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YF-2017/2(CN)

# Yestool

## 硬质合金 切削刀具

— 高性能刀具系列



● YESTOOL公司全球销售网络



- |        |         |         |          |
|--------|---------|---------|----------|
| ▶ 阿根廷  | ▶ 芬兰    | ▶ 墨西哥   | ▶ 斯洛伐克   |
| ▶ 澳大利亚 | ▶ 法国    | ▶ 摩洛哥   | ▶ 西班牙    |
| ▶ 奥地利  | ▶ 德国    | ▶ 荷兰    | ▶ 瑞典     |
| ▶ 白俄罗斯 | ▶ 希腊    | ▶ 新西兰   | ▶ 瑞士     |
| ▶ 比利时  | ▶ 香港    | ▶ 挪威    | ▶ 台湾     |
| ▶ 巴西   | ▶ 匈牙利   | ▶ 巴基斯坦  | ▶ 泰国     |
| ▶ 加拿大  | ▶ 印度    | ▶ 波兰    | ▶ 土耳其    |
| ▶ 中国   | ▶ 印度尼西亚 | ▶ 葡萄牙   | ▶ 阿联酋    |
| ▶ 克罗地亚 | ▶ 伊朗    | ▶ 罗马尼亚  | ▶ 英国     |
| ▶ 捷克   | ▶ 意大利   | ▶ 俄罗斯   | ▶ 乌克兰    |
| ▶ 丹麦   | ▶ 日本    | ▶ 新加坡   | ▶ 美国     |
| ▶ 埃及   | ▶ 马来西亚  | ▶ 斯洛文尼亚 | ▶ 乌兹别克斯坦 |
|        |         | ▶ 南非    | ▶ 越南     |

**Yes<sup>®</sup> YESTOOL Co., Ltd.**



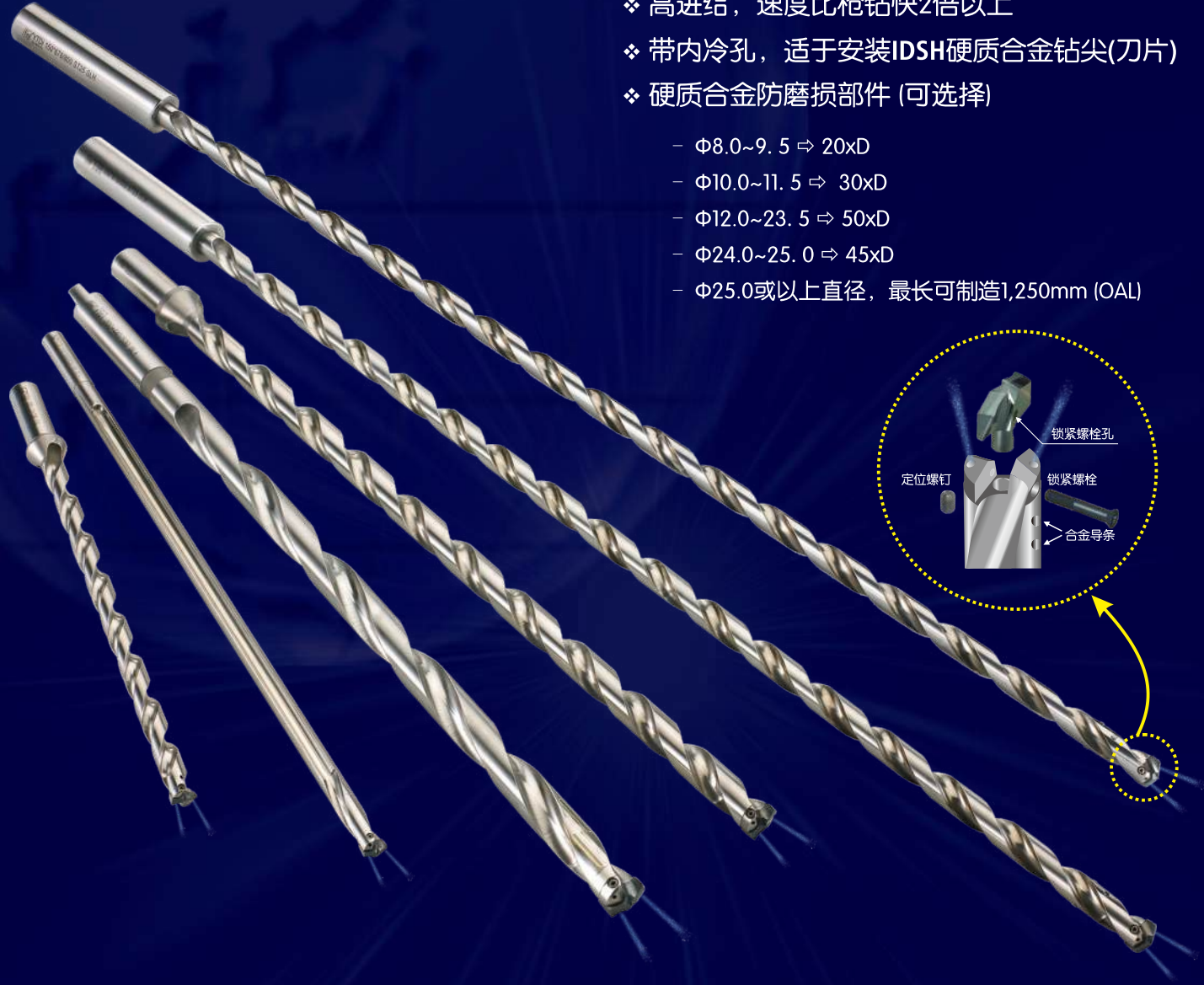


# F1深孔钻头体与硬质合金钻尖

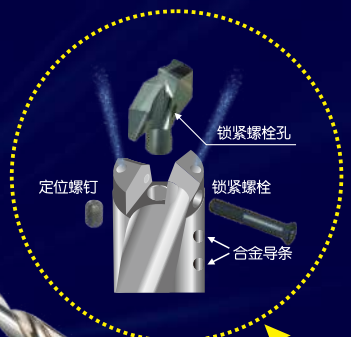
F1DR

IDSH

可换硬质合金钻尖方式的螺旋深孔钻的又一次突破, 世界首创 !!  
钻头总长, 最长可达到 1.25米  
可换钻尖式刀具的专业制造商-**YESTOOL**公司的新产品



- ❖ 在枪钻专机和加工中心上, 都能使用
- ❖ 高进给, 速度比枪钻快2倍以上
- ❖ 带内冷孔, 适于安装**IDSH**硬质合金钻尖(刀片)
- ❖ 硬质合金防磨损部件 (可选择)
  - $\Phi 8.0 \sim 9.5 \Rightarrow 20 \times D$
  - $\Phi 10.0 \sim 11.5 \Rightarrow 30 \times D$
  - $\Phi 12.0 \sim 23.5 \Rightarrow 50 \times D$
  - $\Phi 24.0 \sim 25.0 \Rightarrow 45 \times D$
  - $\Phi 25.0$ 或以上直径, 最长可制造1,250mm (OAL)



※请访问我们的网站, 可看到测试结果  
( $\Phi 20.0$ 直径的钢件, 切削深度为 400mm)  
[www.yestool.com](http://www.yestool.com)

切削参数  
S: 2,000 rpm  
f: 0.25mm/转  
F: 500mm/分



# KRUZ-FSL、YTDI-FSL型法兰刀体与硬质合金钻尖



KRUZ-FSL

IDP

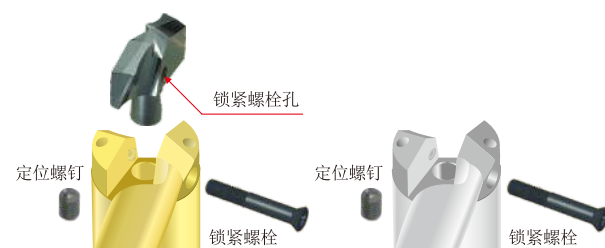
适于加工深孔和通用

IDF

适于加工薄板和浅孔

ID

通用刀片

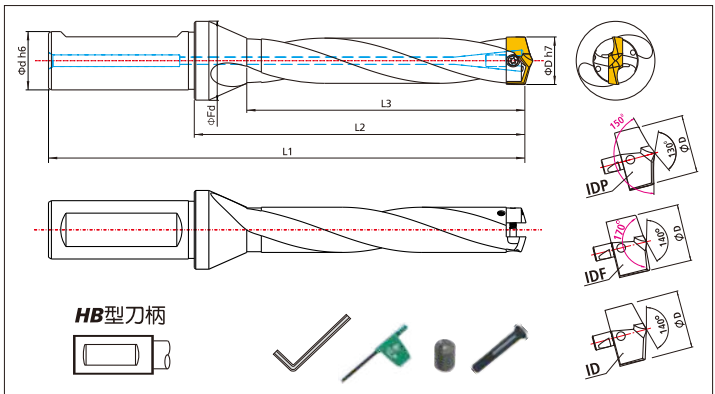


KRUZ-FSL 刀体

YTDI-FSL 刀体

可选刀片(3种通用)

- ▶ 坚固的法兰式刀体, 以减少震动或抖动
- ▶ 三种可通用的<IDP>、<IDF>、<ID>型硬质合金钻尖
- ▶ 刀体采用经过特殊热处理的优质工具钢, 具有很好的刚性
- ▶ 通过减小振动, 更能提高刀具寿命
- ▶ 内冷孔设计, 可做到大进给、高速切削



订货时, 请在口内标注孔深。如: **T**(3倍孔径), **P**(5倍孔径), **H**(7倍孔径), **L**(10倍孔径)

| 孔径范围            | 刀体型号                             | 刀柄尺寸<br>(Φd) | 切削深度<br>(倍 x 孔径)                      | L1                       | L2                     | L3                    | 法兰直径<br>(ΦFd) | 适合刀体的刀片型号                                                                                                                            |  IDP  IDF  ID |  锁紧螺栓                          |  梅花型螺批 |  定位螺钉 |  "L"型内六角扳手 |
|-----------------|----------------------------------|--------------|---------------------------------------|--------------------------|------------------------|-----------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Φ8.0<br>~Φ8.4   | YTDI 080 □ FSL<br>KRUZ 080 □ FSL | 10.0<br>(HA) | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 87<br>103<br>119<br>143  | 42<br>58<br>74<br>98   | 32<br>48<br>64<br>88  | 18            | IDP 080, IDP 081, IDP 082, IDP 083, IDP 084<br>IDF 080, IDF 081, IDF 082, IDF 083, IDF 084<br>ID 080, ID 081, ID 082, ID 083, ID 084 | CS 080<br>-085 SL                                                                                                                                                                                                                                                         | <br>T6<br>扭矩<br>0.6Nm<br>(最大) | None                                                                                       | None                                                                                      |                                                                                                |
| Φ8.5<br>~Φ8.9   | YTDI 085 □ FSL<br>KRUZ 085 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 89<br>106<br>123<br>149  | 44<br>61<br>78<br>104  | 34<br>51<br>68<br>94  |               | IDP 085, IDP 086, IDP 087, IDP 088, IDP 089<br>IDF 085, IDF 086, IDF 087, IDF 088, IDF 089<br>ID 085, ID 086, ID 087, ID 088, ID 089 |                                                                                                                                                                                                                                                                           |                                                                                                                    |                                                                                            |                                                                                           |                                                                                                |
| Φ9.0<br>~Φ9.4   | YTDI 090 □ FSL<br>KRUZ 090 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 92<br>110<br>128<br>155  | 47<br>65<br>83<br>110  | 36<br>54<br>72<br>99  |               | IDP 090, IDP 091, IDP 092, IDP 093, IDP 094<br>IDF 090, IDF 091, IDF 092, IDF 093, IDF 094<br>ID 090, ID 091, ID 092, ID 093, ID 094 | CS 090<br>-095 SL                                                                                                                                                                                                                                                         |                                                                                                                    |                                                                                            |                                                                                           |                                                                                                |
| Φ9.5<br>~Φ9.9   | YTDI 095 □ FSL<br>KRUZ 095 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 97<br>116<br>135<br>164  | 49<br>68<br>87<br>116  | 38<br>57<br>76<br>105 |               | IDP 095, IDP 096, IDP 097, IDP 098, IDP 099<br>IDF 095, IDF 096, IDF 097, IDF 098, IDF 099<br>ID 095, ID 096, ID 097, ID 098, ID 099 |                                                                                                                                                                                                                                                                           |                                                                                                                    |                                                                                            |                                                                                           |                                                                                                |
| Φ10.0<br>~Φ10.4 | YTDI 100 □ FSL<br>KRUZ 100 □ FSL | 12.0<br>(HA) | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 99<br>119<br>139<br>169  | 51<br>71<br>91<br>121  | 40<br>60<br>80<br>110 |               | IDP 100, IDP 101, IDP 102, IDP 103, IDP 104<br>IDF 100, IDF 101, IDF 102, IDF 103, IDF 104<br>ID 100, ID 101, ID 102, ID 103, ID 104 | CS100<br>-115 SL                                                                                                                                                                                                                                                          |                                                                                                                    |                                                                                            |                                                                                           |                                                                                                |
| Φ10.5<br>~Φ10.9 | YTDI 105 □ FSL<br>KRUZ 105 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 102<br>123<br>144<br>176 | 54<br>75<br>96<br>128  | 42<br>63<br>84<br>116 |               | IDP 105, IDP 106, IDP 107, IDP 108, IDP 109<br>IDF 105, IDF 106, IDF 107, IDF 108, IDF 109<br>ID 105, ID 106, ID 107, ID 108, ID 109 |                                                                                                                                                                                                                                                                           |                                                                                                                    |                                                                                            |                                                                                           |                                                                                                |
| Φ11.0<br>~Φ11.4 | YTDI 110 □ FSL<br>KRUZ 110 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 104<br>126<br>148<br>181 | 56<br>78<br>100<br>133 | 44<br>66<br>88<br>121 |               | IDP 110, IDP 111, IDP 112, IDP 113, IDP 114<br>IDF 110, IDF 111, IDF 112, IDF 113, IDF 114<br>ID 110, ID 111, ID 112, ID 113, ID 114 |                                                                                                                                                                                                                                                                           |                                                                                                                    |                                                                                            |                                                                                           |                                                                                                |
| Φ11.5<br>~Φ11.9 | YTDI 115 □ FSL<br>KRUZ 115 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 107<br>130<br>153<br>188 | 59<br>82<br>105<br>140 | 46<br>69<br>92<br>127 |               | IDP 115, IDP 116, IDP 117, IDP 118, IDP 119<br>IDF 115, IDF 116, IDF 117, IDF 118, IDF 119<br>ID 115, ID 116, ID 117, ID 118, ID 119 |                                                                                                                                                                                                                                                                           |                                                                                                                    |                                                                                            |                                                                                           |                                                                                                |
| Φ12.0<br>~Φ12.4 | YTDI 120 □ FSL<br>KRUZ 120 □ FSL | 16.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 109<br>133<br>157<br>193 | 61<br>85<br>109<br>145 | 48<br>72<br>96<br>132 | 21            | IDP 120, IDP 121, IDP 122, IDP 123, IDP 124<br>IDF 120, IDF 121, IDF 122, IDF 123, IDF 124<br>ID 120, ID 121, ID 122, ID 123, ID 124 | CS120<br>-135 SL                                                                                                                                                                                                                                                          |                                                                                                                    | M2.5x4                                                                                     | 1.3mm                                                                                     |                                                                                                |

下页继续





KRUZ-FSL、YTDI-FSL型法兰刀体与硬质合金钻尖

| 孔径<br>范围        | 刀体型号                             | 刀柄尺寸<br>(Φd) | 切削深度<br>(倍×孔径)                        | L1                       | L2                       | L3                      | 法兰直径<br>(ΦFd) | 适合刀体的刀片型号                                                                                                                             |  IDP<br> IDF<br> ID | 锁紧螺栓                                                                                                              | 梅花型螺批 | 定位螺钉   | 1°型内六角扳手 |
|-----------------|----------------------------------|--------------|---------------------------------------|--------------------------|--------------------------|-------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-------|--------|----------|
| Φ12.5<br>~Φ12.9 | YTDI 125 □ FSL<br>KRUZ 125 □ FSL | 16.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 111<br>136<br>161<br>199 | 63<br>88<br>113<br>151   | 50<br>75<br>100<br>138  | 21            | IDP 125, IDP 126, IDP 127, IDP 128, IDP 129<br>IDF 125, IDF 126, IDF 127, IDF 128, IDF 129<br>ID 125-, ID 126, ID 127, ID 128, ID 129 | CS 120<br>-135 SL                                                                                                                                                                                                                                                       | <br>T6<br>扭矩<br>0.6Nm<br>(最大)   |       |        |          |
| Φ13.0<br>~Φ13.4 | YTDI 130 □ FSL<br>KRUZ 130 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 114<br>140<br>166<br>205 | 66<br>92<br>118<br>157   | 52<br>78<br>104<br>143  |               | IDP 130, IDP 131, IDP 132, IDP 133, IDP 134<br>IDF 130, IDF 131, IDF 132, IDF 133, IDF 134<br>ID 130, ID 131, ID 132, ID 133, ID 134  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ13.5<br>~Φ13.9 | YTDI 135 □ FSL<br>KRUZ 135 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 116<br>143<br>170<br>211 | 68<br>95<br>122<br>163   | 54<br>81<br>108<br>149  |               | IDP 135, IDP 136, IDP 137, IDP 138, IDP 139<br>IDF 135, IDF 136, IDF 137, IDF 138, IDF 139<br>ID 135, ID 136, ID 137, ID 138, ID 139  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ14.0<br>~Φ14.4 | YTDI 140 □ FSL<br>KRUZ 140 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 119<br>147<br>175<br>217 | 71<br>99<br>127<br>169   | 56<br>84<br>112<br>154  |               | IDP 140, IDP 141, IDP 142, IDP 143, IDP 144<br>IDF 140, IDF 141, IDF 142, IDF 143, IDF 144<br>ID 140, ID 141, ID 142, ID 143, ID 144  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ14.5<br>~Φ14.9 | YTDI 145 □ FSL<br>KRUZ 145 □ FSL | 20.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 123<br>152<br>181<br>225 | 73<br>102<br>131<br>175  | 58<br>87<br>116<br>160  | 27            | IDP 145, IDP 146, IDP 147, IDP 148, IDP 149<br>IDF 145, IDF 146, IDF 147, IDF 148, IDF 149<br>ID 145, ID 146, ID 147, ID 148, ID 149  | CS 140<br>-155 SL                                                                                                                                                                                                                                                       | <br>T7<br>扭矩<br>0.9Nm<br>(最大)   |       | M2.5x4 | 1.3mm    |
| Φ15.0<br>~Φ15.4 | YTDI 150 □ FSL<br>KRUZ 150 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 127<br>157<br>187<br>232 | 77<br>107<br>137<br>182  | 60<br>90<br>120<br>165  |               | IDP 150, IDP 151, IDP 152, IDP 153, IDP 154<br>IDF 150, IDF 151, IDF 152, IDF 153, IDF 154<br>ID 150, ID 151, ID 152, ID 153, ID 154  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ15.5<br>~Φ15.9 | YTDI 155 □ FSL<br>KRUZ 155 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 130<br>161<br>192<br>239 | 80<br>111<br>142<br>189  | 62<br>93<br>124<br>171  |               | IDP 155, IDP 156, IDP 157, IDP 158, IDP 159<br>IDF 155, IDF 156, IDF 157, IDF 158, IDF 159<br>ID 155, ID 156, ID 157, ID 158, ID 159  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ16.0<br>~Φ16.4 | YTDI 160 □ FSL<br>KRUZ 160 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 132<br>164<br>196<br>244 | 82<br>114<br>146<br>194  | 64<br>96<br>128<br>176  |               | IDP 160, IDP 161, IDP 162, IDP 163, IDP 164<br>IDF 160, IDF 161, IDF 162, IDF 163, IDF 164<br>ID 160, ID 161, ID 162, ID 163, ID 164  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ16.5<br>~Φ16.9 | YTDI 165 □ FSL<br>KRUZ 165 □ FSL | 20.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 135<br>168<br>201<br>251 | 85<br>118<br>151<br>201  | 66<br>99<br>132<br>182  | 27            | IDP 165, IDP 166, IDP 167, IDP 168, IDP 169<br>IDF 165, IDF 166, IDF 167, IDF 168, IDF 169<br>ID 165, ID 166, ID 167, ID 168, ID 169  | CS 160<br>-175 SL                                                                                                                                                                                                                                                       |                                                                                                                   |       |        |          |
| Φ17.0<br>~Φ17.4 | YTDI 170 □ FSL<br>KRUZ 170 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 137<br>171<br>205<br>256 | 87<br>121<br>155<br>206  | 68<br>102<br>136<br>187 |               | IDP 170, IDP 171, IDP 172, IDP 173, IDP 174<br>IDF 170, IDF 171, IDF 172, IDF 173, IDF 174<br>ID 170, ID 171, ID 172, ID 173, ID 174  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ17.5<br>~Φ17.9 | YTDI 175 □ FSL<br>KRUZ 175 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 139<br>174<br>209<br>262 | 89<br>124<br>159<br>212  | 70<br>105<br>140<br>193 |               | IDP 175, IDP 176, IDP 177, IDP 178, IDP 179<br>IDF 175, IDF 176, IDF 177, IDF 178, IDF 179<br>ID 175, ID 176, ID 177, ID 178, ID 179  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ18.0<br>~Φ18.4 | YTDI 180 □ FSL<br>KRUZ 180 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 142<br>178<br>214<br>268 | 92<br>128<br>164<br>218  | 72<br>108<br>144<br>198 |               | IDP 180, IDP 181, IDP 182, IDP 183, IDP 184<br>IDF 180, IDF 181, IDF 182, IDF 183, IDF 184<br>ID 180, ID 181, ID 182, ID 183, ID 184  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ18.5<br>~Φ18.9 | YTDI 185 □ FSL<br>KRUZ 185 □ FSL | 25.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 144<br>181<br>218<br>274 | 94<br>131<br>168<br>224  | 74<br>111<br>148<br>204 | 32            | IDP 185, IDP 186, IDP 187, IDP 188, IDP 189<br>IDF 185, IDF 186, IDF 187, IDF 188, IDF 189<br>ID 185, ID 186, ID 187, ID 188, ID 189  | CS 180<br>-195 SL                                                                                                                                                                                                                                                       | <br>T8<br>扭矩<br>1.5Nm<br>(最大) |       |        |          |
| Φ19.0<br>~Φ19.4 | YTDI 190 □ FSL<br>KRUZ 190 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 147<br>185<br>223<br>280 | 97<br>135<br>173<br>230  | 76<br>114<br>152<br>209 |               | IDP 190, IDP 191, IDP 192, IDP 193, IDP 194<br>IDF 190, IDF 191, IDF 192, IDF 193, IDF 194<br>ID 190, ID 191, ID 192, ID 193, ID 194  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ19.5<br>~Φ19.9 | YTDI 195 □ FSL<br>KRUZ 195 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 149<br>188<br>227<br>286 | 99<br>138<br>177<br>236  | 78<br>117<br>156<br>215 |               | IDP 195, IDP 196, IDP 197, IDP 198, IDP 199<br>IDF 195, IDF 196, IDF 197, IDF 198, IDF 199<br>ID 195, ID 196, ID 197, ID 198, ID 199  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |
| Φ20.0<br>~Φ20.4 | YTDI 200 □ FSL<br>KRUZ 200 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 157<br>197<br>237<br>297 | 101<br>141<br>181<br>241 | 80<br>120<br>160<br>220 |               | IDP 200, IDP 201, IDP 202, IDP 203, IDP 204<br>IDF 200, IDF 201, IDF 202, IDF 203, IDF 204<br>ID 200, ID 201, ID 202, ID 203, ID 204  |                                                                                                                                                                                                                                                                         |                                                                                                                   |       |        |          |

| 孔径<br>范围        | 刀体型号                             | 刀柄尺寸<br>(Φd)                          | 切削深度<br>(倍×孔径)                        | L1                                    | L2                       | L3                       | 法兰直径<br>(ΦFd)                                                                                                                        | 适合刀体的刀片型号                                                                                                                            |  IDP<br> IDF<br> ID | 锁紧螺栓                                                                                                             | 梅花型螺批 | 定位螺钉 | 1°型内六角扳手 |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
|-----------------|----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------|------|----------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------|--|--|--|
| Φ20.5<br>~Φ20.9 | YTDI 205 □ FSL<br>KRUZ 205 □ FSL | 25.0                                  | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 160<br>201<br>242<br>304              | 104<br>145<br>186<br>248 | 82<br>123<br>164<br>226  | 32                                                                                                                                   | IDP 205, IDP 206, IDP 207, IDP 208, IDP 209<br>IDF 205, IDF 206, IDF 207, IDF 208, IDF 209<br>ID 205, ID 206, ID 207, ID 208, ID 209 | CS 200<br>-215 SL                                                                                                                                                                                                                                                            | <br>T8<br>扭矩<br>1.5Nm<br>(最大) |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ21.0<br>~Φ21.4 | YTDI 210 □ FSL<br>KRUZ 210 □ FSL |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 162<br>204<br>246<br>309              | 106<br>148<br>190<br>253 | 84<br>126<br>168<br>231  |                                                                                                                                      | IDP 210, IDP 211, IDP 212, IDP 213, IDP 214<br>IDF 210, IDF 211, IDF 212, IDF 213, IDF 214<br>ID 210, ID 211, ID 212, ID 213, ID 214 |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ21.5<br>~Φ21.9 | YTDI 215 □ FSL<br>KRUZ 215 □ FSL |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 165<br>208<br>251<br>316              | 109<br>152<br>195<br>260 | 86<br>129<br>172<br>237  |                                                                                                                                      | IDP 215, IDP 216, IDP 217, IDP 218, IDP 219<br>IDF 215, IDF 216, IDF 217, IDF 218, IDF 219<br>ID 215, ID 216, ID 217, ID 218, ID 219 |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ22.0<br>~Φ22.4 | YTDI 220 □ FSL<br>KRUZ 220 □ FSL |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 167<br>211<br>255<br>321              | 111<br>155<br>199<br>265 | 88<br>132<br>176<br>242  |                                                                                                                                      | IDP 220, IDP 221, IDP 222, IDP 223, IDP 224<br>IDF 220, IDF 221, IDF 222, IDF 223, IDF 224<br>ID 220, ID 221, ID 222, ID 223, ID 224 |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ22.5<br>~Φ22.9 | YTDI 225 □ FSL<br>KRUZ 225 □ FSL |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 169<br>214<br>259<br>327              | 113<br>158<br>203<br>271 | 90<br>135<br>180<br>248  |                                                                                                                                      | IDP 225, IDP 226, IDP 227, IDP 228, IDP 229<br>IDF 225, IDF 226, IDF 227, IDF 228, IDF 229<br>ID 225, ID 226, ID 227, ID 228, ID 229 |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ23.0<br>~Φ23.4 | YTDI 230 □ FSL<br>KRUZ 230 □ FSL |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 172<br>218<br>264<br>333              | 116<br>162<br>208<br>277 | 92<br>138<br>184<br>253  |                                                                                                                                      | IDP 230, IDP 231, IDP 232, IDP 233, IDP 234<br>IDF 230, IDF 231, IDF 232, IDF 233, IDF 234<br>ID 230, ID 231, ID 232, ID 233, ID 234 |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ23.5<br>~Φ23.9 | YTDI 235 □ FSL<br>KRUZ 235 □ FSL |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 174<br>221<br>268<br>339              | 118<br>165<br>212<br>283 | 94<br>141<br>188<br>259  |                                                                                                                                      | IDP 235, IDP 236, IDP 237, IDP 238, IDP 239<br>IDF 235, IDF 236, IDF 237, IDF 238, IDF 239<br>ID 235, ID 236, ID 237, ID 238, ID 239 | CS 220<br>-235 SL                                                                                                                                                                                                                                                            |                                                                                                                  |       |      |          | M3x6                                                                                                                                 | 1.5mm             |                                                                                                                     |  |  |  |
| Φ24.0<br>~Φ24.4 | YTDI 240 □ FSL<br>KRUZ 240 □ FSL |                                       | 32.0                                  | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 181<br>229<br>277<br>349 | 121<br>169<br>217<br>289 |                                                                                                                                      | 96<br>144<br>192<br>264                                                                                                              | 39                                                                                                                                                                                                                                                                           |                                                                                                                  |       |      |          | IDP 240, IDP 241, IDP 242, IDP 243, IDP244<br>IDF 240, IDF 241, IDF 242, IDF 243, IDF244<br>ID 240, ID 241, ID 242, ID 243, ID 244   | CS 240<br>-255 SL | <br>T15<br>扭矩<br>3.5Nm<br>(最大) |  |  |  |
| Φ24.5<br>~Φ24.9 | YTDI 245 □ FSL<br>KRUZ 245 □ FSL |                                       |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 183<br>232<br>281<br>355 | 123<br>172<br>221<br>295 |                                                                                                                                      | 98<br>147<br>196<br>270                                                                                                              |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          | IDP 245, IDP 246, IDP 247, IDP 248, IDP 249<br>IDF 245, IDF 246, IDF 247, IDF 248, IDF 249<br>ID 245, ID 246, ID 247, ID 248, ID 249 |                   |                                                                                                                     |  |  |  |
| Φ25.0<br>~Φ25.4 | YTDI 250 □ FSL<br>KRUZ 250 □ FSL |                                       |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 185<br>235<br>285<br>360 | 125<br>175<br>225<br>300 |                                                                                                                                      | 100<br>150<br>200<br>275                                                                                                             |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          | IDP 250, IDP 251, IDP 252, IDP 253, IDP 254<br>IDF 250, IDF 251, IDF 252, IDF 253, IDF 254<br>ID 250, ID 251, ID 252, ID 253, ID 254 |                   |                                                                                                                     |  |  |  |
| Φ25.5<br>~Φ25.9 | YTDI 255 □ FSL<br>KRUZ 255 □ FSL |                                       |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 188<br>239<br>290<br>367 | 128<br>179<br>230<br>307 |                                                                                                                                      | 102<br>153<br>204<br>281                                                                                                             |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          | IDP 255, IDP 256, IDP 257, IDP 258, IDP 259<br>IDF 255, IDF 256, IDF 257, IDF 258, IDF 259<br>ID 255, ID 256, ID 257, ID 258, ID 259 |                   |                                                                                                                     |  |  |  |
| Φ26.0<br>~Φ26.4 | YTDI 260 □ FSL<br>KRUZ 260 □ FSL |                                       |                                       | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 190<br>242<br>294<br>372 | 130<br>182<br>234<br>312 |                                                                                                                                      | 104<br>156<br>208<br>286                                                                                                             |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          | IDP 260, IDP 261, IDP 262, IDP 263, IDP 264<br>IDF 260, IDF 261, IDF 262, IDF 263, IDF 264<br>ID 260, ID 261, ID 262, ID 263, ID 264 |                   |                                                                                                                     |  |  |  |
| Φ26.5<br>~Φ26.9 | YTDI 265 □ FSL<br>KRUZ 265 □ FSL | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) |                                       | 193<br>246<br>299<br>379              | 133<br>186<br>239<br>319 | 106<br>159<br>212<br>292 | IDP 265, IDP 266, IDP 267, IDP 268, IDP 269<br>IDF 265, IDF 266, IDF 267, IDF 268, IDF 269<br>ID 265, ID 266, ID 267, ID 268, ID 269 |                                                                                                                                      |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ27.0<br>~Φ27.4 | YTDI 270 □ FSL<br>KRUZ 270 □ FSL | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) |                                       | 195<br>249<br>303<br>384              | 135<br>189<br>243<br>324 | 108<br>162<br>216<br>297 | IDP 270, IDP 271, IDP 272, IDP 273, IDP 274<br>IDF 270, IDF 271, IDF 272, IDF 273, IDF 274<br>ID 270, ID 271, ID 272, ID 273, ID 274 | CS 260<br>-275 SL                                                                                                                    |                                                                                                                                                                                                                                                                              | M4x8                                                                                                             | 2.0mm |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ27.5<br>~Φ27.9 | YTDI 275 □ FSL<br>KRUZ 275 □ FSL | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) |                                       | 197<br>252<br>307<br>390              | 137<br>192<br>247<br>330 | 110<br>165<br>220<br>303 | IDP 275, IDP 276, IDP 277, IDP 278, IDP 279<br>IDF 275, IDF 276, IDF 277, IDF 278, IDF 279<br>ID 275, ID 276, ID 277, ID 278, ID 279 |                                                                                                                                      |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |
| Φ28.0<br>~Φ28.4 | YTDI 280 □ FSL<br>KRUZ 280 □ FSL | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) |                                       | 200<br>256<br>312<br>396              | 140<br>196<br>252<br>336 | 112<br>168<br>224<br>308 | IDP 280, IDP 281, IDP 282, IDP 283, IDP 284<br>IDF 280, IDF 281, IDF 282, IDF 283, IDF 284<br>ID 280, ID 281, ID 282, ID 283, ID 284 | CS 280<br>-295 SL                                                                                                                    |                                                                                                                                                                                                                                                                              |                                                                                                                  |       |      |          |                                                                                                                                      |                   |                                                                                                                     |  |  |  |



KRUZ-FSL、YTDI-FSL型法兰刀体与硬质合金钻尖

| 孔径<br>范围        | 刀体型号                             | 刀柄尺寸<br>(Φd) | 切削深度<br>(倍×孔径)                        | L1                       | L2                       | L3                       | 法兰直径<br>(ΦFd) | 适合刀体的刀片型号                                                                                                                            |  IDP<br> IDF<br> ID | 锁紧螺栓                                                                                                                | 梅花型螺批 | 定位螺钉  | 1°型内六角扳手 |
|-----------------|----------------------------------|--------------|---------------------------------------|--------------------------|--------------------------|--------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------|-------|----------|
| Φ28.5<br>~Φ28.9 | YTDI 285 □ FSL<br>KRUZ 285 □ FSL | 32.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 202<br>259<br>316<br>402 | 142<br>199<br>256<br>342 | 114<br>171<br>228<br>314 | 39            | IDP 285, IDP 286, IDP 287, IDP 288, IDP 289<br>IDF 285, IDF 286, IDF 287, IDF 288, IDF 289<br>ID 285, ID 286, ID 287, ID 288, ID 289 | CS 280<br>-295 SL                                                                                                                                                                                                                                                        | <br>T15<br>扭矩<br>3.5Nm<br>(最大)   | M4x8  | 2.0mm |          |
| Φ29.0<br>~Φ29.4 | YTDI 290 □ FSL<br>KRUZ 290 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 205<br>263<br>321<br>408 | 145<br>203<br>261<br>348 | 116<br>174<br>232<br>319 |               | IDP 290, IDP 291, IDP 292, IDP 293, IDP 294<br>IDF 290, IDF 291, IDF 292, IDF 293, IDF 294<br>ID 290, ID 291, ID 292, ID 293, ID 294 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ29.5<br>~Φ29.9 | YTDI 295 □ FSL<br>KRUZ 295 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 207<br>266<br>325<br>414 | 147<br>206<br>265<br>354 | 118<br>177<br>236<br>325 |               | IDP 295, IDP 296, IDP 297, IDP 298, IDP 299<br>IDF 295, IDF 296, IDF 297, IDF 298, IDF 299<br>ID 295, ID 296, ID 297, ID 298, ID 299 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ30.0<br>~Φ30.4 | YTDI 300 □ FSL<br>KRUZ 300 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 209<br>269<br>329<br>419 | 149<br>209<br>269<br>359 | 120<br>180<br>240<br>330 |               | IDP 300, IDP 301, IDP 302, IDP 303, IDP 304<br>IDF 300, IDF 301, IDF 302, IDF 303, IDF 304<br>ID 300, ID 301, ID 302, ID 303, ID 304 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ30.5<br>~Φ30.9 | YTDI 305 □ FSL<br>KRUZ 305 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 212<br>273<br>334<br>426 | 152<br>213<br>274<br>366 | 122<br>183<br>244<br>336 |               | IDP 305, IDP 306, IDP 307, IDP 308, IDP 309<br>IDF 305, IDF 306, IDF 307, IDF 308, IDF 309<br>ID 305, ID 306, ID 307, ID 308, ID 309 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ31.0<br>~Φ31.4 | YTDI 310 □ FSL<br>KRUZ 310 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 214<br>276<br>338<br>431 | 154<br>216<br>278<br>371 | 124<br>186<br>248<br>341 |               | IDP 310, IDP 311, IDP 312, IDP 313, IDP 314<br>IDF 310, IDF 311, IDF 312, IDF 313, IDF 314<br>ID 310, ID 311, ID 312, ID 313, ID 314 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ31.5<br>~Φ31.9 | YTDI 315 □ FSL<br>KRUZ 315 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 217<br>280<br>343<br>438 | 157<br>220<br>283<br>378 | 126<br>189<br>252<br>347 |               | IDP 315, IDP 316, IDP 317, IDP 318, IDP 319<br>IDF 315, IDF 316, IDF 317, IDF 318, IDF 319<br>ID 315, ID 316, ID 317, ID 318, ID 319 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ32.0<br>~Φ32.4 | YTDI 320 □ FSL<br>KRUZ 320 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 219<br>283<br>347<br>443 | 159<br>223<br>287<br>383 | 128<br>192<br>256<br>352 |               | IDP 320, IDP 321, IDP 322, IDP 323, IDP 324<br>IDF 320, IDF 321, IDF 322, IDF 323, IDF 324<br>ID 320, ID 321, ID 322, ID 323, ID 324 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ32.5<br>~Φ32.9 | YTDI 325 □ FSL<br>KRUZ 325 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 221<br>286<br>351<br>449 | 161<br>226<br>291<br>389 | 130<br>195<br>260<br>358 |               | IDP 325, IDP 326, IDP 327, IDP 328, IDP 329<br>IDF 325, IDF 326, IDF 327, IDF 328, IDF 329<br>ID 325, ID 326, ID 327, ID 328, ID 329 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ33.0<br>~Φ33.4 | YTDI 330 □ FSL<br>KRUZ 330 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 224<br>290<br>356<br>455 | 164<br>230<br>296<br>395 | 132<br>198<br>264<br>363 |               | IDP 330, IDP 331, IDP 332, IDP 333, IDP 334<br>IDF 330, IDF 331, IDF 332, IDF 333, IDF 334<br>ID 330, ID 331, ID 332, ID 333, ID 334 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ33.5<br>~Φ33.9 | YTDI 335 □ FSL<br>KRUZ 335 □ FSL | 40.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 226<br>293<br>360<br>461 | 166<br>233<br>300<br>401 | 134<br>201<br>268<br>369 | 55            | IDP 335, IDP 336, IDP 337, IDP 338, IDP 339<br>IDF 335, IDF 336, IDF 337, IDF 338, IDF 339<br>ID 335, ID 336, ID 337, ID 338, ID 339 | CS 320<br>-355 SL                                                                                                                                                                                                                                                        | <br>T20<br>扭矩<br>5.0Nm<br>(最大) | M5x10 | 2.5mm |          |
| Φ34.0<br>~Φ34.4 | YTDI 340 □ FSL<br>KRUZ 340 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 239<br>307<br>375<br>477 | 169<br>237<br>305<br>407 | 136<br>204<br>272<br>374 |               | IDP 340, IDP 341, IDP 342, IDP 343, IDP 344<br>IDF 340, IDF 341, IDF 342, IDF 343, IDF 344<br>ID 340, ID 341, ID 342, ID 343, ID 344 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ34.5<br>~Φ34.9 | YTDI 345 □ FSL<br>KRUZ 345 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 241<br>310<br>379<br>483 | 171<br>240<br>309<br>413 | 138<br>207<br>276<br>380 |               | IDP 345, IDP 346, IDP 347, IDP 348, IDP 349<br>IDF 345, IDF 346, IDF 347, IDF 348, IDF 349<br>ID 345, ID 346, ID 347, ID 348, ID 349 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ35.0<br>~Φ35.4 | YTDI 350 □ FSL<br>KRUZ 350 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 243<br>313<br>383<br>488 | 173<br>243<br>313<br>418 | 140<br>210<br>280<br>385 |               | IDP 350, IDP 351, IDP 352, IDP 353, IDP 354<br>IDF 350, IDF 351, IDF 352, IDF 353, IDF 354<br>ID 350, ID 351, ID 352, ID 353, ID 354 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ35.5<br>~Φ35.9 | YTDI 355 □ FSL<br>KRUZ 355 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 246<br>317<br>388<br>495 | 176<br>247<br>318<br>425 | 142<br>213<br>284<br>391 |               | IDP 355, IDP 356, IDP 357, IDP 358, IDP 359<br>IDF 355, IDF 356, IDF 357, IDF 358, IDF 359<br>ID 355, ID 356, ID 357, ID 358, ID 359 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |
| Φ36.0<br>~Φ36.4 | YTDI 360 □ FSL<br>KRUZ 360 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 248<br>320<br>392<br>500 | 178<br>250<br>322<br>430 | 144<br>216<br>288<br>396 |               | IDP 360, IDP 361, IDP 362, IDP 363, IDP 364<br>IDF 360, IDF 361, IDF 362, IDF 363, IDF 364<br>ID 360, ID 361, ID 362, ID 363, ID 364 |                                                                                                                                                                                                                                                                          |                                                                                                                     |       |       |          |

| 孔径<br>范围        | 刀体型号                             | 刀柄尺寸<br>(Φd) | 切削深度<br>(倍×孔径)                        | L1                       | L2                       | L3                       | 法兰直径<br>(ΦFd) | 适合刀体的刀片型号                                                                                                                            |  IDP<br> IDF<br> ID | 锁紧螺栓                                                                                                                | 梅花型螺批 | 定位螺钉  | 1°型内六角扳手 |
|-----------------|----------------------------------|--------------|---------------------------------------|--------------------------|--------------------------|--------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------|-------|----------|
| Φ36.5<br>~Φ36.9 | YTDI 365 □ FSL<br>KRUZ 365 □ FSL | 40.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 251<br>324<br>397<br>507 | 181<br>254<br>327<br>437 | 146<br>219<br>292<br>402 | 55            | IDP 365, IDP 366, IDP 367, IDP 368, IDP 369<br>IDF 365, IDF 366, IDF 367, IDF 368, IDF 369<br>ID 365, ID 366, ID 367, ID 368, ID 369 | CS 360<br>-395 SL                                                                                                                                                                                                                                                            | <br>T20<br>扭矩<br>5.0Nm<br>(最大) | M5x10 | 2.5mm |          |
| Φ37.0<br>~Φ37.4 | YTDI 370 □ FSL<br>KRUZ 370 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 253<br>327<br>401<br>512 | 183<br>257<br>331<br>442 | 148<br>222<br>296<br>407 |               | IDP 370, IDP 371, IDP 372, IDP 373, IDP 374<br>IDF 370, IDF 371, IDF 372, IDF 373, IDF 374<br>ID 370, ID 371, ID 372, ID 373, ID 374 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ37.5<br>~Φ37.9 | YTDI 375 □ FSL<br>KRUZ 375 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 255<br>330<br>405<br>518 | 185<br>260<br>335<br>448 | 150<br>225<br>300<br>413 |               | IDP 375, IDP 376, IDP 377, IDP 378, IDP 379<br>IDF 375, IDF 376, IDF 377, IDF 378, IDF 379<br>ID 375, ID 376, ID 377, ID 378, ID 379 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ38.0<br>~Φ38.4 | YTDI 380 □ FSL<br>KRUZ 380 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 258<br>334<br>410<br>524 | 188<br>264<br>340<br>454 | 152<br>228<br>304<br>418 |               | IDP 380, IDP 381, IDP 382, IDP 383, IDP 384<br>IDF 380, IDF 381, IDF 382, IDF 383, IDF 384<br>ID 380, ID 381, ID 382, ID 383, ID 384 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ38.5<br>~Φ38.9 | YTDI 385 □ FSL<br>KRUZ 385 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 260<br>337<br>414<br>530 | 196<br>267<br>344<br>460 | 154<br>231<br>308<br>424 |               | IDP 385, IDP 386, IDP 387, IDP 388, IDP 389<br>IDF 385, IDF 386, IDF 387, IDF 388, IDF 389<br>ID 385, ID 386, ID 387, ID 388, ID 389 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ39.0<br>~Φ39.4 | YTDI 390 □ FSL<br>KRUZ 390 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 263<br>341<br>419<br>536 | 193<br>271<br>349<br>466 | 156<br>234<br>312<br>429 |               | IDP 390, IDP 391, IDP 392, IDP 393, IDP 394<br>IDF 390, IDF 391, IDF 392, IDF 393, IDF 394<br>ID 390, ID 391, ID 392, ID 393, ID 394 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ39.5<br>~Φ39.9 | YTDI 395 □ FSL<br>KRUZ 395 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 265<br>344<br>423<br>542 | 195<br>274<br>353<br>472 | 158<br>237<br>316<br>435 |               | IDP 395, IDP 396, IDP 397, IDP 398, IDP 399<br>IDF 395, IDF 396, IDF 397, IDF 398, IDF 399<br>ID 395, ID 396, ID 397, ID 398, ID 399 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ40.0<br>~Φ40.4 | YTDI 400 □ FSL<br>KRUZ 400 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 267<br>347<br>427<br>547 | 197<br>277<br>357<br>477 | 160<br>240<br>320<br>440 |               | IDP 400, IDP 401, IDP 402, IDP 403, IDP 404<br>IDF 400, IDF 401, IDF 402, IDF 403, IDF 404<br>ID 400, ID 401, ID 402, ID 403, ID 404 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ40.5<br>~Φ40.9 | YTDI 405 □ FSL<br>KRUZ 405 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 270<br>351<br>432<br>554 | 200<br>281<br>362<br>484 | 162<br>243<br>324<br>446 |               | IDP 405, IDP 406, IDP 407, IDP 408, IDP 409<br>IDF 405, IDF 406, IDF 407, IDF 408, IDF 409<br>ID 405, ID 406, ID 407, ID 408, ID 409 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ41.0<br>~Φ41.4 | YTDI 410 □ FSL<br>KRUZ 410 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 272<br>354<br>436<br>559 | 202<br>284<br>366<br>489 | 164<br>246<br>328<br>451 |               | IDP 410, IDP 411, IDP 412, IDP 413, IDP 414<br>IDF 410, IDF 411, IDF 412, IDF 413, IDF 414<br>ID 410, ID 411, ID 412, ID 413, ID 414 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ41.5<br>~Φ41.9 | YTDI 415 □ FSL<br>KRUZ 415 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 275<br>358<br>441<br>566 | 205<br>288<br>371<br>496 | 166<br>249<br>332<br>457 |               | IDP 415, IDP 416, IDP 417, IDP 418, IDP 419<br>IDF 415, IDF 416, IDF 417, IDF 418, IDF 419<br>ID 415, ID 416, ID 417, ID 418, ID 419 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ42.0<br>~Φ42.4 | YTDI 420 □ FSL<br>KRUZ 420 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 277<br>361<br>445<br>571 | 207<br>291<br>375<br>501 | 168<br>252<br>336<br>462 |               | IDP 420, IDP 421, IDP 422, IDP 423, IDP 424<br>IDF 420, IDF 421, IDF 422, IDF 423, IDF 424<br>ID 420, ID 421, ID 422, ID 423, ID 424 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ42.5<br>~Φ42.9 | YTDI 425 □ FSL<br>KRUZ 425 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 279<br>364<br>449<br>577 | 209<br>294<br>379<br>507 | 170<br>255<br>340<br>468 |               | IDP 425, IDP 426, IDP 427, IDP 428, IDP 429<br>IDF 425, IDF 426, IDF 427, IDF 428, IDF 429<br>ID 425, ID 426, ID 427, ID 428, ID 429 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ43.0<br>~Φ43.4 | YTDI 430 □ FSL<br>KRUZ 430 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 282<br>368<br>454<br>583 | 212<br>298<br>384<br>513 | 172<br>258<br>344<br>473 |               | IDP 430, IDP 431, IDP 432, IDP 433, IDP 434<br>IDF 430, IDF 431, IDF 432, IDF 433, IDF 434<br>ID 430, ID 431, ID 432, ID 433, ID 434 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ43.5<br>~Φ43.9 | YTDI 435 □ FSL<br>KRUZ 435 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 284<br>371<br>458<br>589 | 214<br>301<br>388<br>519 | 174<br>261<br>348<br>479 |               | IDP 435, IDP 436, IDP 437, IDP 438, IDP 439<br>IDF 435, IDF 436, IDF 437, IDF 438, IDF 439<br>ID 435, ID 436, ID 437, ID 438, ID 439 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |
| Φ44.0<br>~Φ44.4 | YTDI 440 □ FSL<br>KRUZ 440 □ FSL |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 287<br>375<br>463<br>595 | 217<br>305<br>393<br>525 | 176<br>264<br>352<br>484 |               | IDP 440, IDP 441, IDP 442, IDP 443, IDP 444<br>IDF 440, IDF 441, IDF 442, IDF 443, IDF 444<br>ID 440, ID 441, ID 442, ID 443, ID 444 |                                                                                                                                                                                                                                                                              |                                                                                                                     |       |       |          |



KRUZ-FSL、YTDI-FSL型法兰刀体与硬质合金钻尖

| 孔径范围            | 刀体型号                             | 刀柄尺寸(Φd) | 切削深度(倍×孔径)                            | L1                       | L2                       | L3                       | 法兰直径(ΦFd) | 适合刀体的刀片型号                                                                                                                            | 锁紧螺栓              | 梅花型螺批 | 定位螺钉 | "L"型内六角扳手 |
|-----------------|----------------------------------|----------|---------------------------------------|--------------------------|--------------------------|--------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------|------|-----------|
| Φ44.5<br>~Φ44.9 | YTDI 445 □ FSL<br>KRUZ 445 □ FSL | 40.0     | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 289<br>378<br>467<br>601 | 219<br>308<br>397<br>531 | 178<br>267<br>356<br>490 | 55        | IDP 445, IDP 446, IDP 447, IDP 448, IDP 449<br>IDF 445, IDF 446, IDF 447, IDF 448, IDF 449<br>ID 445, ID 446, ID 447, ID 448, ID 449 | CS 400<br>~445 SL |       |      |           |
| Φ45.0<br>~Φ45.4 | YTDI 450 □ FSL<br>KRUZ 450 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 291<br>381<br>471<br>606 | 221<br>311<br>401<br>536 | 180<br>270<br>360<br>495 |           | IDP 450, IDP 451, IDP 452, IDP 453, IDP 454<br>IDF 450, IDF 451, IDF 452, IDF 453, IDF 454<br>ID 450, ID 451, ID 452, ID 453, ID 454 |                   |       |      |           |
| Φ45.5<br>~Φ45.9 | YTDI 455 □ FSL<br>KRUZ 455 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 294<br>385<br>476<br>613 | 224<br>315<br>406<br>543 | 182<br>273<br>364<br>501 |           | IDP 455, IDP 456, IDP 457, IDP 458, IDP 459<br>IDF 455, IDF 456, IDF 457, IDF 458, IDF 459<br>ID 455, ID 456, ID 457, ID 458, ID 459 |                   |       |      |           |
| Φ46.0<br>~Φ46.4 | YTDI 460 □ FSL<br>KRUZ 460 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 296<br>388<br>480<br>618 | 226<br>318<br>410<br>548 | 184<br>276<br>368<br>506 |           | IDP 460, IDP 461, IDP 462, IDP 463, IDP 464<br>IDF 460, IDF 461, IDF 462, IDF 463, IDF 464<br>ID 460, ID 461, ID 462, ID 463, ID 464 |                   |       |      |           |
| Φ46.5<br>~Φ46.9 | YTDI 465 □ FSL<br>KRUZ 465 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 299<br>392<br>485<br>625 | 229<br>322<br>415<br>555 | 186<br>279<br>372<br>512 |           | IDP 465, IDP 466, IDP 467, IDP 468, IDP 469<br>IDF 465, IDF 466, IDF 467, IDF 468, IDF 469<br>ID 465, ID 466, ID 467, ID 468, ID 469 |                   |       |      |           |
| Φ47.0<br>~Φ47.4 | YTDI 470 □ FSL<br>KRUZ 470 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 301<br>395<br>489<br>630 | 231<br>325<br>419<br>560 | 188<br>282<br>376<br>517 |           | IDP 470, IDP 471, IDP 472, IDP 473, IDP 474<br>IDF 470, IDF 471, IDF 472, IDF 473, IDF 474<br>ID 470, ID 471, ID 472, ID 473, ID 474 |                   |       |      |           |
| Φ47.5<br>~Φ47.9 | YTDI 475 □ FSL<br>KRUZ 475 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 303<br>398<br>493<br>636 | 233<br>328<br>423<br>566 | 190<br>285<br>380<br>523 |           | IDP 475, IDP 476, IDP 477, IDP 478, IDP 479<br>IDF 475, IDF 476, IDF 477, IDF 478, IDF 479<br>ID 475, ID 476, ID 477, ID 478, ID 479 |                   |       |      |           |
| Φ48.0<br>~Φ48.4 | YTDI 480 □ FSL<br>KRUZ 480 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 306<br>402<br>498<br>642 | 236<br>332<br>428<br>572 | 192<br>288<br>384<br>528 |           | IDP 480, IDP 481, IDP 482, IDP 483, IDP 484<br>IDF 480, IDF 481, IDF 482, IDF 483, IDF 484<br>ID 480, ID 481, ID 482, ID 483, ID 484 |                   |       |      |           |
| Φ48.5<br>~Φ48.9 | YTDI 485 □ FSL<br>KRUZ 485 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 308<br>405<br>502<br>648 | 238<br>335<br>432<br>578 | 194<br>291<br>388<br>534 |           | IDP 485, IDP 486, IDP 487, IDP 488, IDP 489<br>IDF 485, IDF 486, IDF 487, IDF 488, IDF 489<br>ID 485, ID 486, ID 487, ID 488, ID 489 |                   |       |      |           |
| Φ49.0<br>~Φ49.4 | YTDI 490 □ FSL<br>KRUZ 490 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 311<br>409<br>507<br>654 | 241<br>339<br>437<br>584 | 196<br>294<br>392<br>539 |           | IDP 490, IDP 491, IDP 492, IDP 493, IDP 494<br>IDF 490, IDF 491, IDF 492, IDF 493, IDF 494<br>ID 490, ID 491, ID 492, ID 493, ID 494 |                   |       |      |           |
| Φ49.5<br>~Φ49.9 | YTDI 495 □ FSL<br>KRUZ 495 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 313<br>412<br>511<br>660 | 243<br>342<br>441<br>590 | 198<br>297<br>396<br>545 |           | IDP 495, IDP 496, IDP 497, IDP 498, IDP 499<br>IDF 495, IDF 496, IDF 497, IDF 498, IDF 499<br>ID 495, ID 496, ID 497, ID 498, ID 499 |                   |       |      |           |
| Φ50.0<br>~Φ50.4 | YTDI 500 □ FSL<br>KRUZ 500 □ FSL |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 315<br>415<br>515<br>665 | 245<br>345<br>445<br>595 | 200<br>300<br>400<br>550 |           | IDP 500, IDP 501, IDP 502, IDP 503, IDP 504<br>IDF 500, IDF 501, IDF 502, IDF 503, IDF 504<br>ID 500, ID 501, ID 502, ID 503, ID 504 |                   |       |      |           |

KRUZ-FSL钻头系列, 推荐切削参数

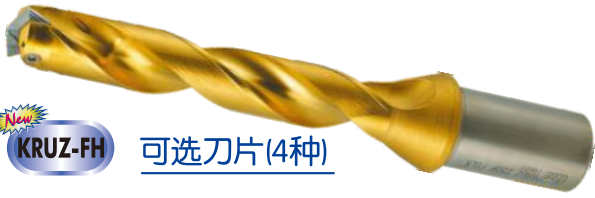
| 工件材质         | 钻头直径<br>切削参数 | Φ8~16mm       |               | Φ16~25mm      |               | Φ25~32mm      |               | Φ32~40mm      |               | Φ40~50mm      |               |
|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|              |              | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) |
| 灰口铸铁 (FC)    |              | 80~150        | 0.20~0.30     | 80~150        | 0.25~0.45     | 80~160        | 0.35~0.55     | 90~200        | 0.34~0.58     | 90~200        | 0.38~0.60     |
| 球墨铸铁 (FCD)   |              | 80~140        | 0.15~0.25     | 80~140        | 0.22~0.45     | 80~150        | 0.32~0.52     | 90~160        | 0.35~0.62     | 90~200        | 0.38~0.60     |
| 中碳钢 (S45C)   |              | 80~140        | 0.15~0.30     | 80~140        | 0.16~0.40     | 80~150        | 0.20~0.40     | 80~150        | 0.22~0.48     | 80~160        | 0.25~0.54     |
| 合金钢 (SCM440) |              | 70~140        | 0.15~0.30     | 70~140        | 0.15~0.40     | 70~140        | 0.18~0.40     | 80~140        | 0.25~0.47     | 80~140        | 0.27~0.52     |
| 淬硬钢 (SKD11)  |              | 40~50         | 0.10~0.20     | 40~50         | 0.12~0.28     | 40~50         | 0.16~0.35     | 40~60         | 0.20~0.38     | 40~60         | 0.22~0.42     |
| 不锈钢 (SUS)    |              | 30~40         | 0.10~0.20     | 35~50         | 0.10~0.22     | 35~50         | 0.15~0.28     | 40~55         | 0.18~0.30     | 40~55         | 0.22~0.32     |
| 铝 130HB (AL) |              | 120~200       | 0.20~0.30     | 120~200       | 0.25~0.40     | 120~200       | 0.30~0.45     | 120~200       | 0.30~0.45     | 120~200       | 0.30~0.50     |

- ☞ 上述推荐切削参数以3xD为准。当在5xD, 7xD或10xD时, 根据工况下降15~20%切削速度。
- ☞ 上述推荐切削参数以正常工况和油污冷却(MQL)为准。
- 如果加工设备(机床)状态不好, 或工件夹具(JIG)不合理, 就会影响最佳切削速度的发挥。



KRUZ "H"系列, 法兰+大螺旋角刀体与硬质合金钻尖

注意 >> "H"系列刀体, 只专用"H"系列钻尖(刀片), 请勿失误。



可选刀片(4种)

- IDPH 适于加工深孔和通用
- IDFH 适于加工薄板和浅孔
- IDH 通用刀片
- IDSH 适于加工不锈钢, 钛或特殊材料



KRUZ-FH 刀体

YTDI-FH 刀体

订货时, 请在口内标注孔深。如: T(3倍孔径), P(5倍孔径), H(7倍孔径), L(10倍孔径---->Φ11.0mm以上)

| 孔径范围            | 刀体型号                           | 刀柄尺寸(Φd) | 切削深度(倍×孔径)                            | L1                       | L2                      | L3                     | 法兰直径(ΦFd) | 适合刀体的刀片型号                                                                                                                                                                                               | 锁紧螺栓             | 梅花型螺批                     | 定位螺钉   | "L"型内六角扳手 |
|-----------------|--------------------------------|----------|---------------------------------------|--------------------------|-------------------------|------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------------|--------|-----------|
| Φ12.0<br>~Φ12.4 | YTDI 120 □ FH<br>KRUZ 120 □ FH | 16.0     | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 109<br>133<br>157<br>193 | 61<br>85<br>109<br>145  | 48<br>72<br>96<br>132  | 21        | IDPH 120, IDPH 121, IDPH 122, IDPH 123, IDPH 124<br>IDFH 120, IDFH 121, IDFH 122, IDFH 123, IDFH 124<br>IDH 120, IDH 121, IDH 122, IDH 123, IDH 124<br>IDSH 120, IDSH 121, IDSH 122, IDSH 123, IDSH 124 | CS120<br>~135 SL | T6<br>扭矩<br>0.6Nm<br>(最大) |        |           |
| Φ12.5<br>~Φ12.9 | YTDI 125 □ FH<br>KRUZ 125 □ FH |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 111<br>136<br>161<br>199 | 63<br>88<br>113<br>151  | 50<br>75<br>100<br>138 |           | IDPH 125, IDPH 126, IDPH 127, IDPH 128, IDPH 129<br>IDFH 125, IDFH 126, IDFH 127, IDFH 128, IDFH 129<br>IDH 125, IDH 126, IDH 127, IDH 128, IDH 129<br>IDSH 125, IDSH 126, IDSH 127, IDSH 128, IDSH 129 |                  |                           |        |           |
| Φ13.0<br>~Φ13.4 | YTDI 130 □ FH<br>KRUZ 130 □ FH |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 114<br>140<br>166<br>205 | 66<br>92<br>118<br>157  | 52<br>78<br>104<br>143 |           | IDPH 130, IDPH 131, IDPH 132, IDPH 133, IDPH 134<br>IDFH 130, IDFH 131, IDFH 132, IDFH 133, IDFH 134<br>IDH 130, IDH 131, IDH 132, IDH 133, IDH 134<br>IDSH 130, IDSH 131, IDSH 132, IDSH 133, IDSH 134 |                  |                           |        |           |
| Φ13.5<br>~Φ13.9 | YTDI 135 □ FH<br>KRUZ 135 □ FH |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 116<br>143<br>170<br>211 | 68<br>95<br>122<br>163  | 54<br>81<br>108<br>149 |           | IDPH 135, IDPH 136, IDPH 137, IDPH 138, IDPH 139<br>IDFH 135, IDFH 136, IDFH 137, IDFH 138, IDFH 139<br>IDH 135, IDH 136, IDH 137, IDH 138, IDH 139<br>IDSH 135, IDSH 136, IDSH 137, IDSH 138, IDSH 139 |                  |                           |        |           |
| Φ14.0<br>~Φ14.4 | YTDI 140 □ FH<br>KRUZ 140 □ FH | 20.0     | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 119<br>147<br>175<br>217 | 71<br>99<br>127<br>169  | 56<br>84<br>112<br>154 | 27        | IDPH 140, IDPH 141, IDPH 142, IDPH 143, IDPH 144<br>IDFH 140, IDFH 141, IDFH 142, IDFH 143, IDFH 144<br>IDH 140, IDH 141, IDH 142, IDH 143, IDH 144<br>IDSH 140, IDSH 141, IDSH 142, IDSH 143, IDSH 144 | CS140<br>~155 SL | T7<br>扭矩<br>0.9Nm<br>(最大) | M2.5x4 | 1.3mm     |
| Φ14.5<br>~Φ14.9 | YTDI 145 □ FH<br>KRUZ 145 □ FH |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 123<br>152<br>181<br>225 | 73<br>102<br>131<br>175 | 58<br>87<br>116<br>160 |           | IDPH 145, IDPH 146, IDPH 147, IDPH 148, IDPH 149<br>IDFH 145, IDFH 146, IDFH 147, IDFH 148, IDFH 149<br>IDH 145, IDH 146, IDH 147, IDH 148, IDH 149<br>IDSH 145, IDSH 146, IDSH 147, IDSH 148, IDSH 149 |                  |                           |        |           |
| Φ15.0<br>~Φ15.4 | YTDI 150 □ FH<br>KRUZ 150 □ FH |          | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 127<br>157<br>187<br>232 | 77<br>107<br>137<br>182 | 60<br>90<br>120<br>165 |           | IDPH 150, IDPH 151, IDPH 152, IDPH 153, IDPH 154<br>IDFH 150, IDFH 151, IDFH 152, IDFH 153, IDFH 154<br>IDH 150, IDH 151, IDH 152, IDH 153, IDH 154<br>IDSH 150, IDSH 151, IDSH 152, IDSH 153, IDSH 154 |                  |                           |        |           |





# KRUIZ "H"系列， 法兰+大螺旋角刀体与硬质合金钻尖

| 孔径<br>范围        | 刀体型号                            | 刀柄尺寸<br>(Φd) | 切削深度<br>(倍 x 孔径)                      | L1                       | L2                       | L3                      | 法兰直径<br>(Φfd) | 适合刀体的刀片型号                                                                                                                                                                                                   | IDPHIDFHIDHIDSH | 锁紧螺栓              | 梅花型螺批 | 定位螺钉 | 1°型内六角扳手 |
|-----------------|---------------------------------|--------------|---------------------------------------|--------------------------|--------------------------|-------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|-------|------|----------|
| Φ15.5<br>~Φ15.9 | YTDI 155 □ FH<br>KRUIZ 155 □ FH | 20.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 130<br>161<br>192<br>239 | 80<br>111<br>142<br>189  | 62<br>93<br>124<br>171  | 27            | IDPH 155, IDPH 156, IDPH 157, IDPH 158, IDPH 159<br>IDFH 155, IDFH 156, IDFH 157, IDFH 158, IDFH 159<br>IDH 155, IDH 156, IDH 157, IDH 158, IDH 159<br>IDSH 155, IDSH 156, IDSH 157, IDSH 158, IDSH 159     |                 | CS 140<br>-155 SL |       |      |          |
| Φ16.0<br>~Φ16.4 | YTDI 160 □ FH<br>KRUIZ 160 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 132<br>164<br>196<br>244 | 82<br>114<br>146<br>194  | 64<br>96<br>128<br>176  |               | IDPH 160, IDPH 161, IDPH 162, IDPH 163, IDPH 164<br>IDFH 160, IDFH 161, IDFH 162, IDFH 163, IDFH 164<br>IDH 160, IDH 161, IDH 162, IDH 163, IDH 164<br>IDSH 160, IDSH 161, IDSH 162, IDSH 163, IDSH 164     |                 |                   |       |      |          |
| Φ16.5<br>~Φ16.9 | YTDI 165 □ FH<br>KRUIZ 165 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 135<br>168<br>201<br>251 | 85<br>118<br>151<br>201  | 66<br>99<br>132<br>182  |               | IDPH 165, IDPH 166, IDPH 167, IDPH 168, IDPH 169<br>IDFH 165, IDFH 166, IDFH 167, IDFH 168, IDFH 169<br>IDH 165, IDH 166, IDH 167, IDH 168, IDH 169<br>IDSH 165, IDSH 166, IDSH 167, IDSH 168, IDSH 169     |                 |                   |       |      |          |
| Φ17.0<br>~Φ17.4 | YTDI 170 □ FH<br>KRUIZ 170 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 137<br>171<br>205<br>256 | 87<br>121<br>155<br>206  | 68<br>102<br>136<br>187 |               | IDPH 170, IDPH 171, IDPH 172, IDPH 173, IDPH 174<br>IDFH 170, IDFH 171, IDFH 172, IDFH 173, IDFH 174<br>IDH 170, IDH 171, IDH 172, IDH 173, IDH 174<br>IDSH 170, IDSH 171, IDSH 172, IDSH 173, IDSH 174     |                 |                   |       |      |          |
| Φ17.5<br>~Φ17.9 | YTDI 175 □ FH<br>KRUIZ 175 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 139<br>174<br>209<br>262 | 89<br>124<br>159<br>212  | 70<br>105<br>140<br>193 |               | IDPH 175, IDPH 176, IDPH 177, IDPH 178, IDPH 179<br>IDFH 175, IDFH 176, IDFH 177, IDFH 178, IDFH 179<br>IDH 175, IDH 176, IDH 177, IDH 178, IDH 179<br>IDSH 175, IDSH 176, IDSH 177, IDSH 178, IDSH 179     |                 |                   |       |      |          |
| Φ18.0<br>~Φ18.4 | YTDI 180 □ FH<br>KRUIZ 180 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 142<br>178<br>214<br>268 | 92<br>128<br>164<br>218  | 72<br>108<br>144<br>198 |               | IDPH 180, IDPH 181, IDPH 182, IDPH 183, IDPH 184<br>IDFH 180, IDFH 181, IDFH 182, IDFH 183, IDFH 184<br>IDH 180, IDH 181, IDH 182, IDH 183, IDH 184<br>IDSH 180, IDSH 181, IDSH 182, IDSH 183, IDSH 184     |                 |                   |       |      |          |
| Φ18.5<br>~Φ18.9 | YTDI 185 □ FH<br>KRUIZ 185 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 144<br>181<br>218<br>274 | 94<br>131<br>168<br>224  | 74<br>111<br>148<br>204 |               | IDPH 185, IDPH 186, IDPH 187, IDPH 188, IDPH 189<br>IDFH 185, IDFH 186, IDFH 187, IDFH 188, IDFH 189<br>IDH 185, IDH 186, IDH 187, IDH 188, IDH 189<br>IDSH 185, IDSH 186, IDSH 187, IDSH 188, IDSH 189     |                 |                   |       |      |          |
| Φ19.0<br>~Φ19.4 | YTDI 190 □ FH<br>KRUIZ 190 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 147<br>185<br>223<br>280 | 97<br>135<br>173<br>230  | 76<br>114<br>152<br>209 |               | IDPH 190, IDPH 191, IDPH 192, IDPH 193, IDPH 194<br>IDFH 190, IDFH 191, IDFH 192, IDFH 193, IDFH 194<br>IDH 190, IDH 191, IDH 192, IDH 193, IDH 194<br>IDSH 190, IDSH 191, IDSH 192, IDSH 193, IDSH 194     |                 |                   |       |      |          |
| Φ19.5<br>~Φ19.9 | YTDI 195 □ FH<br>KRUIZ 195 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 149<br>188<br>227<br>286 | 99<br>138<br>177<br>236  | 78<br>117<br>156<br>215 |               | IDPH 195, IDPH 196, IDPH 197, IDPH 198, IDPH 199<br>IDFH 195, IDFH 196, IDFH 197, IDFH 198, IDFH 199<br>IDH 195, IDH 196, IDH 197, IDH 198, IDH 199<br>IDSH 195, IDSH 196, IDSH 197, IDSH 198, IDSH 199     |                 |                   |       |      |          |
| Φ20.0<br>~Φ20.4 | YTDI 200 □ FH<br>KRUIZ 200 □ FH | 25.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 157<br>197<br>237<br>297 | 101<br>141<br>181<br>241 | 80<br>120<br>160<br>220 | 32            | IDPH 200, IDPH 201, IDPH 202, IDPH 203, IDPH 204<br>IDFH 200, IDFH 201, IDFH 202, IDFH 203, IDFH 204<br>IDH 200, IDH 201, IDH 202, IDH 203, IDH 204<br>IDSH 200, IDSH 201, IDSH 202, IDSH 203, IDSH 204     |                 | CS 200<br>-215 SL |       |      |          |
| Φ20.5<br>~Φ20.9 | YTDI 205 □ FH<br>KRUIZ 205 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 160<br>201<br>242<br>304 | 104<br>145<br>186<br>248 | 82<br>123<br>164<br>226 |               | IDPH 205, IDPH 206, IDPH 207, IDPH 208, IDPH 209<br>IDFH 205, IDFH 206, IDFH 207, IDFH 208, IDFH 209<br>IDH 205, IDH 206, IDH 207, IDH 208, IDH 209<br>IDSH 205, IDSH 206, IDSH 207, IDSH 208, IDSH 209     |                 |                   |       |      |          |
| Φ21.0<br>~Φ21.4 | YTDI 210 □ FH<br>KRUIZ 210 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 162<br>204<br>246<br>309 | 106<br>148<br>190<br>253 | 84<br>126<br>168<br>231 |               | IDPH 210, IDPH 211, IDPH 212, IDPH 213, IDPH 214<br>IDFH 210, IDFH 211, IDFH 212, IDFH 213, IDFH 214<br>IDH 210, IDH 211, IDH 212, IDH 213, IDH 214<br>IDSH 210, IDSH 211, IDSH 212, IDSH 213, IDSH 214     |                 |                   |       |      |          |
| Φ21.5<br>~Φ21.9 | YTDI 215 □ FH<br>KRUIZ 215 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 165<br>208<br>251<br>316 | 109<br>152<br>195<br>260 | 86<br>129<br>172<br>237 |               | IDPH 215, IDPH 216, IDPH 217, IDPH 218, IDPH 219<br>IDFH 215, IDFH 216, IDFH 217, IDFH 218, IDFH 219<br>IDH 215, IDH 216, IDH 217, IDH 218, IDH 219<br>IDSH 215, IDSH 216, IDSH 217, IDSH 218, IDSH 219     |                 |                   |       |      |          |
| Φ22.0<br>~Φ22.4 | YTDI 220 □ FH<br>KRUIZ 220 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 167<br>211<br>255<br>321 | 111<br>155<br>199<br>265 | 88<br>132<br>176<br>242 |               | IDPH 220, IDPH 221, IDPH 222, IDPH 223, IDPH 224<br>IDFH 220, IDFH 221, IDFH 222, IDFH 223, IDFH 224<br>IDH 220, IDH 221, IDH 222, IDH 223, IDH 224<br>IDSH 220, IDSH 221, IDSH 222, IDSH 223, IDSH 224     |                 |                   |       |      |          |
| Φ22.5<br>~Φ22.9 | YTDI 225 □ FH<br>KRUIZ 225 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 169<br>214<br>259<br>327 | 113<br>158<br>203<br>271 | 90<br>135<br>180<br>248 |               | IDPH 225, IDPH 226, IDPH 227, IDPH 228, IDPH 229<br>IDFH 225, IDFH 226, IDFH 227, IDFH 228, IDFH 229<br>IDH 225, IDH 226, IDH 227L, IDH 228L, IDH 229<br>IDSH 225, IDSH 226, IDSH 227L, IDSH 228L, IDSH 229 |                 |                   |       |      |          |

| 孔径<br>范围        | 刀体型号                            | 刀柄尺寸<br>(Φd) | 切削深度<br>(倍 x 孔径)                      | L1                       | L2                       | L3                       | 法兰直径<br>(Φfd) | 适合刀体的刀片型号                                                                                                                                                                                                 | IDPHIDFHIDHIDSH | 锁紧螺栓              | 梅花型螺批 | 定位螺钉 | 1°型内六角扳手 |
|-----------------|---------------------------------|--------------|---------------------------------------|--------------------------|--------------------------|--------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|-------|------|----------|
| Φ23.0<br>~Φ23.4 | YTDI 230 □ FH<br>KRUIZ 230 □ FH | 25.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 172<br>218<br>264<br>333 | 116<br>162<br>208<br>277 | 92<br>138<br>184<br>253  | 32            | IDPH 230, IDPH 231, IDPH 232, IDPH 233, IDPH 234<br>IDFH 230, IDFH 231, IDFH 232, IDFH 233, IDFH 234<br>IDH 230, IDH 231, IDH 232, IDH 233, IDH 234<br>IDSH 230, IDSH 231, IDSH 232, IDSH 233, IDSH 234   |                 | CS 220<br>-235 SL |       |      |          |
| Φ23.5<br>~Φ23.9 | YTDI 235 □ FH<br>KRUIZ 235 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 174<br>221<br>268<br>339 | 118<br>165<br>212<br>283 | 94<br>141<br>188<br>259  |               | IDPH 235, IDPH 236, IDPH 237, IDPH 238, IDPH 239<br>IDFH 235, IDFH 236, IDFH 237, IDFH 238, IDFH 239<br>IDH 235, IDH 236, IDH 237, IDH 238, IDH 239<br>IDSH 235, IDSH 236, IDSH 237, IDSH 238, IDSH 239   |                 |                   |       |      |          |
| Φ24.0<br>~Φ24.4 | YTDI 240 □ FH<br>KRUIZ 240 □ FH | 32.0         | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 181<br>229<br>277<br>349 | 121<br>169<br>217<br>289 | 96<br>144<br>192<br>264  | 39            | IDPH 240, IDPH 241, IDPH 242, IDPH 243, IDPH 244<br>IDFH 240, IDFH 241, IDFH 242, IDFH 243, IDFH 244<br>IDH 240, IDH 241, IDH 242, IDH 243, IDH 244<br>IDSH 240, IDSH 241, IDSH 242, IDSH 243, IDSH 244   |                 | CS 240<br>-255 SL |       |      |          |
| Φ24.5<br>~Φ24.9 | YTDI 245 □ FH<br>KRUIZ 245 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 183<br>232<br>281<br>355 | 123<br>172<br>221<br>295 | 98<br>147<br>196<br>270  |               | IDPH 245, IDPH 246, IDPH 247, IDPH 248, IDPH 249<br>IDFH 245, IDFH 246, IDFH 247, IDFH 248, IDFH 249<br>IDH 245, IDH 246, IDH 247, IDH 248, IDH 249<br>IDSH 245, IDSH 246, IDSH 247, IDSH 248, IDSH 249   |                 |                   |       |      |          |
| Φ25.0<br>~Φ25.4 | YTDI 250 □ FH<br>KRUIZ 250 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 185<br>235<br>285<br>360 | 125<br>175<br>225<br>300 | 100<br>150<br>200<br>275 |               | IDPH 250, IDPH 251, IDPH 252, IDPH 253, IDPH 254<br>IDFH 250, IDFH 251, IDFH 252, IDFH 253, IDFH 254<br>IDH 250, IDH 251, IDH 252, IDH 253L, IDH 254<br>IDSH 250, IDSH 251, IDSH 252, IDSH 253L, IDSH 254 |                 |                   |       |      |          |
| Φ25.5<br>~Φ25.9 | YTDI 255 □ FH<br>KRUIZ 255 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 188<br>239<br>290<br>367 | 128<br>179<br>230<br>307 | 102<br>153<br>204<br>281 |               | IDPH 255, IDPH 256, IDPH 257, IDPH 258, IDPH 259<br>IDFH 255, IDFH 256, IDFH 257, IDFH 258, IDFH 259<br>IDH 255, IDH 256, IDH 257, IDH 258, IDH 259<br>IDSH 255, IDSH 256, IDSH 257, IDSH 258, IDSH 259   |                 |                   |       |      |          |
| Φ26.0<br>~Φ26.4 | YTDI 260 □ FH<br>KRUIZ 260 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 190<br>242<br>294<br>372 | 130<br>182<br>234<br>312 | 104<br>156<br>208<br>286 |               | IDPH 260, IDPH 261, IDPH 262, IDPH 263, IDPH 264<br>IDFH 260, IDFH 261, IDFH 262, IDFH 263, IDFH 264<br>IDH 260, IDH 261, IDH 262, IDH 263, IDH 264<br>IDSH 260, IDSH 261, IDSH 262, IDSH 263, IDSH 264   |                 |                   |       |      |          |
| Φ26.5<br>~Φ26.9 | YTDI 265 □ FH<br>KRUIZ 265 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 193<br>246<br>299<br>379 | 133<br>186<br>239<br>319 | 106<br>159<br>212<br>292 |               | IDPH 265, IDPH 266, IDPH 267, IDPH 268, IDPH 269<br>IDFH 265, IDFH 266, IDFH 267, IDFH 268, IDFH 269<br>IDH 265, IDH 266, IDH 267, IDH 268, IDH 269<br>IDSH 265, IDSH 266, IDSH 267, IDSH 268, IDSH 269   |                 |                   |       |      |          |
| Φ27.0<br>~Φ27.4 | YTDI 270 □ FH<br>KRUIZ 270 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 195<br>249<br>303<br>384 | 135<br>189<br>243<br>324 | 108<br>162<br>216<br>297 |               | IDPH 270, IDPH 271, IDPH 272, IDPH 273, IDPH 274<br>IDFH 270, IDFH 271, IDFH 272, IDFH 273, IDFH 274<br>IDH 270, IDH 271, IDH 272, IDH 273, IDH 274<br>IDSH 270, IDSH 271, IDSH 272, IDSH 273, IDSH 274   |                 |                   |       |      |          |
| Φ27.5<br>~Φ27.9 | YTDI 275 □ FH<br>KRUIZ 275 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 197<br>252<br>307<br>390 | 137<br>192<br>247<br>330 | 110<br>165<br>220<br>303 |               | IDPH 275, IDPH 276, IDPH 277, IDPH 278, IDPH 279<br>IDFH 275, IDFH 276, IDFH 277, IDFH 278, IDFH 279<br>IDH 275, IDH 276, IDH 277, IDH 278, IDH 279<br>IDSH 275, IDSH 276, IDSH 277, IDSH 278, IDSH 279   |                 |                   |       |      |          |
| Φ28.0<br>~Φ28.4 | YTDI 280 □ FH<br>KRUIZ 280 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 200<br>256<br>312<br>396 | 140<br>196<br>252<br>336 | 112<br>168<br>224<br>308 |               | IDPH 280, IDPH 281, IDPH 282, IDPH 283, IDPH 284<br>IDFH 280, IDFH 281, IDFH 282, IDFH 283, IDFH 284<br>IDH 280, IDH 281, IDH 282, IDH 283, IDH 284<br>IDSH 280, IDSH 281, IDSH 282, IDSH 283, IDSH 284   |                 |                   |       |      |          |
| Φ28.5<br>~Φ28.9 | YTDI 285 □ FH<br>KRUIZ 285 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 202<br>259<br>316<br>402 | 142<br>199<br>256<br>342 | 114<br>171<br>228<br>314 |               | IDPH 285, IDPH 286, IDPH 287, IDPH 288, IDPH 289<br>IDFH 285, IDFH 286, IDFH 287, IDFH 288, IDFH 289<br>IDH 285, IDH 286, IDH 287, IDH 288, IDH 289<br>IDSH 285, IDSH 286, IDSH 287, IDSH 288, IDSH 289   |                 |                   |       |      |          |
| Φ29.0<br>~Φ29.4 | YTDI 290 □ FH<br>KRUIZ 290 □ FH |              | T(3xD)<br>P(5xD)<br>H(7xD)<br>L(10xD) | 205<br>263<br>321<br>408 | 145<br>203<br>261<br>348 | 116<br>174<br>232<br>319 |               | IDPH 290, IDPH 291, IDPH 292, IDPH 293, IDPH 294<br>IDFH 290, IDFH 291, IDFH 292, IDFH 293, IDFH 294<br>IDH 290, IDH 291, IDH 292, IDH 293, IDH 294<br>IDSH 290, IDSH 291, IDSH 292, IDSH 293, IDSH 294   |                 |                   |       |      |          |





12  
Yes®

13  
*Yes*



New

KRUZ "H"系列， 法兰+大螺旋角刀体与硬质合金钻尖

| 孔径<br>范围 | 刀体型号          | 刀柄尺寸<br>(Φd) | 切削深度<br>(倍×孔径) | L1  | L2  | L3  | 法兰直径<br>(Φd) | 适合刀体的刀片型号                                        | IDPH | IDFH | IDH | IDSH | 锁紧螺栓 | 梅花型螺栓 | 定位螺钉 | 1°型内六角扳手 |
|----------|---------------|--------------|----------------|-----|-----|-----|--------------|--------------------------------------------------|------|------|-----|------|------|-------|------|----------|
| Φ45.5    | YTDI 455 □ FH | 40.0         | T(3xD)         | 294 | 224 | 182 | 55           | IDPH 455, IDPH 456, IDPH 457, IDPH 458, IDPH 459 |      |      |     |      |      |       |      |          |
| ~Φ45.9   | KRUZ 455 □ FH |              | P(5xD)         | 385 | 315 | 273 |              | IDFH 455, IDFH 456, IDFH 457, IDFH 458, IDFH 459 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 476 | 406 | 364 |              | IDH 455, IDH 456, IDH 457, IDH 458, IDH 459      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 613 | 543 | 501 |              | IDSH 455, IDSH 456, IDSH 457, IDSH 458, IDSH 459 |      |      |     |      |      |       |      |          |
| Φ46.0    | YTDI 460 □ FH |              | T(3xD)         | 296 | 226 | 184 |              | IDPH 460, IDPH 461, IDPH 462, IDPH 463, IDPH 464 |      |      |     |      |      |       |      |          |
| ~Φ46.4   | KRUZ 460 □ FH |              | P(5xD)         | 388 | 318 | 276 |              | IDFH 460, IDFH 461, IDFH 462, IDFH 463, IDFH 464 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 480 | 410 | 368 |              | IDH 460, IDH 461, IDH 462, IDH 463, IDH 464      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 618 | 548 | 506 |              | IDSH 460, IDSH 461, IDSH 462, IDSH 463, IDSH 464 |      |      |     |      |      |       |      |          |
| Φ46.5    | YTDI 465 □ FH |              | T(3xD)         | 299 | 229 | 186 |              | IDPH 465, IDPH 466, IDPH 467, IDPH 468, IDPH 469 |      |      |     |      |      |       |      |          |
| ~Φ46.9   | KRUZ 465 □ FH |              | P(5xD)         | 392 | 322 | 279 |              | IDFH 465, IDFH 466, IDFH 467, IDFH 468, IDFH 469 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 485 | 415 | 372 |              | IDH 465, IDH 466, IDH 467, IDH 468, IDH 469      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 625 | 555 | 512 |              | IDSH 465, IDSH 466, IDSH 467, IDSH 468, IDSH 469 |      |      |     |      |      |       |      |          |
| Φ47.0    | YTDI 470 □ FH |              | T(3xD)         | 301 | 231 | 188 |              | IDPH 470, IDPH 471, IDPH 472, IDPH 473, IDPH 474 |      |      |     |      |      |       |      |          |
| ~Φ47.4   | KRUZ 470 □ FH |              | P(5xD)         | 395 | 325 | 282 |              | IDFH 470, IDFH 471, IDFH 472, IDFH 473, IDFH 474 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 489 | 419 | 376 |              | IDH 470, IDH 471, IDH 472, IDH 473, IDH 474      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 630 | 560 | 517 |              | IDSH 470, IDSH 471, IDSH 472, IDSH 473, IDSH 474 |      |      |     |      |      |       |      |          |
| Φ47.5    | YTDI 475 □ FH |              | T(3xD)         | 303 | 233 | 190 |              | IDPH 475, IDPH 476, IDPH 477, IDPH 478, IDPH 479 |      |      |     |      |      |       |      |          |
| ~Φ47.9   | KRUZ 475 □ FH |              | P(5xD)         | 398 | 328 | 285 |              | IDFH 475, IDFH 476, IDFH 477, IDFH 478, IDFH 479 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 493 | 423 | 380 |              | IDH 475, IDH 476, IDH 477, IDH 478, IDH 479      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 636 | 566 | 523 |              | IDSH 475, IDSH 476, IDSH 477, IDSH 478, IDSH 479 |      |      |     |      |      |       |      |          |
| Φ48.0    | YTDI 480 □ FH |              | T(3xD)         | 306 | 236 | 192 |              | IDPH 480, IDPH 481, IDPH 482, IDPH 483, IDPH 484 |      |      |     |      |      |       |      |          |
| ~Φ48.4   | KRUZ 480 □ FH |              | P(5xD)         | 402 | 332 | 288 |              | IDFH 480, IDFH 481, IDFH 482, IDFH 483, IDFH 484 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 498 | 428 | 384 |              | IDH 480, IDH 481, IDH 482, IDH 483, IDH 484      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 642 | 572 | 528 |              | IDSH 480, IDSH 481, IDSH 482, IDSH 483, IDSH 484 |      |      |     |      |      |       |      |          |
| Φ48.5    | YTDI 485 □ FH |              | T(3xD)         | 308 | 238 | 194 |              | IDPH 485, IDPH 486, IDPH 487, IDPH 488, IDPH 489 |      |      |     |      |      |       |      |          |
| ~Φ48.9   | KRUZ 485 □ FH |              | P(5xD)         | 405 | 335 | 291 |              | IDFH 485, IDFH 486, IDFH 487, IDFH 488, IDFH 489 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 502 | 432 | 388 |              | IDH 485, IDH 486, IDH 487, IDH 488, IDH 489      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 648 | 578 | 534 |              | IDSH 485, IDSH 486, IDSH 487, IDSH 488, IDSH 489 |      |      |     |      |      |       |      |          |
| Φ49.0    | YTDI 490 □ FH |              | T(3xD)         | 311 | 241 | 196 |              | IDPH 490, IDPH 491, IDPH 492, IDPH 493, IDPH 494 |      |      |     |      |      |       |      |          |
| ~Φ49.4   | KRUZ 490 □ FH |              | P(5xD)         | 409 | 339 | 294 |              | IDFH 490, IDFH 491, IDFH 492, IDFH 493, IDFH 494 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 507 | 437 | 392 |              | IDH 490, IDH 491, IDH 492, IDH 493, IDH 494      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 654 | 584 | 539 |              | IDSH 490, IDSH 491, IDSH 492, IDSH 493, IDSH 494 |      |      |     |      |      |       |      |          |
| Φ49.5    | YTDI 495 □ FH |              | T(3xD)         | 313 | 243 | 198 |              | IDPH 495, IDPH 496, IDPH 497, IDPH 498, IDPH 499 |      |      |     |      |      |       |      |          |
| ~Φ49.9   | KRUZ 495 □ FH |              | P(5xD)         | 412 | 342 | 297 |              | IDFH 495, IDFH 496, IDFH 497, IDFH 498, IDFH 499 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 511 | 441 | 396 |              | IDH 495, IDH 496, IDH 497, IDH 498, IDH 499      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 660 | 590 | 545 |              | IDSH 495, IDSH 496, IDSH 497, IDSH 498, IDSH 499 |      |      |     |      |      |       |      |          |
| Φ50.0    | YTDI 500 □ FH |              | T(3xD)         | 315 | 245 | 200 |              | IDPH 500, IDPH 501, IDPH 502, IDPH 503, IDPH 504 |      |      |     |      |      |       |      |          |
| ~Φ50.4   | KRUZ 500 □ FH |              | P(5xD)         | 415 | 345 | 300 |              | IDFH 500, IDFH 501, IDFH 502, IDFH 503, IDFH 504 |      |      |     |      |      |       |      |          |
|          |               |              | H(7xD)         | 515 | 445 | 400 |              | IDH 500, IDH 501, IDH 502, IDH 503, IDH 504      |      |      |     |      |      |       |      |          |
|          |               |              | L(10xD)        | 665 | 595 | 550 |              | IDSH 500, IDSH 501, IDSH 502, IDSH 503, IDSH 504 |      |      |     |      |      |       |      |          |

KRUZ-FH钻头系列, 推荐切削参数

| 工件材质         | 钻头直径<br>切削参数 | Φ8~16mm       |               | Φ16~25mm      |               | Φ25~32mm      |               | Φ32~40mm      |               | Φ40~50mm      |               |
|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|              |              | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) | 线速度<br>(m/分钟) | 进给量<br>(mm/转) |
| 灰口铸铁 (FC)    |              | 80~150        | 0.20~0.30     | 80~150        | 0.25~0.45     | 80~160        | 0.35~0.55     | 90~200        | 0.34~0.58     | 90~200        | 0.38~0.60     |
| 球墨铸铁 (FCD)   |              | 80~140        | 0.15~0.25     | 80~140        | 0.22~0.45     | 80~150        | 0.32~0.52     | 90~160        | 0.35~0.62     | 90~200        | 0.38~0.60     |
| 中碳钢 (S45C)   |              | 80~140        | 0.15~0.30     | 80~140        | 0.16~0.40     | 80~150        | 0.20~0.40     | 80~150        | 0.22~0.48     | 80~160        | 0.25~0.54     |
| 合金钢 (SCM440) |              | 70~140        | 0.15~0.30     | 70~140        | 0.15~0.40     | 70~140        | 0.18~0.40     | 80~140        | 0.25~0.47     | 80~140        | 0.27~0.52     |
| 淬硬钢 (SKD11)  |              | 40~50         | 0.10~0.20     | 40~50         | 0.12~0.28     | 40~50         | 0.16~0.35     | 40~60         | 0.20~0.38     | 40~60         | 0.22~0.42     |
| 不锈钢 (SUS)    |              | 30~40         | 0.10~0.20     | 35~50         | 0.10~0.22     | 35~50         | 0.15~0.28     | 40~55         | 0.18~0.30     | 40~55         | 0.22~0.32     |
| 铝 130HB (AL) |              | 120~200       | 0.20~0.30     | 120~200       | 0.25~0.40     | 120~200       | 0.30~0.45     | 120~200       | 0.30~0.45     | 120~200       | 0.30~0.50     |

- ☞ 上述推荐切削参数以3xD为准。当在5xD, 7xD或10xD时, 根据工况下降15~20%切削速度。
- ☞ 上述推荐切削参数以正常工况和油污冷却(MQL)为准。
- 如果加工设备(机床)状态不好, 或工件夹具(JIG)不合理, 就会影响最佳切削速度的发挥。

New

KRUZ "K"系列刀体与硬质合金钻尖

注意 !!!

"K"系列钻尖(IDFK或IDPK),  
只专用"K"系列刀体(KRUZ-SLK或FSLK), 请勿失误。

IDFK 硬质合金钻尖(刀片)

- 硬质合金刀片, 全部由CNC磨削程序来完成
- 140°+170°双角度结合平底钻尖, 是我公司的专利品
- TiAlN涂层钻尖, 具有优秀耐磨性和高进给加工性能
- 该系列是对型钢、角钢或薄板的钻孔, 针对性地设计的产物



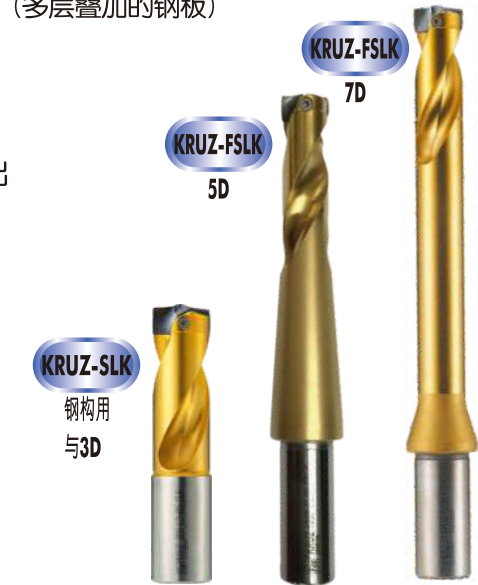
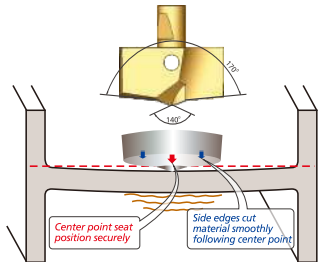
IDPK 硬质合金钻尖(刀片)

- 硬质合金刀片, 全部由CNC磨削程序来完成
- 120°+150°双角度结合钻尖角, 是我公司的专利品
- TiAlN涂层钻尖, 具有优秀耐磨性和高进给加工性能
- 优化的合理设计结构, 适于多层叠加薄板的孔加工

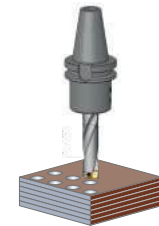


KRUZ-SLK / KRUZ-FSLK 钻头刀体

- 刀体采用经过特殊热处理的优质工具钢, 具有很好的刚性
- TiN涂层的刀体, 保证更长的刀具寿命和更好的润滑性能
- 经特殊设计的螺旋角和容屑槽, 增加排屑性能, 使屑更快地向外弹出
- 在0.5mm范围内, 可通用IDFK与IDPK钻尖(刀片)
- 短而粗的刀体结构, 对结构钢可最大发挥钻孔能力
- 内冷设计, 提高效率、延长刀具寿命



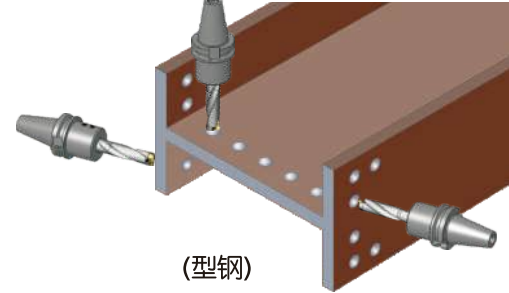
(加工案例)



(钢板)



(角钢)



(型钢)



(专用钻床A)



(专用钻床B)

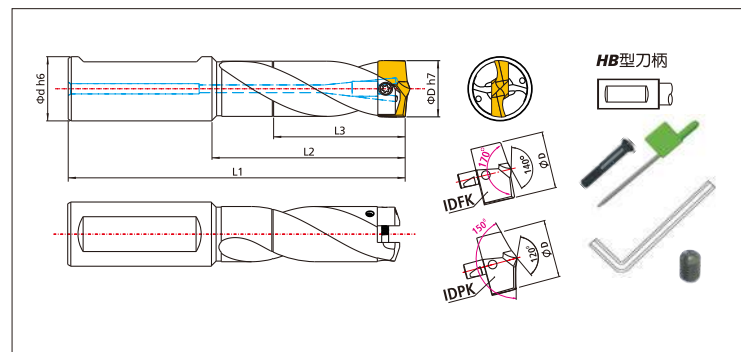


(专用钻床C)



(专用钻床D)





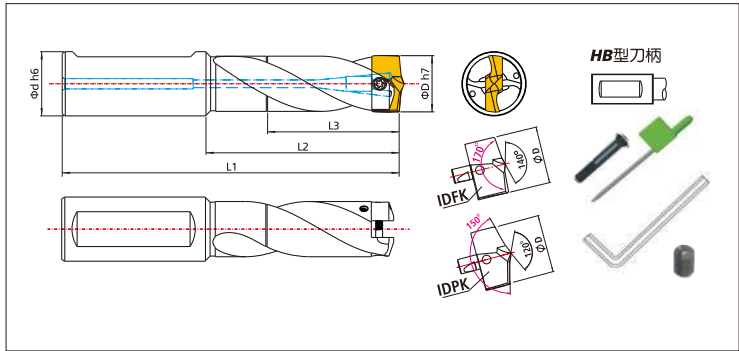
| 孔径<br>(mm) | 钢构刀体型号             | 尺 寸           |                              | 3xD刀体型号                      | 尺 寸                          |                              |                              | 刀柄<br>(Φd)                                                                                                            |  IDFK  IDPK |  锁紧螺栓 |  梅花型螺栓                             |  定位螺钉 |  L型内六角扳手 |                              |                              |
|------------|--------------------|---------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------|------------------------------|
|            |                    | L1            | L2                           |                              | L3                           | L1                           | L2                           |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             | L3                           |                              |
| 12.0~12.4  | KRUZ 120 L3=50 SLK | 110           | 62                           | KRUZ 120T SLK                | 105                          | 57                           | 50                           | 16                                                                                                                    | IDFK 120~124<br>IDPK 120~124                                                                                                                                                     | CS 120<br>~135 SL                                                                        | <br>T6<br>Torque<br>0.6Nm<br>(Max) | M2.5x4                                                                                   | 1.3mm                                                                                       |                              |                              |
| 12.5~12.9  | KRUZ 125 L3=50 SLK |               |                              | KRUZ 125T SLK                | 110                          | 62                           |                              |                                                                                                                       | IDFK 125~129<br>IDPK 125~129                                                                                                                                                     |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 13.0~13.4  | KRUZ 130 L3=50 SLK |               |                              | KRUZ 130T SLK                |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             | IDFK 130~134<br>IDPK 130~134 |                              |
| 13.5~13.9  | KRUZ 135 L3=50 SLK |               |                              | KRUZ 135T SLK                |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              | IDFK 135~139<br>IDPK 135~139 |
| 14.0~14.4  | KRUZ 140 L3=50 SLK |               |                              | KRUZ 140T SLK                |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 14.5~14.9  | KRUZ 145 L3=50 SLK | KRUZ 145T SLK | 115                          | 67                           | 55                           | IDFK 145~149<br>IDPK 145~149 | CS 140<br>~155 SL            | <br>T7<br>Torque<br>0.9Nm<br>(Max) |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 15.0~15.4  | KRUZ 150 L3=50 SLK | KRUZ 150T SLK |                              |                              |                              |                              |                              |                                                                                                                       | 125                                                                                                                                                                              | 75                                                                                       | 60                                                                                                                    | IDFK 150~154<br>IDPK 150~154                                                             |                                                                                             |                              |                              |
| 15.5~15.9  | KRUZ 155 L3=50 SLK | KRUZ 155T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          | 130                                                                                         | 80                           | 62                           |
| 16.0~16.4  | KRUZ 160 L3=50 SLK | KRUZ 160T SLK | IDFK 160~164<br>IDPK 160~164 |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 16.5~16.9  | KRUZ 165 L3=50 SLK | KRUZ 165T SLK |                              | IDFK 165~169<br>IDPK 165~169 |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 17.0~17.4  | KRUZ 170 L3=50 SLK | KRUZ 170T SLK |                              |                              | IDFK 170~174<br>IDPK 170~174 |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 17.5~17.9  | KRUZ 175 L3=50 SLK | KRUZ 175T SLK | 140                          | 90                           |                              | 70                           | IDFK 175~179<br>IDPK 175~179 | CS 180<br>~195 SL                                                                                                     | <br>T8<br>Torque<br>1.5Nm<br>(Max)                                                          |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 18.0~18.4  | KRUZ 180 L3=50 SLK | KRUZ 180T SLK |                              |                              | IDFK 180~184<br>IDPK 180~184 |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 18.5~18.9  | KRUZ 185 L3=50 SLK | KRUZ 185T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  | IDFK 185~189<br>IDPK 185~189                                                             |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 19.0~19.4  | KRUZ 190 L3=50 SLK | KRUZ 190T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          | IDFK 190~194<br>IDPK 190~194                                                                                          |                                                                                          |                                                                                             |                              |                              |
| 19.5~19.9  | KRUZ 195 L3=50 SLK | KRUZ 195T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       | IDFK 195~199<br>IDPK 195~199                                                             |                                                                                             |                              |                              |
| 20.0~20.4  | KRUZ 200 L3=50 SLK | KRUZ 200T SLK | 150                          | 94                           | 80                           | IDFK 200~204<br>IDPK 200~204 | CS 200<br>~215 SL            |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 20.5~20.9  | KRUZ 205 L3=50 SLK | KRUZ 205T SLK |                              |                              |                              |                              |                              | IDFK 205~209<br>IDPK 205~209                                                                                          |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 21.0~21.4  | KRUZ 210 L3=50 SLK | KRUZ 210T SLK |                              |                              |                              |                              |                              |                                                                                                                       | IDFK 210~214<br>IDPK 210~214                                                                                                                                                     |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 21.5~21.9  | KRUZ 215 L3=50 SLK | KRUZ 215T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  | IDFK 215~219<br>IDPK 215~219                                                             |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 22.0~22.4  | KRUZ 220 L3=50 SLK | KRUZ 220T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          | IDFK 220~224<br>IDPK 220~224                                                                                          |                                                                                          |                                                                                             |                              |                              |
| 22.5~22.9  | KRUZ 225 L3=50 SLK | KRUZ 225T SLK | IDFK 225~229<br>IDPK 225~229 |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 23.0~23.4  | KRUZ 230 L3=50 SLK | KRUZ 230T SLK |                              | IDFK 230~234<br>IDPK 230~234 |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 23.5~23.9  | KRUZ 235 L3=50 SLK | KRUZ 235T SLK |                              |                              | IDFK 235~239<br>IDPK 235~239 |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 24.0~24.4  | KRUZ 240 L3=50 SLK | KRUZ 240T SLK | 160                          | 104                          |                              | 80                           | IDFK 240~244<br>IDPK 240~244 | CS 220<br>~235 SL                                                                                                     |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 24.5~24.9  | KRUZ 245 L3=50 SLK | KRUZ 245T SLK |                              |                              |                              |                              |                              |                                                                                                                       | IDFK 245~249<br>IDPK 245~249                                                                                                                                                     |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 25.0~25.4  | KRUZ 250 L3=50 SLK | KRUZ 250T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  | IDFK 250~254<br>IDPK 250~254                                                             |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 25.5~25.9  | KRUZ 255 L3=50 SLK | KRUZ 255T SLK |                              |                              | IDFK 255~259<br>IDPK 255~259 |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 26.0~26.4  | KRUZ 260 L3=50 SLK | KRUZ 260T SLK |                              |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          | 170                                                                                                                   | 110                                                                                      | 84                                                                                          | IDFK 260~264<br>IDPK 260~264 | CS 240<br>~255 SL            |
| 26.5~26.9  | KRUZ 265 L3=50 SLK | KRUZ 265T SLK | IDFK 265~269<br>IDPK 265~269 |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 27.0~27.4  | KRUZ 270 L3=50 SLK | KRUZ 270T SLK |                              | IDFK 270~274<br>IDPK 270~274 |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 27.5~27.9  | KRUZ 275 L3=50 SLK | KRUZ 275T SLK |                              |                              | IDFK 275~279<br>IDPK 275~279 |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 28.0~28.4  | KRUZ 280 L3=50 SLK | KRUZ 280T SLK |                              |                              |                              | IDFK 280~284<br>IDPK 280~284 |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 28.5~28.9  | KRUZ 285 L3=50 SLK | KRUZ 285T SLK | IDFK 285~289<br>IDPK 285~289 |                              |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 29.0~29.4  | KRUZ 290 L3=50 SLK | KRUZ 290T SLK |                              | IDFK 290~294<br>IDPK 290~294 |                              |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |
| 29.5~29.9  | KRUZ 295 L3=50 SLK | KRUZ 295T SLK |                              |                              | IDFK 295~299<br>IDPK 295~299 |                              |                              |                                                                                                                       |                                                                                                                                                                                  |                                                                                          |                                                                                                                       |                                                                                          |                                                                                             |                              |                              |

| 孔径(Φ)<br>mm | 钢构刀体型号             | 尺寸            |                              |     | 3xD刀体型号       | 尺寸                           |                   |                   | 刀柄<br>(Φd) |  |  |    | 定位螺钉 |  型内六角扳手 |                   |
|-------------|--------------------|---------------|------------------------------|-----|---------------|------------------------------|-------------------|-------------------|------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------------------------|-------------------|
|             |                    | L1            | L2                           | L3  |               | L1                           | L2                | L3                |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 30.0~30.4   | KRUZ 300 L3=70 SLK | 155           | 95                           | 70  | KRUZ 300T SLK | 200                          | 140               | 110               | 32         | IDFK 300-304<br>IDPK 300-304                                                        | CS 300<br>-315 SL                                                                   |  | M4x8 | 2.0mm                                                                                      |                   |
| 30.5~30.9   | KRUZ 305 L3=70 SLK |               |                              |     | KRUZ 305T SLK |                              |                   |                   |            | IDFK 305-309<br>IDPK 305-309                                                        |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 31.0~31.4   | KRUZ 310 L3=70 SLK |               |                              |     | KRUZ 310T SLK |                              |                   |                   |            | IDFK 310-314<br>IDPK 310-314                                                        |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 31.5~31.9   | KRUZ 315 L3=70 SLK |               |                              |     | KRUZ 315T SLK |                              |                   |                   |            | IDFK 315-319<br>IDPK 315-319                                                        |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 32.0~32.4   | KRUZ 320 L3=70 SLK |               |                              |     | KRUZ 320T SLK | IDFK 320-324<br>IDPK 320-324 | 210               |                   |            | 150                                                                                 |                                                                                     |                                                                                       |      |                                                                                            | CS 320<br>-355 SL |
| 32.5~32.9   | KRUZ 325 L3=70 SLK |               |                              |     | KRUZ 325T SLK | IDFK 325-329<br>IDPK 325-329 |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 33.0~33.4   | KRUZ 330 L3=70 SLK |               |                              |     | KRUZ 330T SLK | IDFK 330-334<br>IDPK 330-334 |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 33.5~33.9   | KRUZ 335 L3=70 SLK |               |                              |     | KRUZ 335T SLK | IDFK 335-339<br>IDPK 335-339 |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 34.0~34.4   | KRUZ 340 L3=80 SLK |               |                              |     | KRUZ 340T SLK | IDFK 340-344<br>IDPK 340-344 |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 34.5~34.9   | KRUZ 345 L3=80 SLK | KRUZ 345T SLK | IDFK 345-349<br>IDPK 345-349 | 230 | 160           | 120                          | CS 360<br>-395 SL |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 35.0~35.4   | KRUZ 350 L3=80 SLK | KRUZ 350T SLK | IDFK 350-354<br>IDPK 350-354 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 35.5~35.9   | KRUZ 355 L3=80 SLK | KRUZ 355T SLK | IDFK 355-359<br>IDPK 355-359 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 36.0~36.4   | KRUZ 360 L3=80 SLK | KRUZ 360T SLK | IDFK 360-364<br>IDPK 360-364 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 36.5~36.9   | KRUZ 365 L3=80 SLK | KRUZ 365T SLK | IDFK 365-369<br>IDPK 365-369 | 250 | 180           | 130                          |                   | CS 400<br>-445 SL |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 37.0~37.4   | KRUZ 370 L3=80 SLK | KRUZ 370T SLK | IDFK 370-374<br>IDPK 370-374 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 37.5~37.9   | KRUZ 375 L3=80 SLK | KRUZ 375T SLK | IDFK 375-379<br>IDPK 375-379 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 38.0~38.4   | KRUZ 380 L3=80 SLK | KRUZ 380T SLK | IDFK 380-384<br>IDPK 380-384 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 38.5~38.9   | KRUZ 385 L3=80 SLK | KRUZ 385T SLK | IDFK 385-389<br>IDPK 385-389 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 39.0~39.4   | KRUZ 390 L3=80 SLK | KRUZ 390T SLK | IDFK 390-394<br>IDPK 390-394 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 39.5~39.9   | KRUZ 395 L3=80 SLK | KRUZ 395T SLK | IDFK 395-399<br>IDPK 395-399 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 40.0~40.4   | KRUZ 400 L3=80 SLK | KRUZ 400T SLK | IDFK 400-404<br>IDPK 400-404 |     |               |                              | 270               |                   | 200        | 143                                                                                 | CS 450<br>-500 SL                                                                   |                                                                                       |      |                                                                                            |                   |
| 40.5~40.9   | KRUZ 405 L3=80 SLK | KRUZ 405T SLK | IDFK 405-409<br>IDPK 405-409 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 41.0~41.4   | KRUZ 410 L3=80 SLK | KRUZ 410T SLK | IDFK 410-414<br>IDPK 410-414 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 41.5~41.9   | KRUZ 415 L3=80 SLK | KRUZ 415T SLK | IDFK 415-419<br>IDPK 415-419 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 42.0~42.4   | KRUZ 420 L3=80 SLK | KRUZ 420T SLK | IDFK 420-424<br>IDPK 420-424 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 42.5~42.9   | KRUZ 425 L3=80 SLK | KRUZ 425T SLK | IDFK 425-429<br>IDPK 425-429 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 43.0~43.4   | KRUZ 430 L3=80 SLK | KRUZ 430T SLK | IDFK 430-434<br>IDPK 430-434 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 43.5~43.9   | KRUZ 435 L3=80 SLK | KRUZ 435T SLK | IDFK 435-439<br>IDPK 435-439 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 44.0~44.4   | KRUZ 440 L3=80 SLK | KRUZ 440T SLK | IDFK 440-444<br>IDPK 440-444 | 280 | 210           | 158                          |                   | CS 480<br>-500 SL |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 44.5~44.9   | KRUZ 445 L3=80 SLK | KRUZ 445T SLK | IDFK 445-449<br>IDPK 445-449 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 45.0~45.4   | KRUZ 450 L3=80 SLK | KRUZ 450T SLK | IDFK 450-454<br>IDPK 450-454 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 45.5~45.9   | KRUZ 455 L3=80 SLK | KRUZ 455T SLK | IDFK 455-459<br>IDPK 455-459 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 46.0~46.4   | KRUZ 460 L3=80 SLK | KRUZ 460T SLK | IDFK 460-464<br>IDPK 460-464 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 46.5~46.9   | KRUZ 465 L3=80 SLK | KRUZ 465T SLK | IDFK 465-469<br>IDPK 465-469 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 47.0~47.4   | KRUZ 470 L3=80 SLK | KRUZ 470T SLK | IDFK 470-474<br>IDPK 470-474 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 47.5~47.9   | KRUZ 475 L3=80 SLK | KRUZ 475T SLK | IDFK 475-479<br>IDPK 475-479 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 48.0~48.4   | KRUZ 480 L3=90 SLK | KRUZ 480T SLK | IDFK 480-484<br>IDPK 480-484 |     |               |                              | 300               |                   | 230        | 172                                                                                 | CS 495<br>-500 SL                                                                   |                                                                                       |      |                                                                                            |                   |
| 48.5~48.9   | KRUZ 485 L3=90 SLK | KRUZ 485T SLK | IDFK 485-489<br>IDPK 485-489 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 49.0~49.4   | KRUZ 490 L3=90 SLK | KRUZ 490T SLK | IDFK 490-494<br>IDPK 490-494 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 49.5~49.9   | KRUZ 495 L3=90 SLK | KRUZ 495T SLK | IDFK 495-499<br>IDPK 495-499 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |
| 50.0~50.4   | KRUZ 500 L3=90 SLK | KRUZ 500T SLK | IDFK 500-504<br>IDPK 500-504 |     |               |                              |                   |                   |            |                                                                                     |                                                                                     |                                                                                       |      |                                                                                            |                   |





专为结构钢加工设备而设计的钴尖(刀片)



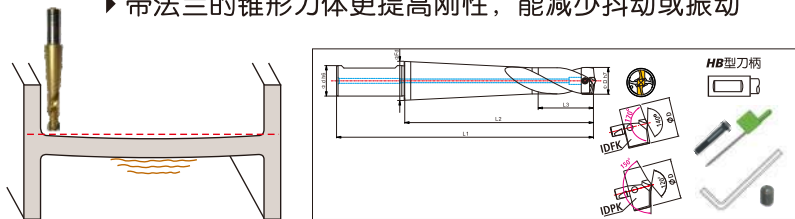
专为结构钢加工设备而设计的钴尖(刀片)

| 孔径(Φ)<br>十进制  | 刀体型号            | 刀柄<br>(Φd)         | 尺 寸               |                  |                  | IDFK<br> | IDPK<br> | 可替代的公制刀体                                        |                    |
|---------------|-----------------|--------------------|-------------------|------------------|------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------|
|               |                 |                    | L1                | L2               | L3               |                                                                                           |                                                                                             |                                                 |                    |
| .4724~.4917   | KRUZ .4724 SLK  | 5/8<br>(15.875mm)  | 4.3307<br>(110mm) | 2.4409<br>(62mm) | 1.9685<br>(50mm) | IDFK 31/64"(12.30mm)                                                                      | IDPK 31/64"(12.30mm)                                                                        | KRUZ 120 L3=50 SLK                              |                    |
| .4921~.5114   | KRUZ .4921 SLK  |                    |                   |                  |                  | IDFK 1/2"(12.70mm)                                                                        | IDPK 1/2"(12.70mm)                                                                          | KRUZ 125 L3=50 SLK                              |                    |
| .5118~.5311   | KRUZ .5118 SLK  |                    |                   |                  |                  | IDFK 33/64"(13.10mm)                                                                      | IDPK 33/64"(13.10mm)                                                                        | KRUZ 130 L3=50 SLK                              |                    |
| .5315~.5508   | KRUZ .5315 SLK  |                    |                   |                  |                  | IDFK 17/32"(13.49mm)                                                                      | IDPK 17/32"(13.49mm)                                                                        | KRUZ 135 L3=50 SLK                              |                    |
| .5512~.5705   | KRUZ .5512 SLK  |                    |                   |                  |                  | IDFK 9/16"(14.29mm)                                                                       | IDPK 9/16"(14.29mm)                                                                         | KRUZ 140 L3=50 SLK                              |                    |
| .5709~.5902   | KRUZ .5709 SLK  |                    | 4.5276<br>(115mm) | 2.5591<br>(65mm) |                  | IDFK 37/64"(14.68mm)                                                                      | IDPK 37/64"(14.68mm)                                                                        | KRUZ 145 L3=50 SLK                              |                    |
| .5906~.6098   | KRUZ .5906 SLK  |                    |                   |                  |                  | IDFK 19/32"(15.08mm),<br>IDFK 39/64"(15.48mm)                                             | IDPK 19/32"(15.08mm),<br>IDPK 39/64"(15.48mm)                                               | KRUZ 150 L3=50 SLK                              |                    |
| .6102~.6295   | KRUZ .6102 SLK  |                    |                   |                  |                  | IDFK 5/8"(15.88mm)                                                                        | IDPK 5/8"(15.88mm)                                                                          | KRUZ 155 L3=50 SLK                              |                    |
| .6299~.6492   | KRUZ .6299 SLK  |                    |                   |                  |                  | IDFK 41/64"(16.27mm)                                                                      | IDPK 41/64"(16.27mm)                                                                        | KRUZ 160 L3=50 SLK                              |                    |
| .6496~.6689   | KRUZ .6496 SLK  |                    |                   |                  |                  | IDFK 21/32"(16.67mm)                                                                      | IDPK 21/32"(16.67mm)                                                                        | KRUZ 165 L3=50 SLK                              |                    |
| .6693~.6886   | KRUZ .6693 SLK  | 3/4<br>(19.05mm)   | 4.6457<br>(118mm) | 2.6772<br>(68mm) |                  | IDFK 43/64"(17.07mm),<br>IDFK 11/16"(17.46mm)                                             | IDPK 43/64"(17.07mm),<br>IDPK 11/16"(17.46mm)                                               | KRUZ 170 L3=50 SLK                              |                    |
| .6890~.7083   | KRUZ .6890 SLK  |                    |                   |                  |                  | IDFK 45/64"(17.86mm)                                                                      | IDPK 45/64"(17.86mm)                                                                        | KRUZ 175 L3=50 SLK                              |                    |
| .7087~.7280   | KRUZ .7087 SLK  |                    |                   |                  |                  | IDFK 23/32"(18.26mm)                                                                      | IDPK 23/32"(18.26mm)                                                                        | KRUZ 180 L3=50 SLK                              |                    |
| .7283~.7476   | KRUZ .7283 SLK  |                    |                   |                  |                  | IDFK 47/64"(18.65mm)                                                                      | IDPK 47/64"(18.65mm)                                                                        | KRUZ 185 L3=50 SLK                              |                    |
| .7480~.7673   | KRUZ .7480 SLK  |                    |                   |                  |                  | IDFK 3/4(19.05mm),<br>IDFK 49/64"(19.45mm)                                                | IDPK 3/4(19.05mm),<br>IDPK 49/64"(19.45mm)                                                  | KRUZ 190 L3=50 SLK                              |                    |
| .7677~.7870   | KRUZ .7677 SLK  | 1"<br>(25.4mm)     | 5.1181<br>(130mm) | 2.9134<br>(74mm) |                  | IDFK 25/32"(19.84mm)                                                                      | IDPK 25/32"(19.84mm)                                                                        | KRUZ 195 L3=50 SLK                              |                    |
| .7874~.8067   | KRUZ .7874 SLK  |                    |                   |                  |                  | IDFK 51/64"(20.24mm)                                                                      | IDPK 51/64"(20.24mm)                                                                        | KRUZ 200 L3=50 SLK                              |                    |
| .8071~.8264   | KRUZ .8071 SLK  |                    |                   |                  |                  | IDFK 13/16"(20.64mm)                                                                      | IDPK 13/16"(20.64mm)                                                                        | KRUZ 205 L3=50 SLK                              |                    |
| .8268~.8461   | KRUZ .8268 SLK  |                    |                   |                  |                  | IDFK 27/32"(21.43mm)                                                                      | IDPK 27/32"(21.43mm)                                                                        | KRUZ 210 L3=50 SLK                              |                    |
| .8465~.8657   | KRUZ .8465 SLK  |                    |                   |                  |                  | IDFK 55/64"(21.83mm)                                                                      | IDPK 55/64"(21.83mm)                                                                        | KRUZ 215 L3=50 SLK                              |                    |
| .8661~.8854   | KRUZ .8661 SLK  | 1 1/4<br>(31.75mm) | 5.3543<br>(136mm) | 2.9921<br>(76mm) |                  | IDFK 7/8"(22.23mm)                                                                        | IDPK 7/8"(22.23mm)                                                                          | KRUZ 220 L3=50 SLK                              |                    |
| .8858~.9051   | KRUZ .8858 SLK  |                    |                   |                  |                  | IDFK 57/64"(22.62mm)                                                                      | IDPK 57/64"(22.62mm)                                                                        | KRUZ 225 L3=50 SLK                              |                    |
| .9055~.9248   | KRUZ .9055 SLK  |                    |                   |                  |                  | IDFK 29/32"(23.02mm),<br>IDFK 59/64"(23.42mm)                                             | IDPK 29/32"(23.02mm),<br>IDPK 59/64"(23.42mm)                                               | KRUZ 230 L3=50 SLK                              |                    |
| .9252~.9445   | KRUZ .9252 SLK  |                    |                   |                  |                  | IDFK 15/16"(23.81mm)                                                                      | IDPK 15/16"(23.81mm)                                                                        | KRUZ 235 L3=50 SLK                              |                    |
| .9646~.9839   | KRUZ .9646 SLK  |                    |                   |                  |                  | IDFK 31/32"(24.61mm)                                                                      | IDPK 31/32"(24.61mm)                                                                        | KRUZ 245 L3=50 SLK                              |                    |
| .9843~1.0035  | KRUZ .9843 SLK  |                    | 6.1024<br>(155mm) | 3.7402<br>(95mm) |                  | 2.7559<br>(70mm)                                                                          | IDFK 63/64"(25.00mm),<br>IDFK 1"(25.4mm)                                                    | IDPK 63/64"(25.00mm),<br>IDPK 1"(25.4mm)        | KRUZ 250 L3=50 SLK |
| 1.0039~1.0232 | KRUZ 1.0039 SLK |                    |                   |                  |                  |                                                                                           | IDFK 1-1/64"(25.80mm)                                                                       | IDPK 1-1/64"(25.80mm)                           | KRUZ 255 L3=50 SLK |
| 1.0236~1.0429 | KRUZ 1.0236 SLK |                    |                   |                  |                  |                                                                                           | IDFK 1-1/32"(26.19mm)                                                                       | IDPK 1-1/32"(26.19mm)                           | KRUZ 260 L3=50 SLK |
| 1.0433~1.0626 | KRUZ 1.0433 SLK |                    |                   |                  |                  |                                                                                           | IDFK 1-3/64"(26.59mm),<br>IDFK 1-1/16"(26.99mm)                                             | IDPK 1-3/64"(26.59mm),<br>IDPK 1-1/16"(26.99mm) | KRUZ 265 L3=50 SLK |
| 1.0827~1.1020 | KRUZ 1.0827 SLK |                    |                   |                  |                  |                                                                                           | IDFK 1-3/32"(27.78mm)                                                                       | IDPK 1-3/32"(27.78mm)                           | KRUZ 275 L3=50 SLK |
| 1.1024~1.1217 | KRUZ 1.1024 SLK | 7.0866<br>(180mm)  | 4.3307<br>(110mm) | 3.1496<br>(80mm) |                  | IDFK 1-7/64"(28.18mm)                                                                     | IDPK 1-7/64"(28.18mm)                                                                       | KRUZ 280 L3=50 SLK                              |                    |
| 1.1220~1.1413 | KRUZ 1.1220 SLK |                    |                   |                  |                  | IDFK 1-1/8"(28.58mm)                                                                      | IDPK 1-1/8"(28.58mm)                                                                        | KRUZ 285 L3=50 SLK                              |                    |
| 1.1417~1.1610 | KRUZ 1.1417 SLK |                    |                   |                  |                  | IDFK 1-5/32"(29.37mm)                                                                     | IDPK 1-5/32"(29.37mm)                                                                       | KRUZ 290 L3=50 SLK                              |                    |
| 1.1811~1.2004 | KRUZ 1.1811 SLK |                    |                   |                  |                  | IDFK 1-3/16"(30.16mm)                                                                     | IDPK 1-3/16"(30.16mm)                                                                       | KRUZ 300 L3=50 SLK                              |                    |
| 1.2008~1.2201 | KRUZ 1.2008 SLK |                    |                   |                  |                  | IDFK 1-7/32"(30.96mm)                                                                     | IDPK 1-7/32"(30.96mm)                                                                       | KRUZ 305 L3=50 SLK                              |                    |
| 1.2402~1.2594 | KRUZ 1.2402 SLK |                    |                   |                  |                  | IDFK 1-1/4"(31.75mm)                                                                      | IDPK 1-1/4"(31.75mm)                                                                        | KRUZ 315 L3=50 SLK                              |                    |
| 1.2795~1.2988 | KRUZ 1.2795 SLK |                    |                   |                  |                  | IDFK 1-9/32"(32.54mm)                                                                     | IDPK 1-9/32"(32.54mm)                                                                       | KRUZ 325 L3=50 SLK                              |                    |
| 1.2992~1.3185 | KRUZ 1.2992 SLK |                    |                   |                  |                  | IDFK 1-5/16"(33.34mm)                                                                     | IDPK 1-5/16"(33.34mm)                                                                       | KRUZ 330 L3=50 SLK                              |                    |
| 1.3386~1.3579 | KRUZ 1.3386 SLK |                    |                   |                  |                  | IDFK 1-11/32"(34.13mm)                                                                    | IDPK 1-11/32"(34.13mm)                                                                      | KRUZ 340 L3=50 SLK                              |                    |
| 1.3583~1.3776 | KRUZ 1.3583 SLK |                    |                   |                  |                  | IDFK 1-3/8"(34.93mm)                                                                      | IDPK 1-3/8"(34.93mm)                                                                        | KRUZ 345 L3=50 SLK                              |                    |



专为结构钢加工设备而设计的钴尖(刀片)

- ▶ 如存在干涉等情况，需较长的悬长时，最为理想的刀体
- ▶ 孔深可加工到接近法兰部分(5倍径)
- ▶ 最小化的螺旋槽和更长的圆柱形颈部设计
- ▶ 比普通的5xD钻头刚度更好
- ▶ 内冷设计
- ▶ 带法兰的锥形刀体更提高刚性，能减少抖动或振动



专为结构钢加工设备而设计的钴尖(刀片)

| 孔径(Φ)<br>mm | 刀体型号                | 刀柄<br>(Φd) | 尺寸  |                                                                                                      |                                                                                                      | 法兰直径<br>(ΦFd)                                                                                        | 钻头IDFK<br> | 钻头IDPK<br>                         |  |  | 定位螺钉<br> |  |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
|-------------|---------------------|------------|-----|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------|-------|
|             |                     |            | L1  | L2                                                                                                   | L3                                                                                                   |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 12.0~12.4   | KRUZ 120P FL50 FSLK | 16         | 133 | 85                                                                                                   | 21                                                                                                   | IDFK 120, IDFK 121, IDFK 122, IDFK 123, IDFK 124<br>IDPK 120, IDPK 121, IDPK 122, IDPK 123, IDPK 124 | CS 120<br>-135 SL                                                                             | <br>T6<br>Torque<br>0.6Nm<br>(Max) |  | M2.5x4                                                                              | 1.3mm                                                                                       |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 12.5~12.9   | KRUZ 125P FL50 FSLK |            | 136 | 88                                                                                                   |                                                                                                      | IDFK 125, IDFK 126, IDFK 127, IDFK 128, IDFK 129<br>IDPK 125, IDPK 126, IDPK 127, IDPK 128, IDPK 129 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 13.0~13.4   | KRUZ 130P FL50 FSLK |            | 140 | 92                                                                                                   |                                                                                                      | IDFK 130, IDFK 131, IDFK 132, IDFK 133, IDFK 134<br>IDPK 130, IDPK 131, IDPK 132, IDPK 133, IDPK 134 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 13.5~13.9   | KRUZ 135P FL50 FSLK |            | 143 | 95                                                                                                   |                                                                                                      | IDFK 135, IDFK 136, IDFK 137, IDFK 138, IDFK 139<br>IDPK 135, IDPK 136, IDPK 137, IDPK 138, IDPK 139 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 14.0~14.4   | KRUZ 140P FL50 FSLK |            | 147 | 99                                                                                                   |                                                                                                      | IDFK 140, IDFK 141, IDFK 142, IDFK 143, IDFK 144<br>IDPK 140, IDPK 141, IDPK 142, IDPK 143, IDPK 144 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 14.5~14.9   | KRUZ 145P FL50 FSLK |            | 150 | 102                                                                                                  |                                                                                                      | IDFK 145, IDFK 146, IDFK 147, IDFK 148, IDFK 149<br>IDPK 145, IDPK 146, IDPK 147, IDPK 148, IDPK 149 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 15.0~15.4   | KRUZ 150P FL50 FSLK | 20         | 157 | 107                                                                                                  | 27                                                                                                   | IDFK 150, IDFK 151, IDFK 152, IDFK 153, IDFK 154<br>IDPK 150, IDPK 151, IDPK 152, IDPK 153, IDPK 154 | CS 140<br>-155 SL                                                                             | <br>T7<br>Torque<br>0.9Nm<br>(Max) |  | M2.5x4                                                                              | 1.3mm                                                                                       |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 15.5~15.9   | KRUZ 155P FL50 FSLK |            | 161 | 111                                                                                                  |                                                                                                      | IDFK 155, IDFK 156, IDFK 157, IDFK 158, IDFK 159<br>IDPK 155, IDPK 156, IDPK 157, IDPK 158, IDPK 159 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 16.0~16.4   | KRUZ 160P FL50 FSLK |            | 164 | 114                                                                                                  |                                                                                                      | IDFK 160, IDFK 161, IDFK 162, IDFK 163, IDFK 164<br>IDPK 160, IDPK 161, IDPK 162, IDPK 163, IDPK 164 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 16.5~16.9   | KRUZ 165P FL50 FSLK |            | 168 | 118                                                                                                  |                                                                                                      | IDFK 165, IDFK 166, IDFK 167, IDFK 168, IDFK 169<br>IDPK 165, IDPK 166, IDPK 167, IDPK 168, IDPK 169 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 17.0~17.4   | KRUZ 170P FL50 FSLK |            | 171 | 121                                                                                                  |                                                                                                      | IDFK 170, IDFK 171, IDFK 172, IDFK 173, IDFK 174<br>IDPK 170, IDPK 171, IDPK 172, IDPK 173, IDPK 174 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 17.5~17.9   | KRUZ 175P FL50 FSLK |            | 174 | 124                                                                                                  |                                                                                                      | IDFK 175, IDFK 176, IDFK 177, IDFK 178, IDFK 179<br>IDPK 175, IDPK 176, IDPK 177, IDPK 178, IDPK 179 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 18.0~18.4   | KRUZ 180P FL50 FSLK |            | 178 | 128                                                                                                  |                                                                                                      | IDFK 180, IDFK 181, IDFK 182, IDFK 183, IDFK 184<br>IDPK 180, IDPK 181, IDPK 182, IDPK 183, IDPK 184 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 18.5~18.9   | KRUZ 185P FL50 FSLK |            | 181 | 131                                                                                                  |                                                                                                      | IDFK 185, IDFK 186, IDFK 187, IDFK 188, IDFK 189<br>IDPK 185, IDPK 186, IDPK 187, IDPK 188, IDPK 189 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 19.0~19.4   | KRUZ 190P FL50 FSLK |            | 185 | 135                                                                                                  |                                                                                                      | IDFK 190, IDFK 191, IDFK 192, IDFK 193, IDFK 194<br>IDPK 190, IDPK 191, IDPK 192, IDPK 193, IDPK 194 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 19.5~19.9   | KRUZ 195P FL50 FSLK |            | 188 | 138                                                                                                  |                                                                                                      | IDFK 195, IDFK 196, IDFK 197, IDFK 198, IDFK 199<br>IDPK 195, IDPK 196, IDPK 197, IDPK 198, IDPK 199 |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 20.0~20.4   | KRUZ 200P FL50 FSLK |            | 25  | 197                                                                                                  |                                                                                                      | 141                                                                                                  |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             | 32                                                                                  | IDFK 200, IDFK 201, IDFK 202, IDFK 203, IDFK 204<br>IDPK 200, IDPK 201, IDPK 202, IDPK 203, IDPK 204 | CS 200<br>-215 SL | <br>T8<br>Torque<br>1.5Nm<br>(Max) |  | M3x6 | 1.5mm |
| 20.5~20.9   | KRUZ 205P FL50 FSLK |            |     | 201                                                                                                  |                                                                                                      | 145                                                                                                  |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     | IDFK 205, IDFK 206, IDFK 207, IDFK 208, IDFK 209<br>IDPK 205, IDPK 206, IDPK 207, IDPK 208, IDPK 209 |                   |                                                                                                                         |                                                                                       |      |       |
| 21.0~21.4   | KRUZ 210P FL50 FSLK | 204        |     | 148                                                                                                  | IDFK 210, IDFK 211, IDFK 212, IDFK 213, IDFK 214<br>IDPK 210, IDPK 211, IDPK 212, IDPK 213, IDPK 214 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 21.5~21.9   | KRUZ 215P FL50 FSLK | 208        |     | 152                                                                                                  | IDFK 215, IDFK 216, IDFK 217, IDFK 218, IDFK 219<br>IDPK 215, IDPK 216, IDPK 217, IDPK 218, IDPK 219 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 22.0~22.4   | KRUZ 220P FL50 FSLK | 211        |     | 155                                                                                                  | IDFK 220, IDFK 221, IDFK 222, IDFK 223, IDFK 224<br>IDPK 220, IDPK 221, IDPK 222, IDPK 223, IDPK 224 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 22.5~22.9   | KRUZ 225P FL50 FSLK | 214        |     | 158                                                                                                  | IDFK 225, IDFK 226, IDFK 227, IDFK 228, IDFK 229<br>IDPK 225, IDPK 226, IDPK 227, IDPK 228, IDPK 229 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 23.0~23.4   | KRUZ 230P FL50 FSLK | 218        |     | 162                                                                                                  | IDFK 230, IDFK 231, IDFK 232, IDFK 233, IDFK 234<br>IDPK 230, IDPK 231, IDPK 232, IDPK 233, IDPK 234 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 23.5~23.9   | KRUZ 235P FL50 FSLK | 221        |     | 165                                                                                                  | IDFK 235, IDFK 236, IDFK 237, IDFK 238, IDFK 239<br>IDPK 235, IDPK 236, IDPK 237, IDPK 238, IDPK 239 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 24.0~24.4   | KRUZ 240P FL50 FSLK | 229        |     | 169                                                                                                  | IDFK 240, IDFK 241, IDFK 242, IDFK 243, IDFK 244<br>IDPK 240, IDPK 241, IDPK 242, IDPK 243, IDPK 244 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 24.5~24.9   | KRUZ 245P FL50 FSLK | 232        |     | 172                                                                                                  | IDFK 245, IDFK 246, IDFK 247, IDFK 248, IDFK 249<br>IDPK 245, IDPK 246, IDPK 247, IDPK 248, IDPK 249 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 25.0~25.4   | KRUZ 250P FL50 FSLK | 235        |     | 175                                                                                                  | IDFK 250, IDFK 251, IDFK 252, IDFK 253, IDFK 254<br>IDPK 250, IDPK 251, IDPK 252, IDPK 253, IDPK 254 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 25.5~25.9   | KRUZ 255P FL50 FSLK | 239        |     | 179                                                                                                  | IDFK 255, IDFK 256, IDFK 257, IDFK 258, IDFK 259<br>IDPK 255, IDPK 256, IDPK 257, IDPK 258, IDPK 259 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 26.0~26.4   | KRUZ 260P FL50 FSLK | 242        |     | 182                                                                                                  | IDFK 260, IDFK 261, IDFK 262, IDFK 263, IDFK 264<br>IDPK 260, IDPK 261, IDPK 262, IDPK 263, IDPK 264 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 26.5~26.9   | KRUZ 265P FL50 FSLK | 246        |     | 186                                                                                                  | IDFK 265, IDFK 266, IDFK 267, IDFK 268, IDFK 269<br>IDPK 265, IDPK 266, IDPK 267, IDPK 268, IDPK 269 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 27.0~27.4   | KRUZ 270P FL50 FSLK | 249        |     | 189                                                                                                  | IDFK 270, IDFK 271, IDFK 272, IDFK 273, IDFK 274<br>IDPK 270, IDPK 271, IDPK 272, IDPK 273, IDPK 274 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 27.5~27.9   | KRUZ 275P FL50 FSLK | 252        |     | 192                                                                                                  | IDFK 275, IDFK 276, IDFK 277, IDFK 278, IDFK 279<br>IDPK 275, IDPK 276, IDPK 277, IDPK 278, IDPK 279 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 28.0~28.4   | KRUZ 280P FL50 FSLK | 256        |     | 196                                                                                                  | IDFK 280, IDFK 281, IDFK 282, IDFK 283, IDFK 284<br>IDPK 280, IDPK 281, IDPK 282, IDPK 283, IDPK 284 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 28.5~28.9   | KRUZ 285P FL50 FSLK | 259        |     | 199                                                                                                  | IDFK 285, IDFK 286, IDFK 287, IDFK 288, IDFK 289<br>IDPK 285, IDPK 286, IDPK 287, IDPK 288, IDPK 289 |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 29.0~29.4   | KRUZ 290P FL50 FSLK | 263        | 203 | IDFK 290, IDFK 291, IDFK 292, IDFK 293, IDFK 294<br>IDPK 290, IDPK 291, IDPK 292, IDPK 293, IDPK 294 |                                                                                                      |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |
| 29.5~29.9   | KRUZ 295P FL50 FSLK | 266        | 206 | IDFK 295, IDFK 296, IDFK 297, IDFK 298, IDFK 299<br>IDPK 295, IDPK 296, IDPK 297, IDPK 298, IDPK 299 |                                                                                                      |                                                                                                      |                                                                                               |                                                                                                                       |                                                                                     |                                                                                     |                                                                                             |                                                                                     |                                                                                                      |                   |                                                                                                                         |                                                                                       |      |       |

☞ 上述未标出的尺寸，可根据需求定制。



| 孔径(Φ)<br>mm | 刀体型号                | 刀柄<br>(Φd) | 尺寸  |                                                                                                      |                                                                                                      | 法兰直径<br>(Φf)                                                                                         | 钻尖IDFK                                                                                               | 钻尖IDPK                                                                                               | 锁紧螺栓              | 梅花型螺栓 | 定位螺钉 | L型内六角扳手 |                                                                                                      |                                                                                                      |
|-------------|---------------------|------------|-----|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------|-------|------|---------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|             |                     |            | L1  | L2                                                                                                   | L3                                                                                                   |                                                                                                      |                                                                                                      |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 30.0~30.4   | KRUZ 300P FL70 FSLK | 32         | 269 | 209                                                                                                  | 70                                                                                                   | 39                                                                                                   | IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304<br>IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304 | IDFK 305, IDFK 306, IDFK 307, IDFK 308, IDFK 309<br>IDPK 305, IDPK 306, IDPK 307, IDPK 308, IDPK 309 | CS 300<br>-315 SL |       | M4x8 | 2.0mm   |                                                                                                      |                                                                                                      |
| 30.5~30.9   | KRUZ 305P FL70 FSLK |            | 273 | 213                                                                                                  |                                                                                                      |                                                                                                      | IDFK 310, IDFK 311, IDFK 312, IDFK 313, IDFK 314<br>IDPK 310, IDPK 311, IDPK 312, IDPK 313, IDPK 314 |                                                                                                      |                   |       |      |         | IDFK 315, IDFK 316, IDFK 317, IDFK 318, IDFK 319<br>IDPK 315, IDPK 316, IDPK 317, IDPK 318, IDPK 319 |                                                                                                      |
| 31.0~31.4   | KRUZ 310P FL70 FSLK |            | 276 | 216                                                                                                  |                                                                                                      |                                                                                                      | IDFK 320, IDFK 321, IDFK 322, IDFK 323, IDFK 324<br>IDPK 320, IDPK 321, IDPK 322, IDPK 323, IDPK 324 |                                                                                                      |                   |       |      |         |                                                                                                      | IDFK 325, IDFK 326, IDFK 327, IDFK 328, IDFK 329<br>IDPK 325, IDPK 326, IDPK 327, IDPK 328, IDPK 329 |
| 31.5~31.9   | KRUZ 315P FL70 FSLK |            | 280 | 220                                                                                                  |                                                                                                      |                                                                                                      | IDFK 330, IDFK 331, IDFK 332, IDFK 333, IDFK 334<br>IDPK 330, IDPK 331, IDPK 332, IDPK 333, IDPK 334 |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 32.0~32.4   | KRUZ 320P FL70 FSLK |            | 283 | 223                                                                                                  |                                                                                                      |                                                                                                      | IDFK 340, IDFK 341, IDFK 342, IDFK 343, IDFK 344<br>IDPK 340, IDPK 341, IDPK 342, IDPK 343, IDPK 344 | IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349<br>IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349 |                   |       |      |         |                                                                                                      |                                                                                                      |
| 32.5~32.9   | KRUZ 325P FL70 FSLK |            | 286 | 226                                                                                                  |                                                                                                      |                                                                                                      | IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354<br>IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354 |                                                                                                      |                   |       |      |         | IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359<br>IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359 |                                                                                                      |
| 33.0~33.4   | KRUZ 330P FL70 FSLK |            | 290 | 230                                                                                                  |                                                                                                      |                                                                                                      | IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364<br>IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364 |                                                                                                      |                   |       |      |         |                                                                                                      | IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369<br>IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369 |
| 33.5~33.9   | KRUZ 335P FL70 FSLK |            | 293 | 233                                                                                                  |                                                                                                      |                                                                                                      | IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374<br>IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374 |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 34.0~34.4   | KRUZ 340P FL80 FSLK | 307        | 237 | IDFK 380, IDFK 381, IDFK 382, IDFK 383, IDFK 384<br>IDPK 380, IDPK 381, IDPK 382, IDPK 383, IDPK 384 | IDFK 385, IDFK 386, IDFK 387, IDFK 388, IDFK 389<br>IDPK 385, IDPK 386, IDPK 387, IDPK 388, IDPK 389 |                                                                                                      |                                                                                                      |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 34.5~34.9   | KRUZ 345P FL80 FSLK | 310        | 240 | IDFK 390, IDFK 391, IDFK 392, IDFK 393, IDFK 394<br>IDPK 390, IDPK 391, IDPK 392, IDPK 393, IDPK 394 |                                                                                                      | IDFK 395, IDFK 396, IDFK 397, IDFK 398, IDFK 399<br>IDPK 395, IDPK 396, IDPK 397, IDPK 398, IDPK 399 |                                                                                                      |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 35.0~35.4   | KRUZ 350P FL80 FSLK | 313        | 243 | IDFK 400, IDFK 401, IDFK 402, IDFK 403, IDFK 404<br>IDPK 400, IDPK 401, IDPK 402, IDPK 403, IDPK 404 |                                                                                                      |                                                                                                      | IDFK 405, IDFK 406, IDFK 407, IDFK 408, IDFK 409<br>IDPK 405, IDPK 406, IDPK 407, IDPK 408, IDPK 409 |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 35.5~35.9   | KRUZ 355P FL80 FSLK | 317        | 247 | IDFK 410, IDFK 411, IDFK 412, IDFK 413, IDFK 414<br>IDPK 410, IDPK 411, IDPK 412, IDPK 413, IDPK 414 |                                                                                                      |                                                                                                      |                                                                                                      | IDFK 415, IDFK 416, IDFK 417, IDFK 418, IDFK 419<br>IDPK 415, IDPK 416, IDPK 417, IDPK 418, IDPK 419 |                   |       |      |         |                                                                                                      |                                                                                                      |
| 36.0~36.4   | KRUZ 360P FL80 FSLK | 320        | 250 | IDFK 420, IDFK 421, IDFK 422, IDFK 423, IDFK 424<br>IDPK 420, IDPK 421, IDPK 422, IDPK 423, IDPK 424 | IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429<br>IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429 |                                                                                                      |                                                                                                      |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 36.5~36.9   | KRUZ 365P FL80 FSLK | 324        | 254 | IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434<br>IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434 |                                                                                                      | IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439<br>IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439 |                                                                                                      |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 37.0~37.4   | KRUZ 370P FL80 FSLK | 327        | 257 | IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444<br>IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444 |                                                                                                      |                                                                                                      | IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449<br>IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449 |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 37.5~37.9   | KRUZ 375P FL80 FSLK | 330        | 260 | IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454<br>IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454 |                                                                                                      |                                                                                                      |                                                                                                      | IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459<br>IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459 |                   |       |      |         |                                                                                                      |                                                                                                      |
| 38.0~38.4   | KRUZ 380P FL80 FSLK | 334        | 264 | IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464<br>IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464 | IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469<br>IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469 |                                                                                                      |                                                                                                      |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 38.5~38.9   | KRUZ 385P FL80 FSLK | 337        | 267 | IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474<br>IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474 |                                                                                                      | IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479<br>IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479 |                                                                                                      |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |
| 39.0~39.4   | KRUZ 390P FL80 FSLK | 341        | 271 | IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484<br>IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484 |                                                                                                      |                                                                                                      | IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489<br>IDPK 485, IDPK 486, IDPK                         |                                                                                                      |                   |       |      |         |                                                                                                      |                                                                                                      |

| 孔径(Φ)<br>mm | 刀体型号                | 刀柄<br>(Φd) | 尺 寸 |     |    | 法兰直径<br>(ΦFd)                                                                                        | 钻尖IDFK<br> IDFK | 钻尖IDPK<br> IDPK                       | 锁紧螺栓<br> | 梅花型螺批<br> | 定位螺钉<br> | L型内六角扳手<br> |
|-------------|---------------------|------------|-----|-----|----|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|             |                     |            | L1  | L2  | L3 |                                                                                                      |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 12.0~12.4   | KRUZ 120H FL50 FSLK | 16         | 157 | 109 | 21 | IDFK 120, IDFK 121, IDFK 122, IDFK 123, IDFK 124<br>IDPK 120, IDPK 121, IDPK 122, IDPK 123, IDPK 124 | CS 120<br>-135 SL                                                                                  | T6<br><br>Torque<br>0.6Nm<br>(Max)    | M2.5x4                                                                                      | 1.3mm                                                                                        |                                                                                             |                                                                                                |
| 12.5~12.9   | KRUZ 125H FL50 FSLK |            | 161 | 113 |    | IDFK 125, IDFK 126, IDFK 127, IDFK 128, IDFK 129<br>IDPK 125, IDPK 126, IDPK 127, IDPK 128, IDPK 129 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 13.0~13.4   | KRUZ 130H FL50 FSLK |            | 166 | 118 |    | IDFK 130, IDFK 131, IDFK 132, IDFK 133, IDFK 134<br>IDPK 130, IDPK 131, IDPK 132, IDPK 133, IDPK 134 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 13.5~13.9   | KRUZ 135H FL50 FSLK |            | 170 | 122 |    | IDFK 135, IDFK 136, IDFK 137, IDFK 138, IDFK 139<br>IDPK 135, IDPK 136, IDPK 137, IDPK 138, IDPK 139 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 14.0~14.4   | KRUZ 140H FL50 FSLK |            | 175 | 127 |    | IDFK 140, IDFK 141, IDFK 142, IDFK 143, IDFK 144<br>IDPK 140, IDPK 141, IDPK 142, IDPK 143, IDPK 144 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 14.5~14.9   | KRUZ 145H FL50 FSLK |            | 181 | 131 |    | IDFK 145, IDFK 146, IDFK 147, IDFK 148, IDFK 149<br>IDPK 145, IDPK 146, IDPK 147, IDPK 148, IDPK 149 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 15.0~15.4   | KRUZ 150H FL50 FSLK |            | 187 | 137 |    | IDFK 150, IDFK 151, IDFK 152, IDFK 153, IDFK 154<br>IDPK 150, IDPK 151, IDPK 152, IDPK 153, IDPK 154 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 15.5~15.9   | KRUZ 155H FL50 FSLK |            | 192 | 142 |    | IDFK 155, IDFK 156, IDFK 157, IDFK 158, IDFK 159<br>IDPK 155, IDPK 156, IDPK 157, IDPK 158, IDPK 159 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 16.0~16.4   | KRUZ 160H FL50 FSLK | 20         | 196 | 146 | 27 | IDFK 160, IDFK 161, IDFK 162, IDFK 163, IDFK 164<br>IDPK 160, IDPK 161, IDPK 162, IDPK 163, IDPK 164 | CS 140<br>-155 SL                                                                                  | T7<br><br>Torque<br>0.9Nm<br>(Max)    | M2.5x4                                                                                      | 1.3mm                                                                                        |                                                                                             |                                                                                                |
| 16.5~16.9   | KRUZ 165H FL50 FSLK |            | 201 | 151 |    | IDFK 165, IDFK 166, IDFK 167, IDFK 168, IDFK 169<br>IDPK 165, IDPK 166, IDPK 167, IDPK 168, IDPK 169 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 17.0~17.4   | KRUZ 170H FL50 FSLK |            | 205 | 155 |    | IDFK 170, IDFK 171, IDFK 172, IDFK 173, IDFK 174<br>IDPK 170, IDPK 171, IDPK 172, IDPK 173, IDPK 174 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 17.5~17.9   | KRUZ 175H FL50 FSLK |            | 209 | 159 |    | IDFK 175, IDFK 176, IDFK 177, IDFK 178, IDFK 179<br>IDPK 175, IDPK 176, IDPK 177, IDPK 178, IDPK 179 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 18.0~18.4   | KRUZ 180H FL50 FSLK |            | 214 | 164 |    | IDFK 180, IDFK 181, IDFK 182, IDFK 183, IDFK 184<br>IDPK 180, IDPK 181, IDPK 182, IDPK 183, IDPK 184 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 18.5~18.9   | KRUZ 185H FL50 FSLK |            | 218 | 168 |    | IDFK 185, IDFK 186, IDFK 187, IDFK 188, IDFK 189<br>IDPK 185, IDPK 186, IDPK 187, IDPK 188, IDPK 189 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 19.0~19.4   | KRUZ 190H FL50 FSLK |            | 223 | 173 |    | IDFK 190, IDFK 191, IDFK 192, IDFK 193, IDFK 194<br>IDPK 190, IDPK 191, IDPK 192, IDPK 193, IDPK 194 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 19.5~19.9   | KRUZ 195H FL50 FSLK |            | 227 | 177 |    | IDFK 195, IDFK 196, IDFK 197, IDFK 198, IDFK 199<br>IDPK 195, IDPK 196, IDPK 197, IDPK 198, IDPK 199 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 20.0~20.4   | KRUZ 200H FL50 FSLK | 25         | 237 | 181 | 32 | IDFK 200, IDFK 201, IDFK 202, IDFK 203, IDFK 204<br>IDPK 200, IDPK 201, IDPK 202, IDPK 203, IDPK 204 | CS 200<br>-215 SL                                                                                  | T8<br><br>Torque<br>1.5Nm<br>(Max)  | M3x6                                                                                        | 1.5mm                                                                                        |                                                                                             |                                                                                                |
| 20.5~20.9   | KRUZ 205H FL50 FSLK |            | 242 | 186 |    | IDFK 205, IDFK 206, IDFK 207, IDFK 208, IDFK 209<br>IDPK 205, IDPK 206, IDPK 207, IDPK 208, IDPK 209 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 21.0~21.4   | KRUZ 210H FL50 FSLK |            | 246 | 190 |    | IDFK 210, IDFK 211, IDFK 212, IDFK 213, IDFK 214<br>IDPK 210, IDPK 211, IDPK 212, IDPK 213, IDPK 214 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 21.5~21.9   | KRUZ 215H FL50 FSLK |            | 251 | 195 |    | IDFK 215, IDFK 216, IDFK 217, IDFK 218, IDFK 219<br>IDPK 215, IDPK 216, IDPK 217, IDPK 218, IDPK 219 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 22.0~22.4   | KRUZ 220H FL50 FSLK |            | 255 | 199 |    | IDFK 220, IDFK 221, IDFK 222, IDFK 223, IDFK 224<br>IDPK 220, IDPK 221, IDPK 222, IDPK 223, IDPK 224 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 22.5~22.9   | KRUZ 225H FL50 FSLK |            | 259 | 203 |    | IDFK 225, IDFK 226, IDFK 227, IDFK 228, IDFK 229<br>IDPK 225, IDPK 226, IDPK 227, IDPK 228, IDPK 229 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 23.0~23.4   | KRUZ 230H FL50 FSLK |            | 264 | 208 |    | IDFK 230, IDFK 231, IDFK 232, IDFK 233, IDFK 234<br>IDPK 230, IDPK 231, IDPK 232, IDPK 233, IDPK 234 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 23.5~23.9   | KRUZ 235H FL50 FSLK |            | 268 | 212 |    | IDFK 235, IDFK 236, IDFK 237, IDFK 238, IDFK 239<br>IDPK 235, IDPK 236, IDPK 237, IDPK 238, IDPK 239 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
| 24.0~24.4   | KRUZ 240H FL50 FSLK | 32         | 277 | 217 | 39 | IDFK 240, IDFK 241, IDFK 242, IDFK 243, IDFK 244<br>IDPK 240, IDPK 241, IDPK 242, IDPK 243, IDPK 244 | CS 220<br>-235 SL                                                                                  | T15<br><br>Torque<br>3.5Nm<br>(Max) | M4x8                                                                                        | 2.0mm                                                                                        |                                                                                             |                                                                                                |
| 24.5~24.9   | KRUZ 245H FL50 FSLK |            | 281 | 221 |    | IDFK 245, IDFK 246, IDFK 247, IDFK 248, IDFK 249<br>IDPK 245, IDPK 246, IDPK 247, IDPK 248, IDPK 249 |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |
|             |                     |            |     |     |    |                                                                                                      |                                                                                                    |                                                                                                                          |                                                                                             |                                                                                              |                                                                                             |                                                                                                |

☞ 上述未标出的尺寸, 可根据需求定制。



New

KRUZ-FSLK法兰刀体(7x10)

与IDFK & IDPK钻尖

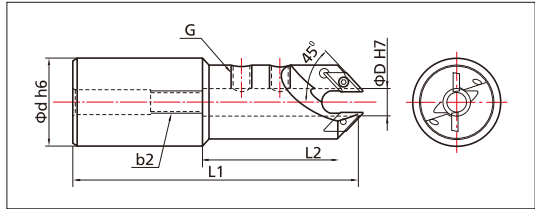
专为结构钢加工设备而设计的钻尖(刀片)

| 孔径(Φ)<br>mm | 刀体型号                | 刀柄<br>(Φd) | 尺 寸 |                                                                                                      |    | 法兰直径<br>(ΦFd) | 钻尖IDFK                                                                                               | 钻尖IDPK                                                                                               | 锁紧螺栓                                                                                                 | 梅花型螺批                                                                                                | 定位螺钉                                                                                                 | L型内六角扳手                                                                                              |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
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|             |                     |            | L1  | L2                                                                                                   | L3 |               |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 30.0~30.4   | KRUZ 300H FL70 FSLK | 32         | 329 | 269                                                                                                  | 70 | 39            | IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304<br>IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304 | IDFK 305, IDFK 306, IDFK 307, IDFK 308, IDFK 309<br>IDPK 305, IDPK 306, IDPK 307, IDPK 308, IDPK 309 | CS 300<br>-315 SL                                                                                    |                                                                                                      | M4x8                                                                                                 | 2.0mm                                                                                                |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 30.5~30.9   | KRUZ 305H FL70 FSLK |            | 334 | 274                                                                                                  |    |               | IDFK 310, IDFK 311, IDFK 312, IDFK 313, IDFK 314<br>IDPK 310, IDPK 311, IDPK 312, IDPK 313, IDPK 314 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 31.0~31.4   | KRUZ 310H FL70 FSLK |            | 338 | 278                                                                                                  |    |               | IDFK 315, IDFK 316, IDFK 317, IDFK 318, IDFK 319<br>IDPK 315, IDPK 316, IDPK 317, IDPK 318, IDPK 319 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 31.5~31.9   | KRUZ 315H FL70 FSLK |            | 343 | 283                                                                                                  |    |               | IDFK 320, IDFK 321, IDFK 322, IDFK 323, IDFK 324<br>IDPK 320, IDPK 321, IDPK 322, IDPK 323, IDPK 324 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 32.0~32.4   | KRUZ 320H FL70 FSLK |            | 347 | 287                                                                                                  |    |               | IDFK 325, IDFK 326, IDFK 327, IDFK 328, IDFK 329<br>IDPK 325, IDPK 326, IDPK 327, IDPK 328, IDPK 329 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 32.5~32.9   | KRUZ 325H FL70 FSLK |            | 351 | 291                                                                                                  |    |               | IDFK 330, IDFK 331, IDFK 332, IDFK 333, IDFK 334<br>IDPK 330, IDPK 331, IDPK 332, IDPK 333, IDPK 334 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 33.0~33.4   | KRUZ 330H FL70 FSLK |            | 356 | 296                                                                                                  |    |               | IDFK 335, IDFK 336, IDFK 337, IDFK 338, IDFK 339<br>IDPK 335, IDPK 336, IDPK 337, IDPK 338, IDPK 339 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 33.5~33.9   | KRUZ 335H FL70 FSLK |            | 360 | 300                                                                                                  |    |               | IDFK 340, IDFK 341, IDFK 342, IDFK 343, IDFK 344<br>IDPK 340, IDPK 341, IDPK 342, IDPK 343, IDPK 344 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 34.0~34.4   | KRUZ 340H FL80 FSLK | 40         | 375 | 305                                                                                                  | 80 | 54            | IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349<br>IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349 | IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354<br>IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354 | IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359<br>IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359 | IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364<br>IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364 | IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369<br>IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369 | IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374<br>IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374 | IDFK 375, IDFK 376, IDFK 377, IDFK 378, IDFK 379<br>IDPK 375, IDPK 376, IDPK 377, IDPK 378, IDPK 379 | IDFK 380, IDFK 381, IDFK 382, IDFK 383, IDFK 384<br>IDPK 380, IDPK 381, IDPK 382, IDPK 383, IDPK 384 | IDFK 385, IDFK 386, IDFK 387, IDFK 388, IDFK 389<br>IDPK 385, IDPK 386, IDPK 387, IDPK 388, IDPK 389 | IDFK 390, IDFK 391, IDFK 392, IDFK 393, IDFK 394<br>IDPK 390, IDPK 391, IDPK 392, IDPK 393, IDPK 394 | IDFK 395, IDFK 396, IDFK 397, IDFK 398, IDFK 399<br>IDPK 395, IDPK 396, IDPK 397, IDPK 398, IDPK 399 | IDFK 400, IDFK 401, IDFK 402, IDFK 403, IDFK 404<br>IDPK 400, IDPK 401, IDPK 402, IDPK 403, IDPK 404 | IDFK 405, IDFK 406, IDFK 407, IDFK 408, IDFK 409<br>IDPK 405, IDPK 406, IDPK 407, IDPK 408, IDPK 409 | IDFK 410, IDFK 411, IDFK 412, IDFK 413, IDFK 414<br>IDPK 410, IDPK 411, IDPK 412, IDPK 413, IDPK 414 | IDFK 415, IDFK 416, IDFK 417, IDFK 418, IDFK 419<br>IDPK 415, IDPK 416, IDPK 417, IDPK 418, IDPK 419 | IDFK 420, IDFK 421, IDFK 422, IDFK 423, IDFK 424<br>IDPK 420, IDPK 421, IDPK 422, IDPK 423, IDPK 424 | IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429<br>IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429 | IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434<br>IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434 | IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439<br>IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439 | IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444<br>IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444 | IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449<br>IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449 | IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454<br>IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454 | IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459<br>IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459 | IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464<br>IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464 | IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469<br>IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469 | IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474<br>IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474 | IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479<br>IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479 | IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484<br>IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484 | IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489<br>IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489 | IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494<br>IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494 | IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499<br>IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499 | IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504<br>IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504 |
| 34.5~34.9   | KRUZ 345H FL80 FSLK |            | 379 | 309                                                                                                  |    |               | IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349<br>IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 35.0~35.4   | KRUZ 350H FL80 FSLK |            | 383 | 313                                                                                                  |    |               | IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354<br>IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 35.5~35.9   | KRUZ 355H FL80 FSLK |            | 388 | 318                                                                                                  |    |               | IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359<br>IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 36.0~36.4   | KRUZ 360H FL80 FSLK |            | 392 | 322                                                                                                  |    |               | IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364<br>IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 36.5~36.9   | KRUZ 365H FL80 FSLK |            | 397 | 327                                                                                                  |    |               | IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369<br>IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 37.0~37.4   | KRUZ 370H FL80 FSLK |            | 401 | 331                                                                                                  |    |               | IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374<br>IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 37.5~37.9   | KRUZ 375H FL80 FSLK |            | 405 | 335                                                                                                  |    |               | IDFK 375, IDFK 376, IDFK 377, IDFK 378, IDFK 379<br>IDPK 375, IDPK 376, IDPK 377, IDPK 378, IDPK 379 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 38.0~38.4   | KRUZ 380H FL80 FSLK |            | 410 | 340                                                                                                  |    |               | IDFK 380, IDFK 381, IDFK 382, IDFK 383, IDFK 384<br>IDPK 380, IDPK 381, IDPK 382, IDPK 383, IDPK 384 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 38.5~38.9   | KRUZ 385H FL80 FSLK |            | 414 | 344                                                                                                  |    |               | IDFK 385, IDFK 386, IDFK 387, IDFK 388, IDFK 389<br>IDPK 385, IDPK 386, IDPK 387, IDPK 388, IDPK 389 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 39.0~39.4   | KRUZ 390H FL80 FSLK |            | 419 | 349                                                                                                  |    |               | IDFK 390, IDFK 391, IDFK 392, IDFK 393, IDFK 394<br>IDPK 390, IDPK 391, IDPK 392, IDPK 393, IDPK 394 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 39.5~39.9   | KRUZ 395H FL80 FSLK |            | 423 | 353                                                                                                  |    |               | IDFK 395, IDFK 396, IDFK 397, IDFK 398, IDFK 399<br>IDPK 395, IDPK 396, IDPK 397, IDPK 398, IDPK 399 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 40.0~40.4   | KRUZ 400H FL80 FSLK |            | 427 | 357                                                                                                  |    |               | IDFK 400, IDFK 401, IDFK 402, IDFK 403, IDFK 404<br>IDPK 400, IDPK 401, IDPK 402, IDPK 403, IDPK 404 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 40.5~40.9   | KRUZ 405H FL80 FSLK |            | 432 | 362                                                                                                  |    |               | IDFK 405, IDFK 406, IDFK 407, IDFK 408, IDFK 409<br>IDPK 405, IDPK 406, IDPK 407, IDPK 408, IDPK 409 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 41.0~41.4   | KRUZ 410H FL80 FSLK |            | 436 | 366                                                                                                  |    |               | IDFK 410, IDFK 411, IDFK 412, IDFK 413, IDFK 414<br>IDPK 410, IDPK 411, IDPK 412, IDPK 413, IDPK 414 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 41.5~41.9   | KRUZ 415H FL80 FSLK |            | 441 | 371                                                                                                  |    |               | IDFK 415, IDFK 416, IDFK 417, IDFK 418, IDFK 419<br>IDPK 415, IDPK 416, IDPK 417, IDPK 418, IDPK 419 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 42.0~42.4   | KRUZ 420H FL80 FSLK | 40         | 445 | 375                                                                                                  | 80 | 54            | IDFK 420, IDFK 421, IDFK 422, IDFK 423, IDFK 424<br>IDPK 420, IDPK 421, IDPK 422, IDPK 423, IDPK 424 | IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429<br>IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429 | IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434<br>IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434 | IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439<br>IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439 | IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444<br>IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444 | IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449<br>IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449 | IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454<br>IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454 | IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459<br>IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459 | IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464<br>IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464 | IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469<br>IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469 | IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474<br>IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474 | IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479<br>IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479 | IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484<br>IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484 | IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489<br>IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489 | IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494<br>IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494 | IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499<br>IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499 | IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504<br>IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 42.5~42.9   | KRUZ 425H FL80 FSLK |            | 449 | 379                                                                                                  |    |               | IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429<br>IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 43.0~43.4   | KRUZ 430H FL80 FSLK |            | 454 | 384                                                                                                  |    |               | IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434<br>IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 43.5~43.9   | KRUZ 435H FL80 FSLK |            | 458 | 388                                                                                                  |    |               | IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439<br>IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 44.0~44.4   | KRUZ 440H FL80 FSLK |            | 463 | 393                                                                                                  |    |               | IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444<br>IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 44.5~44.9   | KRUZ 445H FL80 FSLK |            | 467 | 397                                                                                                  |    |               | IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449<br>IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 45.0~45.4   | KRUZ 450H FL80 FSLK |            | 471 | 401                                                                                                  |    |               | IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454<br>IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 45.5~45.9   | KRUZ 455H FL80 FSLK |            | 476 | 406                                                                                                  |    |               | IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459<br>IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 46.0~46.4   | KRUZ 460H FL80 FSLK |            | 480 | 410                                                                                                  |    |               | IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464<br>IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 46.5~46.9   | KRUZ 465H FL80 FSLK |            | 485 | 415                                                                                                  |    |               | IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469<br>IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 47.0~47.4   | KRUZ 470H FL80 FSLK |            | 489 | 419                                                                                                  |    |               | IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474<br>IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 47.5~47.9   | KRUZ 475H FL80 FSLK |            | 493 | 423                                                                                                  |    |               | IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479<br>IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 48.0~48.4   | KRUZ 480H FL90 FSLK |            | 498 | 428                                                                                                  |    |               | IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484<br>IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 48.5~48.9   | KRUZ 485H FL90 FSLK |            | 502 | 432                                                                                                  |    |               | IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489<br>IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 49.0~49.4   | KRUZ 490H FL90 FSLK |            | 507 | 437                                                                                                  |    |               | IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494<br>IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 49.5~49.9   | KRUZ 495H FL90 FSLK |            | 511 | 441                                                                                                  |    |               | IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499<br>IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499 |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |
| 50.0~50.4   | KRUZ 500H FL90 FSLK | 515        | 445 | IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504<br>IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504 |    |               |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |                                                                                                      |

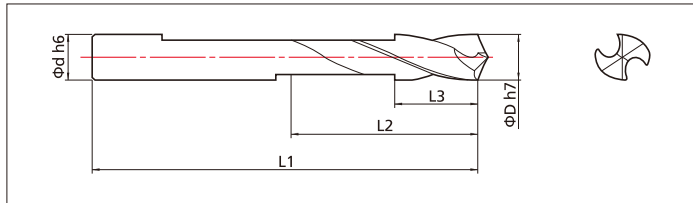
New

钻铣刀具

DMH



DM



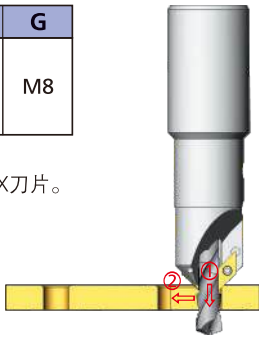
| CODE No.     | D(mm) | d(mm) | L1 | L2 | L3   |
|--------------|-------|-------|----|----|------|
| DM 080 TiAlN | 8.0   | 8.0   | 70 | 30 | 14.6 |
| DM 100 TiAlN | 10.0  | 10.0  |    |    |      |
| DM 120 TiAlN | 12.0  | 12.0  |    |    |      |

DM 钻可加工最大14mm孔深。如需加工更深的孔，需分别注明各尺寸。

- ▶ 在该刀体上安装使用，可换式硬质合金钻铣刀与XCGX刀片
- ▶ 特殊设计的硬质合金钻铣刀(TiAlN)，具有很好铣削功能的螺旋槽
- ▶ 硬质合金倒角刀片XCGX 1102，可用两个边角
- ▶ 采用侧固系统并经特殊热处理的工具钢刀体，具有很好的刚性
- ▶ 钻、铣、倒角功能集于一体，又经济又省事
- ▶ 加上倒角功能的立铣刀，边铣边倒角

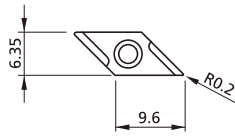
| CODE No.  | D(mm) | d(mm) | L1  | L2 | G  |
|-----------|-------|-------|-----|----|----|
| DMH 32-8  | 8     | 32    | 110 | 40 | M8 |
| DMH 32-10 | 10    |       |     |    |    |
| DMH 32-12 | 12    |       |     |    |    |

- 其他特殊尺寸，可根据需求定制。
- 注：安装DM钻铣刀之前，首先在DMH架上装好XCGX刀片。



- ▶ 整体硬质合金材料，TiAlN涂层
- ▶ 该产品是YESTOOL公司自主设计的钻铣刀
- ▶ 采用平磨工艺，适合安装两个XCGX刀片
- ▶ 该刀头必须安装在DMH刀架上使用
- ▶ 采用TiAlN涂层，寿命更长

XCGX



XCGX1102

- ▶ 采用磨边的硬质合金刀片
- ▶ 使用两个边角
- ▶ 可应用与孔倒角

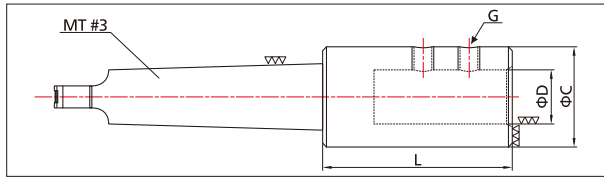
New

侧固式莫式锥柄

MT



MTC



- ▶ 适合安装KRUZ刀体的特殊莫氏锥柄
- ▶ 通过螺钉把KRUZ刀体，安装在侧固式莫式锥柄上面
- ▶ 是加长HSS MT刀柄钻头的替代品
- ▶ 对老设备、不稳定的机床、工件装夹不稳定，是理想的刀具

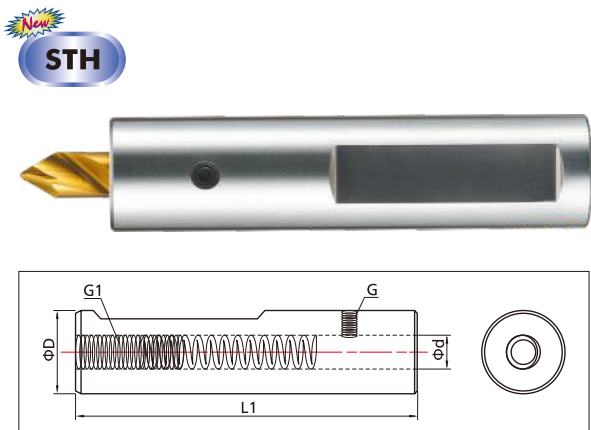
| CODE No.      | MT# | D(mm) | L(mm) | C(mm) | G   |
|---------------|-----|-------|-------|-------|-----|
| MT3S-SLA16-95 | #3  | 16    | 95    | 33    | M12 |
| MT3S-SLA20-70 |     | 20    | 70    | 37    |     |
| MT3S-SLA25-70 |     | 25    |       | 40    |     |
| MT3S-SLA32-70 |     | 32    |       | 48    |     |
| MT3S-SLA40-80 |     | 40    | 80    | 56    |     |

针对MT#2, MT#4莫式锥柄，可根据要求定制。



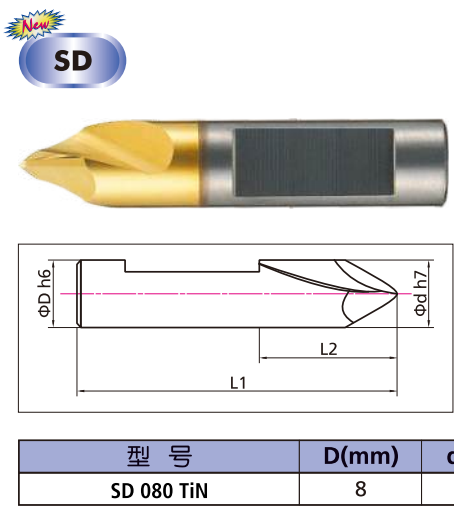
New

# 划线刀具

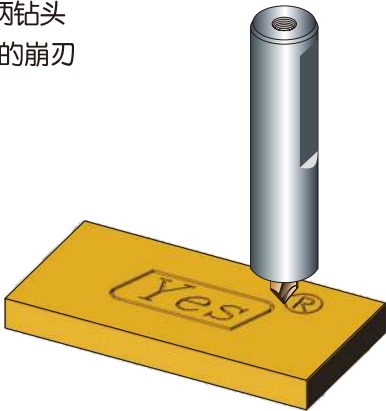


- ▶ 安装在侧固式刀柄的可换式硬质合金划线钻
- ▶ 经热处理的工具钢刀体
- ▶ 特殊设计的弹簧系统，加工不平表面时，可回收钻头阻力
- ▶ 另外还有：对倒角孔铣边的功能

| 型 号        | D(mm) | d(mm) | L1 | G    | G1    |
|------------|-------|-------|----|------|-------|
| STH 080    | 20    | 8     | 83 | M4x6 | M8x20 |
| STH-Spring | 6     |       | 40 |      |       |

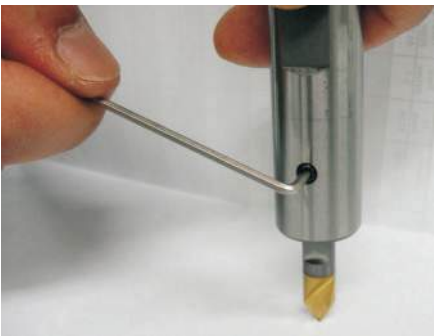
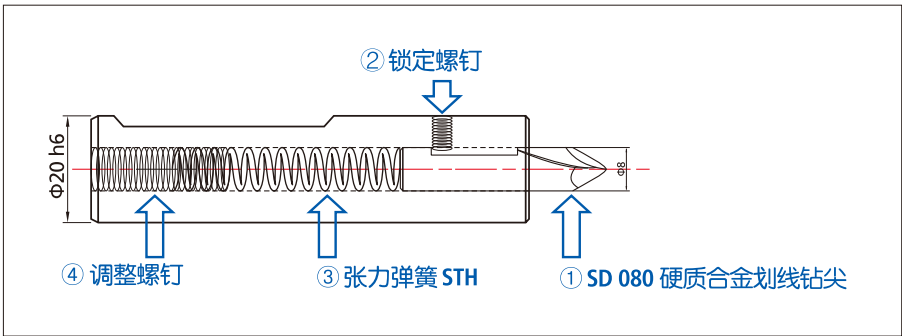


- ▶ TiN涂层的90°钻尖，保证了划线时的双角稳定性
- ▶ 适合STH刀架的硬质合金扁柄钻头
- ▶ 双重角钻尖，有效防止尖部的崩刃
- ▶ 以侧固螺钉来锁定
- ▶ 以侧面螺栓可调张力



## 装配划线刀具的方法

- 推入①SD 080划线钻尖，直到削平的刀柄完全隐藏到刀体内
- 完全锁紧螺钉②
- 向刀体内，插入③STH张力弹簧
- 把调整螺钉④，向右推到边端
- 最后，把锁定螺钉②，向左松动45°(约1/8转)，弹簧的弹力进入执行状态



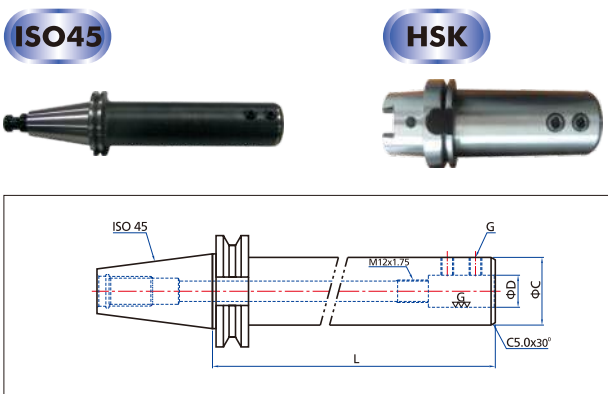
## 拆除划线刀具的方法

- 向左旋转调整螺钉④，取出该螺钉
- 从刀体上取出张力弹簧③
- 松开锁定螺钉②
- 从刀体上取下①SD 080划线刀具

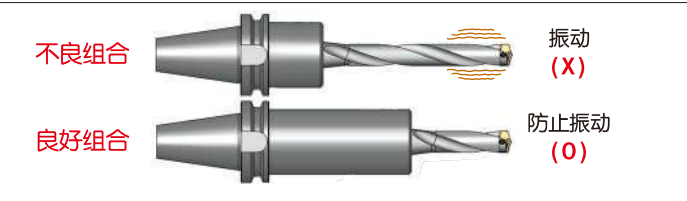
注意!：请务必留意拆卸划线钻头时的安全，从刀体上端开始操作（参见上图）。

New

# ISO 45与HSK加长强化刀柄(加工型钢设备专用)



- ▶ ISO 45(HSK)刀柄，可增强钻削刚性
- ▶ 采用了内冷结构
- ▶ 采用了两个螺钉侧固式夹紧方式
- ▶ 优化的KRUIZ-SLK刀体与IDFK钻尖(刀片)组合
- ▶ HSK刀柄，可根据要求定制

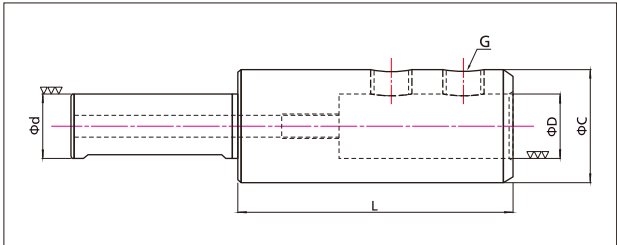


| 型 号                  | D  | L   | C  | G   | 型 号                  | D   | L                    | C                    | G   | 型 号                  | D   | L   | C  | G   |
|----------------------|----|-----|----|-----|----------------------|-----|----------------------|----------------------|-----|----------------------|-----|-----|----|-----|
| ISO45(HSK)-SLA16-80  | 16 | 100 | 56 | M10 | ISO45(HSK)-SLA20-400 | 20  | 400                  | 56                   | M12 | ISO45(HSK)-SLA32-270 | 32  | 270 | 56 | M14 |
| ISO45(HSK)-SLA16-160 |    | 160 |    |     | ISO45(HSK)-SLA20-450 |     | 450                  |                      |     | ISO45(HSK)-SLA32-300 |     | 300 |    |     |
| ISO45(HSK)-SLA16-210 |    | 210 |    |     | ISO45(HSK)-SLA20-500 |     | 500                  |                      |     | ISO45(HSK)-SLA32-350 |     | 350 |    |     |
| ISO45(HSK)-SLA16-240 |    | 240 |    |     | ISO45(HSK)-SLA25-80  | 100 | ISO45(HSK)-SLA32-400 |                      |     | 400                  |     |     |    |     |
| ISO45(HSK)-SLA16-270 |    | 270 |    |     | ISO45(HSK)-SLA25-160 | 160 | ISO45(HSK)-SLA32-450 |                      |     | 450                  |     |     |    |     |
| ISO45(HSK)-SLA16-300 |    | 300 |    |     | ISO45(HSK)-SLA25-210 | 210 | ISO45(HSK)-SLA32-500 |                      |     | 500                  |     |     |    |     |
| ISO45(HSK)-SLA16-350 |    | 350 |    |     | ISO45(HSK)-SLA25-240 | 240 | ISO45(HSK)-SLA40-90  |                      |     | 40                   | 120 | 60  |    |     |
| ISO45(HSK)-SLA16-400 |    | 400 |    |     | ISO45(HSK)-SLA25-270 | 270 | ISO45(HSK)-SLA40-160 |                      |     |                      | 160 |     |    |     |
| ISO45(HSK)-SLA16-450 |    | 450 |    |     | ISO45(HSK)-SLA25-300 | 300 | ISO45(HSK)-SLA40-210 |                      |     |                      | 210 |     |    |     |
| ISO45(HSK)-SLA16-500 |    | 500 |    |     | ISO45(HSK)-SLA25-350 | 350 | ISO45(HSK)-SLA40-240 |                      |     |                      | 240 |     |    |     |
| ISO45(HSK)-SLA20-80  | 20 | 100 | 56 | M12 | ISO45(HSK)-SLA25-400 | 400 | ISO45(HSK)-SLA40-270 | 270                  | 60  |                      |     |     |    |     |
| ISO45(HSK)-SLA20-160 |    | 160 |    |     | ISO45(HSK)-SLA25-450 | 450 | ISO45(HSK)-SLA40-300 | 300                  |     |                      |     |     |    |     |
| ISO45(HSK)-SLA20-210 |    | 210 |    |     | ISO45(HSK)-SLA25-500 | 500 | ISO45(HSK)-SLA40-350 | 350                  |     |                      |     |     |    |     |
| ISO45(HSK)-SLA20-240 |    | 240 |    |     | ISO45(HSK)-SLA32-80  | 32  | 100                  | ISO45(HSK)-SLA40-400 |     |                      | 400 |     |    |     |
| ISO45(HSK)-SLA20-270 |    | 270 |    |     | ISO45(HSK)-SLA32-160 |     | 160                  | ISO45(HSK)-SLA40-450 |     |                      | 450 |     |    |     |
| ISO45(HSK)-SLA20-300 |    | 300 |    |     | ISO45(HSK)-SLA32-210 |     | 210                  | ISO45(HSK)-SLA40-500 |     |                      | 500 |     |    |     |
| ISO45(HSK)-SLA20-350 |    | 350 |    |     | ISO45(HSK)-SLA32-240 |     | 240                  |                      |     |                      |     |     |    |     |
| ☞ 不包括拉钉              |    |     |    |     |                      |     |                      |                      |     |                      |     |     |    |     |

☞ 不包括拉钉  
☞ ISO40刀柄可根据需求定制

New

# 加长套筒

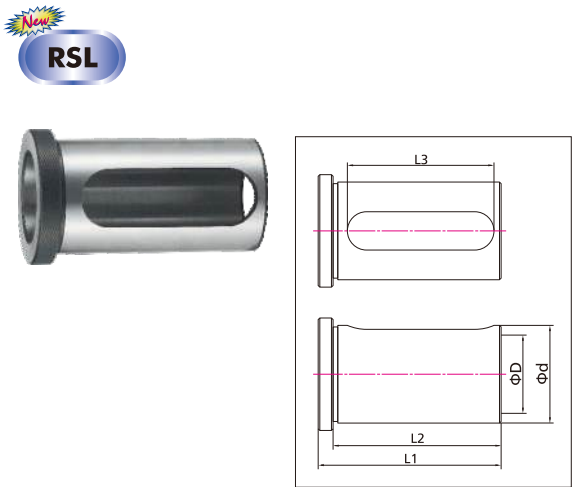


| 型 号             | d(mm) | D(mm) | L(mm) | C(mm) | G   |
|-----------------|-------|-------|-------|-------|-----|
| EXT16-SLA16-80  | 16    | 16    | 80    | 50    | M10 |
| EXT16-SLA16-125 |       |       | 125   |       |     |
| EXT16-SLA16-150 |       |       | 150   |       |     |
| EXT16-SLA16-200 |       |       | 200   |       |     |
| EXT16-SLA16-250 |       |       | 250   |       |     |
| EXT20-SLA20-80  | 20    | 20    | 80    |       | M12 |
| EXT20-SLA20-125 |       |       | 125   |       |     |
| EXT20-SLA20-150 |       |       | 150   |       |     |
| EXT20-SLA20-200 |       |       | 200   |       |     |
| EXT20-SLA20-250 |       |       | 250   |       |     |
| EXT25-SLA25-80  | 25    | 25    | 80    |       | M14 |
| EXT25-SLA25-125 |       |       | 125   |       |     |
| EXT25-SLA25-150 |       |       | 150   |       |     |
| EXT25-SLA25-200 |       |       | 200   |       |     |
| EXT25-SLA25-250 |       |       | 250   |       |     |
| EXT32-SLA32-80  | 32    | 32    | 80    | 60    |     |
| EXT32-SLA32-125 |       |       | 125   |       |     |
| EXT32-SLA32-150 |       |       | 150   |       |     |
| EXT32-SLA32-200 |       |       | 200   |       |     |
| EXT32-SLA32-250 |       |       | 250   |       |     |
| EXT40-SLA40-80  | 40    | 40    | 80    |       |     |
| EXT40-SLA40-125 |       |       | 125   |       |     |
| EXT40-SLA40-150 |       |       | 150   |       |     |
| EXT40-SLA40-200 |       |       | 200   |       |     |
| EXT40-SLA40-250 |       |       | 250   |       |     |



New

变径套筒



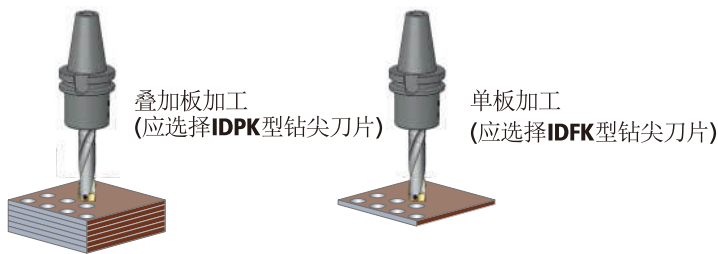
- ▶ RSL套筒适于侧固式刀柄的变径
- ▶ 适于KRUZ型刀体的直刀柄
- ▶ 公制和英制都可适用

| 型 号          | d(mm)  | D(mm) | L1 | L2 | L3 |
|--------------|--------|-------|----|----|----|
| RSL 32-16    | 32     | 16    | 65 | 59 | 50 |
| RSL 32-20    |        | 20    |    |    |    |
| RSL 32-25    |        | 25    |    |    |    |
| RSL 40-32    | 40     | 32    | 75 | 69 | 60 |
| RSL 1 1/4-16 | 1 1/4" | 16    | 65 | 59 | 50 |
| RSL 1 1/4-20 |        | 20    |    |    |    |
| RSL 1 1/4-25 |        | 25    |    |    |    |
| RSL 1 1/2-32 |        | 32    |    |    |    |

结构钢加工技术要点

由于钢结构工件的工装(夹持)，往往很难保证其牢靠性，并且大部分工件又是端面大而且长度很长。  
当机床主轴向结构钢的钢板方向进给时，表面将出现弯曲、变形或回弹现象，导致颤动或振动，这是常见的情况。  
为了实现更好的钻孔，我们建议您考虑以下技术要点，选好刀体和钻尖(刀片)。

- ☞ 根据加工孔深以及考虑到干涉后，请尽量选择较短的刀体，以避免振动或抖动，从而最大限度地提高加工性能。
- ☞ 结构钢的加工孔深一般小于50mm。YESTOOL公司的KRUZ-SLK以及KRUZ-FSLK刀体，以合理的设计保证其刚性，并排屑顺畅，从而保证良好的加工性能。
- ☞ 如果用莫式锥柄来装持我们的钻头，将会造成严重的抖动或振动、以及扭曲或孔径变大等诸多麻烦，并且严重缩短刀具寿命。这时选择我们提供的MT或MTC型转换刀柄，就能很好地得到解决。
- ☞ 如果存在干涉时，请选用带法兰的KRUZ-FSLK型(5D, 7D)长刀体，从而很好地降低抖动或振动。
- ☞ 如果ISO刀柄和KRUZ-SLK刀体不能满足长度，请使用我们提供的加长强化刀柄来补偿长度，就能保证良好的刚性。
- ☞ 另外，我们备有加长套筒和变径套筒，可灵活地应用于各种工况。
- ☞ 参考切削参数表，并根据现场工况，找出最佳参数。这是优化加工性能以及保障刀具寿命的关键所在。
- ☞ 单板加工以及叠加板加工，请正确选择钻尖(刀片)。  
(如右图所示)

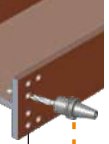


如果您寻找更多的信息，请联系当地的经销商或访问yestool@yestool.co.kr网站



推荐切削参数(型钢)

针对KRUZ SLK刀体 + 硬质合金IDFK钻尖(刀片)

| 步骤   | 钻头直径     |          | 转数    | 每转进给       |                | 线速        |                | 每分钟进给 |           | 功率 (KW) | 进给力 (KGF) | 稳定性                                                                                   | 刀具寿命                                                                                | 速 度    |
|------|----------|----------|-------|------------|----------------|-----------|----------------|-------|-----------|---------|-----------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|      | 公制       | 英制       |       | f(mm/rev.) | IPR(inch/rev.) | V(m/min.) | SFM(feet/min.) | F(mm) | IPM(inch) |         |           |                                                                                       |                                                                                     |        |
| 步骤 1 | 12.0     | 31/64"   | 780   | 0.20       | 0.008          | 29        | 96             | 156   | 6.1       | 1.3     | 286       | 稳定<br>↑                                                                               | 长<br>↑                                                                              | 慢<br>↑ |
|      | 14.0     | 9/16"    | 760   | 0.20       | 0.008          | 33        | 110            | 152   | 6.0       | 1.7     | 331       |                                                                                       |                                                                                     |        |
|      | 16.0     | 41/64"   | 740   | 0.21       | 0.008          | 37        | 122            | 155   | 6.1       | 2.2     | 387       |                                                                                       |                                                                                     |        |
|      | 17.5     | 11/16"   | 720   | 0.22       | 0.009          | 40        | 130            | 158   | 6.2       | 2.6     | 434       |                                                                                       |                                                                                     |        |
|      | 18.0     | 23/32"   | 700   | 0.22       | 0.009          | 40        | 130            | 154   | 6.1       | 2.6     | 445       |                                                                                       |                                                                                     |        |
|      | 20.5     | 13/16"   | 660   | 0.23       | 0.009          | 42        | 139            | 152   | 6.0       | 3.2     | 518       |                                                                                       |                                                                                     |        |
|      | 21.5     | 27/32"   | 620   | 0.24       | 0.009          | 42        | 137            | 149   | 5.9       | 3.3     | 556       |                                                                                       |                                                                                     |        |
|      | 22.0     | 7/8"     | 600   | 0.24       | 0.009          | 41        | 136            | 144   | 5.7       | 3.3     | 568       |                                                                                       |                                                                                     |        |
|      | 24.0     | 15/16"   | 570   | 0.26       | 0.010          | 43        | 141            | 148   | 5.8       | 3.9     | 648       |                                                                                       |                                                                                     |        |
|      | 26.0     | 1-1/32"  | 520   | 0.28       | 0.011          | 42        | 139            | 146   | 5.7       | 4.2     | 732       |                                                                                       |                                                                                     |        |
|      | 27.0     | 1-1/16"  | 500   | 0.28       | 0.011          | 42        | 139            | 140   | 5.5       | 4.3     | 758       |                                                                                       |                                                                                     |        |
|      | 30.0     | 1-3/16"  | 400   | 0.29       | 0.011          | 38        | 124            | 116   | 4.6       | 4.1     | 856       |                                                                                       |                                                                                     |        |
|      | 32.0     | 1-1/4"   | 380   | 0.29       | 0.011          | 38        | 125            | 110   | 4.3       | 4.3     | 911       |                                                                                       |                                                                                     |        |
|      | 34.0     | 1-11/32" | 360   | 0.29       | 0.011          | 38        | 126            | 104   | 4.1       | 4.5     | 964       |                                                                                       |                                                                                     |        |
|      | 36.0     | 1-27/64" | 340   | 0.29       | 0.011          | 38        | 126            | 99    | 3.9       | 4.7     | 1018      |                                                                                       |                                                                                     |        |
|      | 38.0     | 1-1/2"   | 320   | 0.29       | 0.011          | 38        | 125            | 93    | 3.7       | 4.9     | 1072      |                                                                                       |                                                                                     |        |
| 40.0 | 1-37/64" | 300      | 0.29  | 0.011      | 38             | 124       | 87             | 3.4   | 5.0       | 1126    |           |                                                                                       |                                                                                     |        |
| 步骤 2 | 12.0     | 31/64"   | 970   | 0.21       | 0.008          | 37        | 120            | 204   | 8.0       | 1.7     | 295       |    |  |        |
|      | 14.0     | 9/16"    | 970   | 0.21       | 0.008          | 43        | 140            | 204   | 8.0       | 2.3     | 341       |                                                                                       |                                                                                     |        |
|      | 16.0     | 41/64"   | 950   | 0.22       | 0.009          | 48        | 157            | 209   | 8.2       | 3.0     | 398       |                                                                                       |                                                                                     |        |
|      | 17.5     | 11/16"   | 930   | 0.24       | 0.009          | 51        | 168            | 223   | 8.8       | 3.7     | 457       |                                                                                       |                                                                                     |        |
|      | 18.0     | 23/32"   | 900   | 0.24       | 0.009          | 51        | 167            | 216   | 8.5       | 3.8     | 470       |                                                                                       |                                                                                     |        |
|      | 20.5     | 13/16"   | 850   | 0.25       | 0.010          | 55        | 180            | 213   | 8.4       | 4.6     | 545       |                                                                                       |                                                                                     |        |
|      | 21.5     | 27/32"   | 800   | 0.26       | 0.010          | 54        | 177            | 208   | 8.2       | 4.8     | 584       |                                                                                       |                                                                                     |        |
|      | 22.0     | 7/8"     | 780   | 0.26       | 0.010          | 54        | 177            | 203   | 8.0       | 4.9     | 597       |                                                                                       |                                                                                     |        |
|      | 24.0     | 15/16"   | 710   | 0.28       | 0.011          | 54        | 176            | 199   | 7.8       | 5.3     | 678       |                                                                                       |                                                                                     |        |
|      | 26.0     | 1-1/32"  | 640   | 0.30       | 0.012          | 52        | 171            | 192   | 7.6       | 5.7     | 763       |                                                                                       |                                                                                     |        |
|      | 27.0     | 1-1/16"  | 610   | 0.30       | 0.012          | 52        | 170            | 183   | 7.2       | 5.8     | 791       |                                                                                       |                                                                                     |        |
|      | 30.0     | 1-3/16"  | 500   | 0.30       | 0.012          | 47        | 155            | 150   | 5.9       | 5.5     | 874       |                                                                                       |                                                                                     |        |
|      | 32.0     | 1-1/4"   | 470   | 0.30       | 0.012          | 47        | 155            | 141   | 5.6       | 5.8     | 930       |                                                                                       |                                                                                     |        |
|      | 34.0     | 1-11/32" | 440   | 0.31       | 0.012          | 47        | 154            | 136   | 5.4       | 6.1     | 1005      |                                                                                       |                                                                                     |        |
|      | 36.0     | 1-27/64" | 410   | 0.31       | 0.012          | 46        | 152            | 127   | 5.0       | 6.2     | 1061      |                                                                                       |                                                                                     |        |
|      | 38.0     | 1-1/2"   | 380   | 0.31       | 0.012          | 45        | 149            | 118   | 4.6       | 6.3     | 1116      |                                                                                       |                                                                                     |        |
| 40.0 | 1-37/64" | 350      | 0.31  | 0.012      | 44             | 144       | 109            | 4.3   | 6.3       | 1172    |           |                                                                                       |                                                                                     |        |
| 步骤 3 | 12.0     | 31/64"   | 1,180 | 0.22       | 0.009          | 44        | 146            | 260   | 10.2      | 2.3     | 303       |                                                                                       |                                                                                     |        |
|      | 14.0     | 9/16"    | 1,180 | 0.22       | 0.009          | 52        | 170            | 260   | 10.2      | 3.1     | 351       |                                                                                       |                                                                                     |        |
|      | 16.0     | 41/64"   | 1,160 | 0.23       | 0.009          | 58        | 191            | 267   | 10.5      | 4.0     | 409       |                                                                                       |                                                                                     |        |
|      | 17.5     | 11/16"   | 1,140 | 0.26       | 0.010          | 63        | 206            | 296   | 11.7      | 5.0     | 480       |                                                                                       |                                                                                     |        |
|      | 18.0     | 23/32"   | 1,100 | 0.26       | 0.010          | 62        | 204            | 286   | 11.3      | 5.1     | 493       |                                                                                       |                                                                                     |        |
|      | 20.5     | 13/16"   | 1,040 | 0.27       | 0.011          | 67        | 220            | 281   | 11.1      | 6.3     | 571       |                                                                                       |                                                                                     |        |
|      | 21.5     | 27/32"   | 980   | 0.28       | 0.011          | 66        | 217            | 274   | 10.8      | 6.5     | 611       |                                                                                       |                                                                                     |        |
|      | 22.0     | 7/8"     | 960   | 0.28       | 0.011          | 66        | 218            | 269   | 10.6      | 6.6     | 624       |                                                                                       |                                                                                     |        |
|      | 24.0     | 15/16"   | 850   | 0.30       | 0.012          | 64        | 210            | 255   | 10.0      | 7.0     | 707       |                                                                                       |                                                                                     |        |
|      | 26.0     | 1-1/32"  | 760   | 0.32       | 0.013          | 62        | 204            | 243   | 9.6       | 7.4     | 794       |                                                                                       |                                                                                     |        |
|      | 27.0     | 1-1/16"  | 720   | 0.32       | 0.013          | 61        | 200            | 230   | 9.1       | 7.4     | 823       |                                                                                       |                                                                                     |        |
|      | 30.0     | 1-3/16"  | 600   | 0.32       | 0.013          | 57        | 185            | 192   | 7.6       | 7.2     | 909       |                                                                                       |                                                                                     |        |
|      | 32.0     | 1-1/4"   | 560   | 0.32       | 0.013          | 56        | 185            | 179   | 7.1       | 7.5     | 967       |                                                                                       |                                                                                     |        |
|      | 34.0     | 1-11/32" | 520   | 0.33       | 0.013          | 56        | 182            | 172   | 6.8       | 7.8     | 1044      |                                                                                       |                                                                                     |        |
|      | 36.0     | 1-27/64" | 480   | 0.33       | 0.013          | 54        | 178            | 158   | 6.2       | 7.9     | 1102      |                                                                                       |                                                                                     |        |
|      | 38.0     | 1-1/2"   | 440   | 0.33       | 0.013          | 53        | 172            | 145   | 5.7       | 7.9     | 1160      |                                                                                       |                                                                                     |        |
| 40.0 | 1-37/64" | 400      | 0.33  | 0.013      | 50             | 165       | 132            | 5.2   | 7.7       | 1218    |           |                                                                                       |                                                                                     |        |
| 步骤 4 | 12.0     | 31/64"   | 1,330 | 0.23       | 0.009          | 50        | 164            | 306   | 12.0      | 2.7     | 311       |  |                                                                                     |        |
|      | 14.0     | 9/16"    | 1,330 | 0.23       | 0.009          | 58        | 192            | 306   | 12.0      | 3.7     | 360       |                                                                                       |                                                                                     |        |
|      | 16.0     | 41/64"   | 1,310 | 0.24       | 0.009          | 66        | 216            | 314   | 12.4      | 4.8     | 420       |                                                                                       |                                                                                     |        |
|      | 17.5     | 11/16"   | 1,290 | 0.28       | 0.011          | 71        | 233            | 361   | 14.2      | 6.2     | 502       |                                                                                       |                                                                                     |        |
|      | 18.0     | 23/32"   | 1,240 | 0.28       | 0.011          | 70        | 230            | 347   | 13.7      | 6.2     | 516       |                                                                                       |                                                                                     |        |
|      | 20.5     | 13/16"   | 1,170 | 0.29       | 0.011          | 75        | 247            | 339   | 13.4      | 7.6     | 596       |                                                                                       |                                                                                     |        |
|      | 21.5     | 27/32"   | 1,100 | 0.30       | 0.012          | 74        | 244            | 330   | 13.0      | 7.8     | 637       |                                                                                       |                                                                                     |        |
|      | 22.0     | 7/8"     | 1,080 | 0.30       | 0.012          | 75        | 245            | 324   | 12.8      | 8.0     | 651       |                                                                                       |                                                                                     |        |
|      | 24.0     | 15/16"   | 930   | 0.32       | 0.013          | 70        | 230            | 298   | 11.7      | 8.2     | 736       |                                                                                       |                                                                                     |        |
|      | 26.0     | 1-1/32"  | 850   | 0.33       | 0.013          | 69        | 228            | 281   | 11.0      | 8.7     | 809       |                                                                                       |                                                                                     |        |
|      | 27.0     | 1-1/16"  | 800   | 0.33       | 0.013          | 68        | 223            | 264   | 10.4      | 8.6     | 838       |                                                                                       |                                                                                     |        |
|      | 30.0     | 1-3/16"  | 700   | 0.33       | 0.013          | 66        | 216            | 231   | 9.1       | 8.9     | 927       |                                                                                       |                                                                                     |        |
|      | 32.0     | 1-1/4"   | 650   | 0.33       | 0.013          | 65        | 214            | 215   | 8.4       | 9.2     | 985       |                                                                                       |                                                                                     |        |
|      | 34.0     | 1-11/32" | 600   | 0.34       | 0.013          | 64        | 210            | 204   | 8.0       | 9.6     | 1063      |                                                                                       |                                                                                     |        |
|      | 36.0     | 1-27/64" | 550   | 0.34       | 0.013          | 62        | 204            | 187   | 7.4       | 9.6     | 1122      |                                                                                       |                                                                                     |        |
|      | 38.0     | 1-1/2"   | 500   | 0.34       | 0.013          | 60        | 196            | 170   | 6.7       | 9.4     | 1181      |                                                                                       |                                                                                     |        |
| 40.0 | 1-37/64" | 450      | 0.34  | 0.013      | 57             | 185       | 153            | 6.0   | 9.1       | 1240    |           |                                                                                       |                                                                                     |        |
| 步骤 5 | 12.0     | 31/64"   | 1,800 | 0.24       | 0.009          | 68        | 223            | 432   | 17.0      | 4.1     | 320       |                                                                                       |                                                                                     |        |
|      | 14.0     | 9/16"    | 1,800 | 0.24       | 0.009          | 79        | 260            | 432   | 17.0      | 5.6     | 370       |                                                                                       |                                                                                     |        |
|      | 16.0     | 41/64"   | 1,780 | 0.25       | 0.010          | 89        | 293            | 445   | 17.5      | 7.3     | 431       |                                                                                       |                                                                                     |        |
|      | 17.5     | 11/16"   | 1,760 | 0.30       | 0.012          | 97        | 317            | 528   | 20.8      | 9.5     | 524       |                                                                                       |                                                                                     |        |
|      | 18.0     | 23/32"   | 1,660 | 0.30       | 0.012          | 94        | 308            | 498   | 19.6      | 9.3     | 538       |                                                                                       |                                                                                     |        |
|      | 20.5     | 13/16"   | 1,580 | 0.31       | 0.012          | 102       | 334            | 490   | 19.3      | 11.5    | 621       |                                                                                       |                                                                                     |        |
|      | 21.5     | 27/32"   | 1,500 | 0.32       | 0.013          | 101       | 332            | 480   | 18.9      | 12.1    | 663       |                                                                                       |                                                                                     |        |
|      | 22.0     | 7/8"     | 1,440 | 0.32       | 0.013          | 99        | 326            | 461   | 18.1      | 12.0    | 677       |                                                                                       |                                                                                     |        |
|      | 24.0     | 15/16"   | 1,250 | 0.34       | 0.013          | 94        | 309            | 425   | 16.7      | 12.3    | 763       |                                                                                       |                                                                                     |        |
|      | 26.0     | 1-1/32"  | 1,120 | 0.35       | 0.014          | 91        | 300            | 392   | 15.4      | 12.7    | 838       |                                                                                       |                                                                                     |        |
|      | 27.0     | 1-1/16"  | 1,020 | 0.35       | 0.014          | 86        | 284            | 357   | 14.1      | 12.2    | 869       |                                                                                       |                                                                                     |        |
|      | 30.0     | 1-3/16"  | 800   | 0.35       | 0.014          | 75        | 247            | 280   | 11.0      | 11.0    | 960       |                                                                                       |                                                                                     |        |
|      | 32.0     | 1-1/4"   | 740   | 0.35       | 0.014          | 74        | 244            | 259   | 10.2      | 11.0    | 1021      |                                                                                       |                                                                                     |        |
|      | 34.0     | 1-11/32" | 680   | 0.36       | 0.014          | 73        | 238            | 245   | 9.6       | 11.6    | 1100      |                                                                                       |                                                                                     |        |
|      | 36.0     | 1-27/64" | 620   | 0.36       | 0.014          | 70        | 230            | 223   | 8.8       | 11.5    | 1162      |                                                                                       |                                                                                     |        |
|      | 38.0     | 1-1/2"   | 560   | 0.36       | 0.014          | 67        | 219            | 202   | 7.9       | 11.2    | 1222      |                                                                                       |                                                                                     |        |
| 40.0 | 1-37/64" | 500      | 0.36  | 0.014      | 63             | 206       | 180            | 7.0   | 10.8      | 1284    |           |                                                                                       |                                                                                     |        |
| 步骤 6 | 12.0     | 31/64"   | 2,040 | 0.25       | 0.010          | 77        | 252            | 510   | 20.1      | 4.9     | 328       | 不稳定<br>↓                                                                              | 短<br>↓                                                                              | 快<br>↓ |
|      | 14.0     | 9/16"    | 2,040 | 0.25       | 0.010          | 90        | 294            | 510   | 20.1      | 6.7     | 379       |                                                                                       |                                                                                     |        |
|      | 16.0     | 41/64"   | 2,020 | 0.26       | 0.010          | 101       | 333            | 525   | 20.7      | 8.8     | 441       |                                                                                       |                                                                                     |        |
|      | 17.5     | 11/16"   | 2,000 | 0.31       | 0.012          | 110       | 361            | 620   | 24.4      | 11.4    | 535       |                                                                                       |                                                                                     |        |
|      | 18.0     | 23/32"   | 1,900 | 0.31       | 0.012          | 107       | 352            | 589   | 23.2      | 11.3    | 549       |                                                                                       |                                                                                     |        |
|      | 20.5     | 13/16"   | 1,800 | 0.32       | 0.013          | 116       | 380            | 576   | 22.7      | 13.9    | 633       |                                                                                       |                                                                                     |        |
|      | 21.5     | 27/32"   | 1,700 | 0.33       | 0.013          | 115       | 377            | 561   | 22.1      | 14.4    | 675       |                                                                                       |                                                                                     |        |
|      | 22.0     | 7/8"     | 1,650 | 0.33       | 0.013          | 114       | 374            | 545   | 21.4      | 14.5    | 690       |                                                                                       |                                                                                     |        |
|      | 24.0     | 15/16"   | 1,400 | 0.35       | 0.014          | 106       | 346            | 490   | 19.3      | 14.5    | 777       |                                                                                       |                                                                                     |        |
|      | 26.0     | 1-1/32"  | 1,250 | 0.36       | 0.014          | 102       | 335            | 450   | 17.7      | 14.9    | 853       |                                                                                       |                                                                                     |        |
|      | 27.0     | 1-1/16"  | 1,170 | 0.36       | 0.014          | 99        | 325            | 421   | 16.6      | 14.7    | 884       |                                                                                       |                                                                                     |        |
|      | 30.0     | 1-3/16"  | 900   | 0.36       | 0.014          | 85        | 278            | 324   | 12.8      | 13.0    | 977       |                                                                                       |                                                                                     |        |
|      | 32.0     | 1-1/4"   | 830   | 0.36       | 0.014          | 83        | 274            | 299   | 11.8      | 13.3    | 1039      |                                                                                       |                                                                                     |        |
|      | 34.0     | 1-11/32" | 760   | 0.37       | 0.015          | 81        | 266            | 281   | 11.1      | 13.6    | 1119      |                                                                                       |                                                                                     |        |
|      | 36.0     | 1-27/64" | 680   | 0.37       | 0.015          | 77        | 252            | 252   | 9.9       | 13.2    | 1181      |                                                                                       |                                                                                     |        |
|      | 38.0     | 1-1/2"   | 610   | 0.37       | 0.015          | 73        | 239            | 226   | 8.9       | 12.7    | 1244      |                                                                                       |                                                                                     |        |
| 40.0 | 1-37/64" | 550      | 0.37  | 0.015      | 69             | 227       | 204            | 8.0   | 12.3      | 1306    |           |                                                                                       |                                                                                     |        |



**YESTOOL Co., Ltd.**

# ITM 4刃可转位刀片

## 螺纹立铣刀

### — 经济型 4刃螺纹铣刀刀片

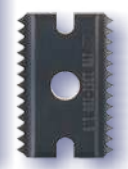






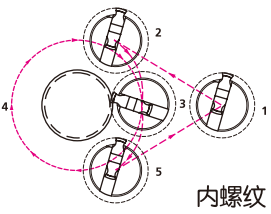
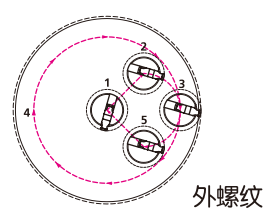
- ▶ YESTOOL的设计技术诞生的又一个经典，经精密研磨的螺纹铣刀刀片
- ▶ 刀杆的夹缝里嵌入螺纹刀片后再用贯通螺纹紧固，结合非常牢固
- ▶ 配有内冷式设计
- ▶ 内螺纹和外螺纹刀片兼用的刀杆







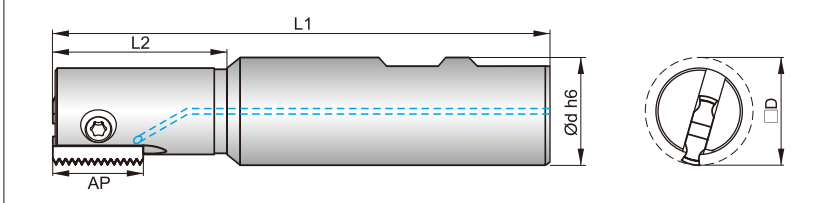



**YITM 螺纹铣刀杆**



- ▶ 刀杆的夹缝里嵌入螺纹刀片后再用贯通螺纹紧固，结合非常牢固
- ▶ 经济型4刃螺纹铣刀刀片（ITM080型，只用2刃）
- ▶ 可用4刃的可转位硬质合金螺纹铣刀刀片
- ▶ 刀杆采用了内冷式
- ▶ 采用了韦尔登刀柄（可定制HA、HE型）


**螺纹铣刀杆**



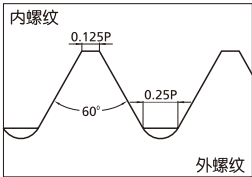
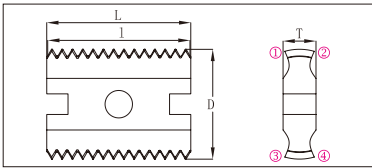
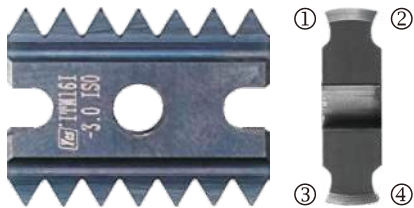
| 刀杆型号    | ØD   | L1  | L2 | AP | 刀柄规格<br>Ød | 固定螺栓<br> | 扳手<br>                          | 刀片      |  |
|---------|------|-----|----|----|------------|----------|---------------------------------|---------|--|
| YITM090 | 9.0  | 85  | 14 | 12 | 20         | M2.5     | T7<br>Torque<br>0.9Nm<br>(Max)  | ITM080□ |  |
| YITM095 | 9.5  | 85  | 14 | 12 | 20         |          |                                 |         |  |
| YITM100 | 10.0 | 85  | 16 | 12 | 20         |          |                                 |         |  |
| YITM115 | 11.5 | 88  | 18 | 14 | 20         | M3       | T8<br>Torque<br>1.5Nm<br>(Max)  | ITM100□ |  |
| YITM125 | 12.5 | 90  | 20 | 14 | 20         |          |                                 |         |  |
| YITM140 | 14.0 | 94  | 25 | 14 | 20         |          |                                 | ITM130□ |  |
| YITM150 | 15.0 | 95  | 25 | 16 | 20         |          |                                 |         |  |
| YITM170 | 17.0 | 98  | 30 | 16 | 20         | M4       | T15<br>Torque<br>3.5Nm<br>(Max) | ITM160□ |  |
| YITM190 | 19.0 | 95  | 30 | 21 | 20         |          |                                 |         |  |
| YITM210 | 21.0 | 115 | 40 | 21 | 25         |          |                                 |         |  |
| YITM250 | 25.0 | 115 | 40 | 21 | 25         |          |                                 |         |  |
| YITM285 | 28.5 | 140 | 50 | 30 | 25         | M6       | T20<br>Torque<br>4.0Nm<br>(Max) | ITM220□ |  |
| YITM310 | 31.0 | 140 | 50 | 30 | 25         |          |                                 |         |  |
| YITM380 | 38.0 | 160 | 60 | 30 | 32         |          |                                 |         |  |
| YITM420 | 42.0 | 170 | 65 | 40 | 40         | M8       |                                 | ITM280□ |  |
| YITM460 | 46.0 | 170 | 65 | 40 | 40         |          |                                 |         |  |

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# ITM 硬质合金螺纹铣刀片, ISO 内螺纹



- } 4刃可转位螺纹铣刀片
- } 精密研磨的硬质合金刀片
- ▶ 刀杆的夹缝里嵌入螺纹刀片后  
再用贯通螺纹紧固, 结合非常牢固
- } 刀片采用TiAlN涂层(标准品)

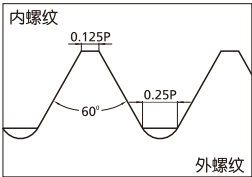
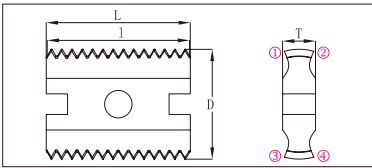
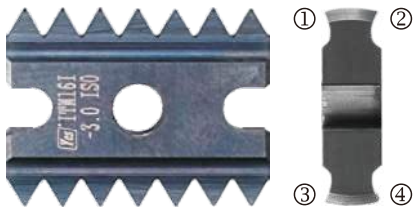
ITM 硬质合金螺纹铣刀片

ISO 内螺纹

| 刀片型号             | 螺距   | I     | L  | D    | T   | 可用<br>刃数 | 对应刀杆型号                        |
|------------------|------|-------|----|------|-----|----------|-------------------------------|
| ITM080I-0.50 ISO | 0.5  | 12    | 12 | 6.5  | 2.4 | 2        | YITM090<br>YITM095<br>YITM100 |
| ITM080I-0.75 ISO | 0.75 | 12    |    |      |     |          |                               |
| ITM080I-1.00 ISO | 1    | 12    |    |      |     |          |                               |
| ITM080I-1.25 ISO | 1.25 | 11.25 |    |      |     |          |                               |
| ITM080I-1.50 ISO | 1.5  | 12    | 14 | 9.5  | 2.6 | 4        | YITM115<br>YITM125<br>YITM140 |
| ITM100I-0.75 ISO | 0.75 | 13.5  |    |      |     |          |                               |
| ITM100I-1.00 ISO | 1    | 14    |    |      |     |          |                               |
| ITM100I-1.25 ISO | 1.25 | 13.75 |    |      |     |          |                               |
| ITM100I-1.50 ISO | 1.5  | 13.5  |    |      |     |          |                               |
| ITM100I-1.75 ISO | 1.75 | 14    |    |      |     |          |                               |
| ITM100I-2.00 ISO | 2    | 14    | 16 | 12.5 | 3.6 | 4        | YITM150<br>YITM170            |
| ITM130I-1.00 ISO | 1    | 16    |    |      |     |          |                               |
| ITM130I-1.25 ISO | 1.25 | 15    |    |      |     |          |                               |
| ITM130I-1.50 ISO | 1.5  | 15    |    |      |     |          |                               |
| ITM130I-1.75 ISO | 1.75 | 15.75 |    |      |     |          |                               |
| ITM130I-2.00 ISO | 2    | 16    |    |      |     |          |                               |
| ITM130I-2.50 ISO | 2.5  | 15    | 21 | 16   | 4.8 | 4        | YITM190<br>YITM210<br>YITM250 |
| ITM160I-1.00 ISO | 1    | 21    |    |      |     |          |                               |
| ITM160I-1.75 ISO | 1.75 | 21    |    |      |     |          |                               |
| ITM160I-2.00 ISO | 2    | 20    |    |      |     |          |                               |
| ITM160I-2.50 ISO | 2.5  | 20    |    |      |     |          |                               |
| ITM160I-3.00 ISO | 3    | 21    |    |      |     |          |                               |
| ITM160I-3.50 ISO | 3.5  | 21    | 30 | 22   | 5.6 | 4        | YITM285<br>YITM310<br>YITM380 |
| ITM220I-1.50 ISO | 1.5  | 30    |    |      |     |          |                               |
| ITM220I-2.00 ISO | 2    | 30    |    |      |     |          |                               |
| ITM220I-3.00 ISO | 3    | 30    |    |      |     |          |                               |
| ITM220I-3.50 ISO | 3.5  | 28    |    |      |     |          |                               |
| ITM220I-4.00 ISO | 4    | 28    |    |      |     |          |                               |
| ITM220I-4.50 ISO | 4.5  | 27    | 40 | 28   | 6.4 | 4        | YITM420<br>YITM460            |
| ITM220I-5.00 ISO | 5    | 30    |    |      |     |          |                               |
| ITM280I-1.50 ISO | 1.5  | 39    |    |      |     |          |                               |
| ITM280I-2.00 ISO | 2    | 40    |    |      |     |          |                               |
| ITM280I-3.00 ISO | 3    | 39    |    |      |     |          |                               |
| ITM280I-3.50 ISO | 3.5  | 38.5  |    |      |     |          |                               |
| ITM280I-4.00 ISO | 4    | 40    | 40 | 28   | 6.4 | 4        | YITM420<br>YITM460            |
| ITM280I-4.50 ISO | 4.5  | 36    |    |      |     |          |                               |
| ITM280I-5.00 ISO | 5    | 40    |    |      |     |          |                               |
| ITM280I-5.50 ISO | 5.5  | 38.5  |    |      |     |          |                               |
| ITM280I-6.00 ISO | 6    | 36    |    |      |     |          |                               |



# ITM 硬质合金螺纹铣刀片, ISO 外螺纹



- } 4刃可转位螺纹铣刀片
- } 精密研磨的硬质合金刀片
- ▶ 刀杆的夹缝里嵌入螺纹刀片后  
再用贯通螺纹紧固, 结合非常牢固
- } 刀片采用TiAlN涂层(标准品)

ITM 硬质合金螺纹铣刀片

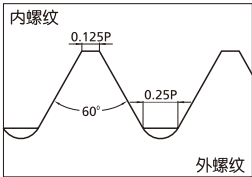
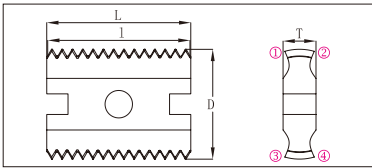
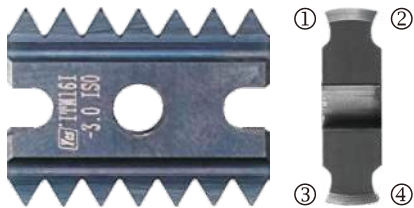
ISO 外螺纹

| 刀片型号             | 螺距   | I     | L  | D    | T   | 可用<br>刃数 | 对应刀杆型号                        |
|------------------|------|-------|----|------|-----|----------|-------------------------------|
| ITM100E-0.75 ISO | 0.75 | 13.5  | 14 | 9.5  | 2.6 | 4        | YITM115<br>YITM125<br>YITM140 |
| ITM100E-1.00 ISO | 1    | 14    |    |      |     |          |                               |
| ITM100E-1.25 ISO | 1.25 | 13.75 |    |      |     |          |                               |
| ITM100E-1.50 ISO | 1.5  | 13.5  |    |      |     |          |                               |
| ITM100E-1.75 ISO | 0.75 | 14    | 16 | 12.5 | 3.6 | 4        | YITM150<br>YITM170            |
| ITM100E-2.00 ISO | 2    | 14    |    |      |     |          |                               |
| ITM130E-1.00 ISO | 1    | 16    |    |      |     |          |                               |
| ITM130E-1.25 ISO | 1.25 | 15    |    |      |     |          |                               |
| ITM130E-1.50 ISO | 1.5  | 15    |    |      |     |          |                               |
| ITM130E-1.75 ISO | 1.75 | 15.75 |    |      |     |          |                               |
| ITM130E-2.00 ISO | 2    | 16    | 21 | 16   | 4.8 | 4        | YITM190<br>YITM210<br>YITM250 |
| ITM130E-2.50 ISO | 2.5  | 15    |    |      |     |          |                               |
| ITM160E-1.00 ISO | 1    | 21    |    |      |     |          |                               |
| ITM160E-1.50 ISO | 1.5  | 21    |    |      |     |          |                               |
| ITM160E-2.00 ISO | 2    | 20    |    |      |     |          |                               |
| ITM160E-2.50 ISO | 2.5  | 20    |    |      |     |          |                               |
| ITM160E-3.00 ISO | 3    | 21    | 30 | 22   | 5.6 | 4        | YITM285<br>YITM310<br>YITM380 |
| ITM220E-1.50 ISO | 1.5  | 30    |    |      |     |          |                               |
| ITM220E-2.00 ISO | 2    | 30    |    |      |     |          |                               |
| ITM220E-3.00 ISO | 3    | 30    |    |      |     |          |                               |
| ITM220E-3.50 ISO | 3.5  | 28    |    |      |     |          |                               |
| ITM220E-4.00 ISO | 4    | 28    |    |      |     |          |                               |
| ITM280E-1.50 ISO | 1.5  | 39    | 40 | 28   | 6.4 | 4        | YITM420<br>YITM460            |
| ITM280E-2.00 ISO | 2    | 40    |    |      |     |          |                               |
| ITM280E-3.00 ISO | 3    | 39    |    |      |     |          |                               |
| ITM280E-4.00 ISO | 4    | 40    |    |      |     |          |                               |
| ITM280E-5.00 ISO | 5    | 40    |    |      |     |          |                               |
| ITM280E-6.00 ISO | 6    | 36    |    |      |     |          |                               |





# ITM 硬质合金螺纹铣刀片, UN 内螺纹



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- ▶ 刀杆的夹缝里嵌入螺纹刀片后  
再用贯通螺纹紧固, 结合非常牢固
- } 刀片采用TiAlN涂层(标准品)

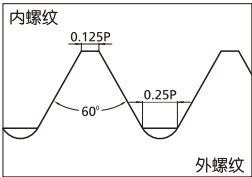
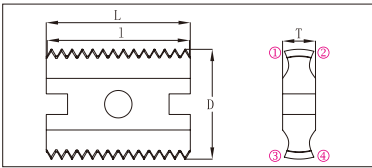
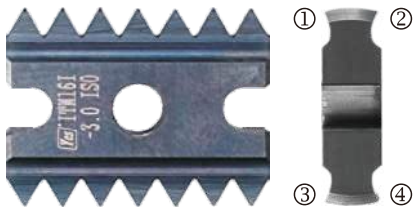
ITM 硬质合金螺纹铣刀片

UN 内螺纹

| 刀片型号          | TPI | I     | L  | D    | T   | 可用<br>刃数 | 对应刀杆型号                        |
|---------------|-----|-------|----|------|-----|----------|-------------------------------|
| ITM080I-32UN  | 32  | 11.91 | 12 | 6.5  | 2.4 | 2        | YITM090<br>YITM095<br>YITM100 |
| ITM080I-28UN  | 28  | 11.79 |    |      |     |          |                               |
| ITM080I-24UN  | 24  | 11.64 |    |      |     |          |                               |
| ITM080I-20UN  | 20  | 11.25 |    |      |     |          |                               |
| ITM080I-18UN  | 18  | 11.43 |    |      |     |          |                               |
| ITM080I-16UN  | 18  | 11.11 | 14 | 9.5  | 2.6 | 4        | YITM115<br>YITM125<br>YITM140 |
| ITM100I-32UN  | 32  | 13.49 |    |      |     |          |                               |
| ITM100I-28UN  | 28  | 13.61 |    |      |     |          |                               |
| ITM100I-27UN  | 27  | 14.11 |    |      |     |          |                               |
| ITM100I-24UN  | 24  | 13.76 |    |      |     |          |                               |
| ITM100I-20UN  | 20  | 13.97 |    |      |     |          |                               |
| ITM100I-18UN  | 18  | 14.11 |    |      |     |          |                               |
| ITM100I-16UN  | 16  | 12.7  |    |      |     |          |                               |
| ITM100I-14UN  | 14  | 12.7  |    |      |     |          |                               |
| ITM100I-12UN  | 12  | 12.7  |    |      |     |          |                               |
| ITM100I-11UN  | 11  | 13.85 | 16 | 12.5 | 3.6 | 4        | YITM150<br>YITM170            |
| ITM130I-32UN  | 32  | 15.88 |    |      |     |          |                               |
| ITM130I-28UN  | 28  | 15.42 |    |      |     |          |                               |
| ITM130I-27UN  | 27  | 15.99 |    |      |     |          |                               |
| ITM130I-24UN  | 24  | 15.88 |    |      |     |          |                               |
| ITM130I-20UN  | 20  | 15.24 |    |      |     |          |                               |
| ITM130I-18UN  | 18  | 15.52 |    |      |     |          |                               |
| ITM130I-16UN  | 16  | 15.88 |    |      |     |          |                               |
| ITM130I-14UN  | 14  | 14.51 |    |      |     |          |                               |
| ITM130I-12UN  | 12  | 14.82 |    |      |     |          |                               |
| ITM130I-11UN  | 11  | 16.16 | 21 | 16   | 4.8 | 4        | YITM190<br>YITM210<br>YITM250 |
| ITM130I-10UN  | 10  | 15.24 |    |      |     |          |                               |
| ITM160I-24UN  | 24  | 20.11 |    |      |     |          |                               |
| ITM160I-20UN  | 20  | 20.32 |    |      |     |          |                               |
| ITM160I-18UN  | 18  | 19.76 |    |      |     |          |                               |
| ITM160I-16UN  | 16  | 20.64 |    |      |     |          |                               |
| ITM160I-14UN  | 14  | 19.96 |    |      |     |          |                               |
| ITM160I-12UN  | 12  | 21.17 |    |      |     |          |                               |
| ITM160I-10UN  | 10  | 20.32 |    |      |     |          |                               |
| ITM160I-8UN   | 8   | 19.05 |    |      |     |          |                               |
| ITM160I-7UN   | 7   | 21.77 | 30 | 22   | 5.6 | 4        | YITM285<br>YITM310<br>YITM380 |
| ITM220I-20UN  | 20  | 29.21 |    |      |     |          |                               |
| ITM220I-18UN  | 18  | 29.63 |    |      |     |          |                               |
| ITM220I-16UN  | 16  | 28.58 |    |      |     |          |                               |
| ITM220I-14UN  | 14  | 29.03 |    |      |     |          |                               |
| ITM220I-12UN  | 12  | 29.63 |    |      |     |          |                               |
| ITM220I-10UN  | 10  | 27.94 |    |      |     |          |                               |
| ITM220I-8UN   | 8   | 28.58 |    |      |     |          |                               |
| ITM220I-6UN   | 6   | 29.63 |    |      |     |          |                               |
| ITM220I-5UN   | 5   | 30.48 |    |      |     |          |                               |
| ITM280I-16UN  | 16  | 39.69 | 40 | 28   | 6.4 | 4        | YITM420<br>YITM460            |
| ITM280I-14UN  | 14  | 39.91 |    |      |     |          |                               |
| ITM280I-12UN  | 12  | 38.1  |    |      |     |          |                               |
| ITM280I-10UN  | 10  | 38.1  |    |      |     |          |                               |
| ITM280I-8UN   | 8   | 38.1  |    |      |     |          |                               |
| ITM280I-6UN   | 6   | 38.1  |    |      |     |          |                               |
| ITM280I-4.5UN | 4.5 | 39.51 |    |      |     |          |                               |
| ITM280I-4UN   | 4   | 38.1  |    |      |     |          |                               |



# ITM 硬质合金螺纹铣刀片, UN 外螺纹



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- ▶ 刀杆的夹缝里嵌入螺纹刀片后  
再用贯通螺纹紧固, 结合非常牢固
- } 刀片采用TiAlN涂层(标准品)

ITM 硬质合金螺纹铣刀片

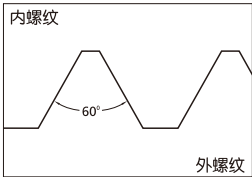
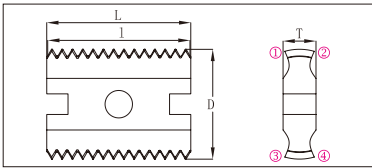
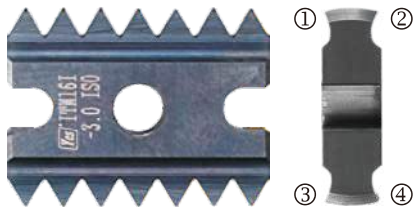
UN 外螺纹

| 刀片型号         | TPI | I     | L  | D    | T   | 可用<br>刃数 | 对应刀杆型号                        |
|--------------|-----|-------|----|------|-----|----------|-------------------------------|
| ITM100E-32UN | 32  | 13.49 | 14 | 9.5  | 2.6 | 4        | YITM115<br>YITM125<br>YITM140 |
| ITM100E-28UN | 28  | 13.61 |    |      |     |          |                               |
| ITM100E-24UN | 24  | 13.76 |    |      |     |          |                               |
| ITM100E-20UN | 20  | 13.97 |    |      |     |          |                               |
| ITM100E-18UN | 18  | 14.11 |    |      |     |          |                               |
| ITM100E-16UN | 16  | 12.7  |    |      |     |          |                               |
| ITM100E-14UN | 14  | 12.7  | 16 | 12.5 | 3.6 | 4        | YITM150<br>YITM170            |
| ITM100E-12UN | 12  | 12.7  |    |      |     |          |                               |
| ITM130E-32UN | 32  | 15.88 |    |      |     |          |                               |
| ITM130E-28UN | 28  | 15.42 |    |      |     |          |                               |
| ITM130E-27UN | 27  | 15.99 |    |      |     |          |                               |
| ITM130E-24UN | 24  | 15.88 |    |      |     |          |                               |
| ITM130E-20UN | 20  | 15.24 |    |      |     |          |                               |
| ITM130E-18UN | 18  | 15.52 |    |      |     |          |                               |
| ITM130E-16UN | 16  | 15.88 |    |      |     |          |                               |
| ITM130E-14UN | 14  | 14.52 |    |      |     |          |                               |
| ITM130E-12UN | 12  | 14.82 | 21 | 16   | 4.8 | 4        | YITM190<br>YITM210<br>YITM250 |
| ITM130E-11UN | 11  | 16.16 |    |      |     |          |                               |
| ITM130E-10UN | 10  | 15.24 |    |      |     |          |                               |
| ITM160E-24UN | 24  | 20.11 |    |      |     |          |                               |
| ITM160E-20UN | 20  | 20.32 |    |      |     |          |                               |
| ITM160E-18UN | 18  | 19.76 |    |      |     |          |                               |
| ITM160E-16UN | 16  | 20.64 |    |      |     |          |                               |
| ITM160E-14UN | 14  | 19.96 |    |      |     |          |                               |
| ITM160E-12UN | 12  | 21.17 |    |      |     |          |                               |
| ITM160E-10UN | 10  | 20.32 |    |      |     |          |                               |
| ITM220E-20UN | 20  | 29.21 | 30 | 22   | 5.6 | 4        | YITM285<br>YITM310<br>YITM380 |
| ITM220E-18UN | 18  | 29.63 |    |      |     |          |                               |
| ITM220E-16UN | 16  | 28.58 |    |      |     |          |                               |
| ITM220E-14UN | 14  | 29.03 |    |      |     |          |                               |
| ITM220E-12UN | 12  | 29.63 |    |      |     |          |                               |
| ITM220E-10UN | 10  | 27.94 |    |      |     |          |                               |
| ITM220E-8UN  | 8   | 28.58 |    |      |     |          |                               |
| ITM220E-6UN  | 6   | 29.63 |    |      |     |          |                               |
| ITM280E-16UN | 16  | 39.69 | 40 | 28   | 6.4 | 4        | YITM420<br>YITM460            |
| ITM280E-14UN | 14  | 39.91 |    |      |     |          |                               |
| ITM280E-12UN | 12  | 38.1  |    |      |     |          |                               |
| ITM280E-10UN | 10  | 38.1  |    |      |     |          |                               |
| ITM280E-8UN  | 8   | 38.1  |    |      |     |          |                               |
| ITM280E-6UN  | 6   | 38.1  |    |      |     |          |                               |





# ITM 硬质合金螺纹铣刀片, NPS, NPSF 内螺纹, 外螺纹



- } 4刃可转位螺纹铣刀片
- } 精密研磨的硬质合金刀片
- ▶ 刀杆的夹缝里嵌入螺纹刀片后 再用贯通螺纹紧固, 结合非常牢固
- } 刀片采用TiAlN涂层(标准品)

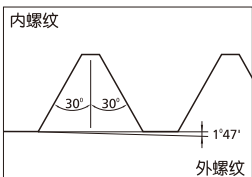
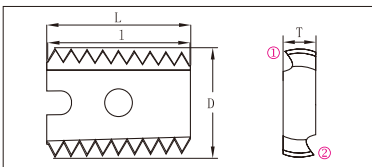
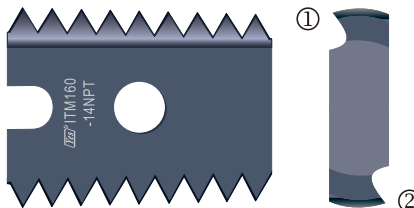
ITM 硬质合金螺纹铣刀片

NPS, NPSF 内螺纹, 外螺纹

| 刀片型号           | 螺距   | I     | L  | D    | T   | 可用刀数 | 对应刀杆型号                      |
|----------------|------|-------|----|------|-----|------|-----------------------------|
| ITM080-18NPS   | 18   | 11.29 | 12 | 6.5  | 2.4 | 4    | YITM090 / YITM095 / YITM100 |
| ITM100-18NPS   | 18   | 12.7  | 14 | 9.5  | 2.6 | 4    | YITM115 / YITM125 / YITM140 |
| ITM100-14NPS   | 14   | 12.7  | 14 | 9.5  | 2.6 | 4    | YITM115 / YITM125 / YITM140 |
| ITM130-18NPS   | 18   | 15.52 | 16 | 12.5 | 3.6 | 4    | YITM150 / YITM170           |
| ITM130-14NPS   | 14   | 14.51 | 16 | 12.5 | 3.6 | 4    | YITM150 / YITM170           |
| ITM130-11.5NPS | 11.5 | 15.46 | 16 | 12.5 | 3.6 | 4    | YITM150 / YITM170           |
| ITM160-14NPS   | 14   | 19.96 | 21 | 16   | 4.8 | 4    | YITM190 / YITM210 / YITM250 |
| ITM160-11.5NPS | 11.5 | 19.88 | 21 | 16   | 4.8 | 4    | YITM190 / YITM210 / YITM250 |
| ITM220-11.5NPS | 11.5 | 28.71 | 30 | 22   | 5.6 | 4    | YITM285 / YITM310 / YITM380 |
| ITM220-8NPS    | 8    | 28.58 | 30 | 22   | 5.6 | 4    | YITM285 / YITM310 / YITM380 |
| ITM280-11.5NPS | 11.5 | 39.76 | 40 | 28   | 6.4 | 4    | YITM420 / YITM460           |
| ITM280-8NPS    | 8    | 38.1  | 40 | 28   | 6.4 | 4    | YITM420 / YITM460           |



# ITM 硬质合金螺纹铣刀片, NPT, NPTF 内螺纹, 外螺纹



- } 2刃可转位螺纹铣刀片
- } 精密研磨的硬质合金刀片
- ▶ 刀杆的夹缝里嵌入螺纹刀片后 再用贯通螺纹紧固, 结合非常牢固
- } 刀片采用TiAlN涂层(标准品)

ITM 硬质合金螺纹铣刀片

NPT, NPTF 内螺纹, 外螺纹

| 刀片型号           | 螺距   | I     | L  | D    | T   | 可用刀数 | 对应刀杆型号                      |
|----------------|------|-------|----|------|-----|------|-----------------------------|
| ITM080-18NPT   | 18   | 11.29 | 12 | 6.5  | 2.4 | 2    | YITM090 / YITM095 / YITM100 |
| ITM100-18NPT   | 18   | 12.7  | 14 | 9.5  | 2.6 | 2    | YITM115 / YITM125 / YITM140 |
| ITM100-14NPT   | 14   | 12.7  | 14 | 9.5  | 2.6 | 2    | YITM115 / YITM125 / YITM140 |
| ITM130-18NPT   | 18   | 15.52 | 16 | 12.5 | 3.6 | 2    | YITM150 / YITM170           |
| ITM130-14NPT   | 14   | 14.51 | 16 | 12.5 | 3.6 | 2    | YITM150 / YITM170           |
| ITM130-11.5NPT | 11.5 | 15.46 | 16 | 12.5 | 3.6 | 2    | YITM150 / YITM170           |
| ITM160-14NPT   | 14   | 19.96 | 21 | 16   | 4.8 | 2    | YITM190 / YITM210 / YITM250 |
| ITM160-11.5NPT | 11.5 | 19.88 | 21 | 16   | 4.8 | 2    | YITM190 / YITM210 / YITM250 |
| ITM220-11.5NPT | 11.5 | 28.71 | 30 | 22   | 5.6 | 2    | YITM285 / YITM310 / YITM380 |
| ITM220-8NPT    | 8    | 28.58 | 30 | 22   | 5.6 | 2    | YITM285 / YITM310 / YITM380 |
| ITM280-11.5NPT | 11.5 | 39.76 | 40 | 28   | 6.4 | 2    | YITM420 / YITM460           |
| ITM280-8NPT    | 8    | 38.1  | 40 | 28   | 6.4 | 2    | YITM420 / YITM460           |



# KRUZ非标阶梯组合钻的刀体

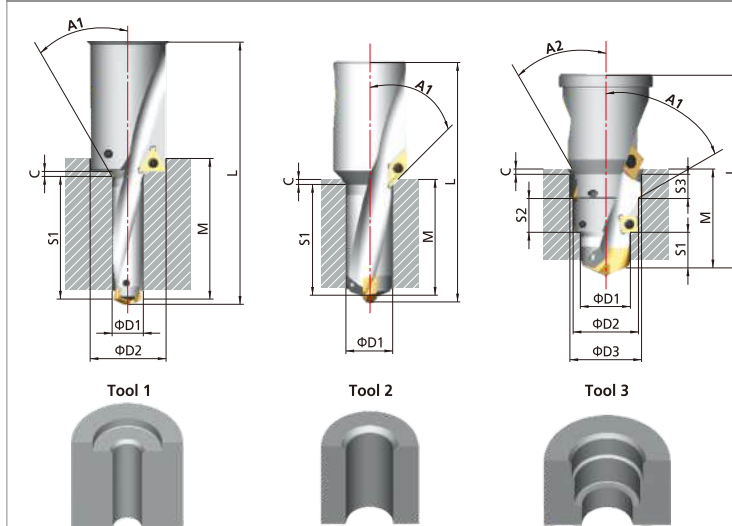
这种组合钻, 一次就能同时加工2~3种不同直径的孔和倒角。精度高、效率高、降成本。



- ▶ 螺旋槽钻头刀体, 更容易排屑对主轴冷却有帮助
- ▶ 采用我公司的标准钻尖(ID、IDP、IDF) 以及ISO标准倒角刀片
- ▶ 所有的装换刀片, 不需拆下刀体可直接换刀
- ▶ 缩短周期, 提高生产效率、降低成本

Special KRUZ

定制时请参考以下形状与尺寸标注方法, 标明各部分尺寸, 并提供图纸



- HA型刀柄
- HB型刀柄
- HE型刀柄



定制时提供以下信息, 便有助于设计刀具

- ① 工件材质(请注明)
- ② 刀柄型式(HA型、HB型、HE型或其他非标)
- ③ 倒角刀片、阶梯刀片的种类(限于ISO标准)
- ④ 是否要求带内冷
- ⑤ 提供工件图纸



# 扭矩扳手

- ▶ 装配硬质合金刀片时, 更容易掌握拧紧螺钉的力度
- ▶ 是理想的扭矩扳手, 听到“咔咔”声音就拧紧了
- ▶ 使用该扳手就可避免过度拧紧造成的螺钉损伤



| 组件   | 型号                                        |
|------|-------------------------------------------|
| T-手柄 | TPK-H01                                   |
| 梅花尖  | 25mm<br>50mm                              |
| 适配器  | TX6<br>TX7<br>TX8<br>TX15<br>TX20         |
| 最大扭矩 | 0.6Nm<br>0.9Nm<br>1.5Nm<br>3.5Nm<br>5.0Nm |





## “一次完成”钻孔/去毛刺，可换式组合钻

这种组合钻，不停止旋转连续完成钻孔与两面去毛刺，效率惊人。



**KRUZ/DBI** "一次完成", 钻孔/两面去毛刺  
可换式组合钻



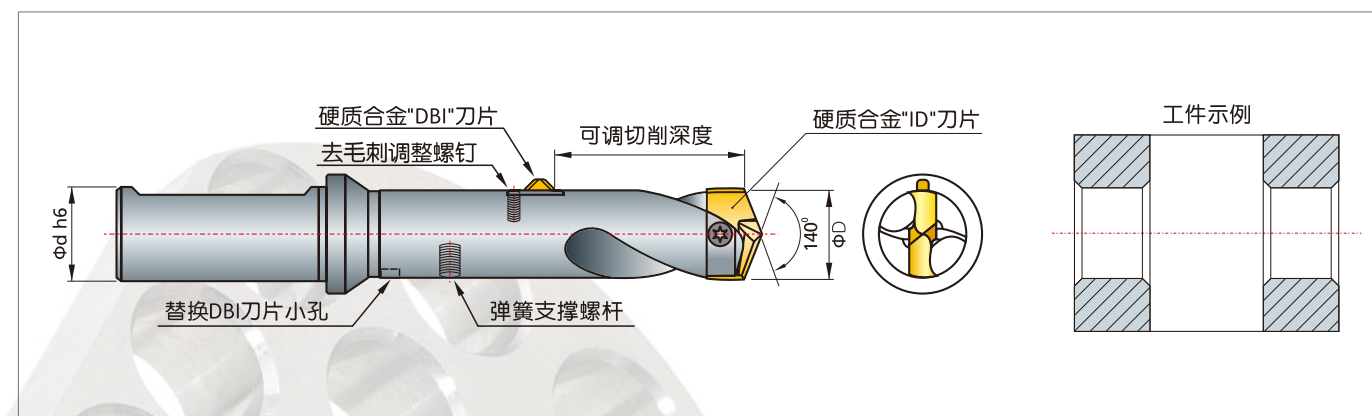
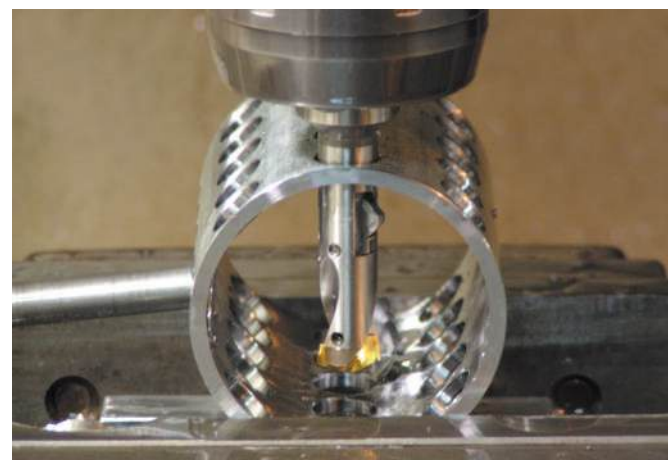
硬质合金去毛刺刀片 45°  
(有TiN, TiAlN涂层)



**ID** 标准硬质合金刀片  
(有TiN, TiAlN涂层)

\*注: 如需要准确的倒角尺寸(如C=1.0)时,  
不能使用这种刀具

- ▶ 连续不断地完成: 钻孔以及清理前/后两面毛刺
- ▶ 前端钻孔刀片, 采用了我公司的标准刀片
- ▶ 去毛刺"DBI"刀片, 可简便更换, 并且通过刀片弹力调整螺杆来调整其侧向力
- ▶ 当钻头穿过孔时, "DBI"刀片自动回缩进去, 不刮伤孔的加工表面。
- ▶ 不需从机床卸下刀体, 可简便更换两种刀片
- ▶ 可设计各种深度和去毛刺角度(倒角)
- ▶ 不需另外调整去毛刺与钻孔的各别速度, 所有加工始终可维持相同速度



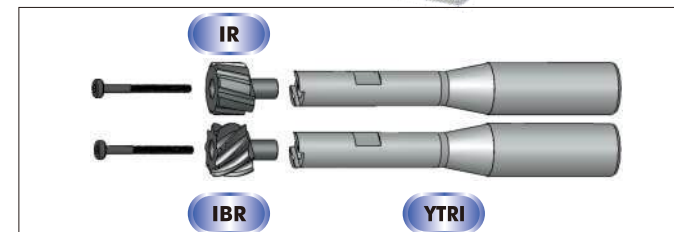
YesTool公司的"一次完成"组合钻  
实现了惊人的"高效率、低成本"



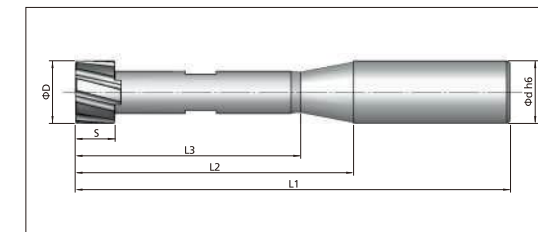
"DBI"刀片, 在进刀/退刀时, 可以一次清除前/后孔的毛刺。  
当钻头穿过孔时, 这种特殊刀片自动回缩进去, 不刮伤孔的加工表面。



## YTRI可换式铰刀刀体与硬质合金刀头



- ▶ 可换式硬质合金铰刀刀头
- ▶ 大幅度降低大直径(15mm以上)铰削加工的成本
- ▶ 用螺栓从中心孔锁定刀头
- ▶ IR: 右螺旋多刃铰刀刀头
- ▶ IBR: 左螺旋拉铰刀刀头
- ▶ 快速铰削, 满足H7精度



订货时, 请在口内标明孔深。如: T(3倍孔径), P(5倍孔径)

| 刀体型号           | 柄径<br>d | S    | T(3 x Dia.) |     |     | P(5 x Dia.) |     |     | 适用的 IR, IBR规格           | 锁定螺栓<br>M | 刃数 |
|----------------|---------|------|-------------|-----|-----|-------------|-----|-----|-------------------------|-----------|----|
|                |         |      | L1          | L2  | L3  | L1          | L2  | L3  |                         |           |    |
| YTRI 150-174 □ | 20      | 7.4  | 114         | 64  | 53  | 148         | 98  | 87  | IR 150~174, IBR 150~174 | M2.5x30   | 6  |
| YTRI 175-199 □ |         | 9.4  | 125         | 75  | 61  | 165         | 115 | 101 | IR 175~199, IBR 175~199 | M2.5x30   |    |
| YTRI 200-224 □ |         | 9.3  | 136         | 86  | 69  | 180         | 130 | 113 | IR 200~224, IBR 200~224 | M3x35     |    |
| YTRI 225-249 □ | 25      | 10.6 | 153         | 97  | 75  | 203         | 147 | 125 | IR 225~249, IBR 225~249 | M4x40     | 8  |
| YTRI 250-274 □ |         | 10.4 | 158         | 102 | 82  | 213         | 157 | 137 | IR 250~274, IBR 250~274 | M5x45     |    |
| YTRI 275-299 □ | 32      | 12.2 | 177         | 117 | 90  | 237         | 177 | 150 | IR 275~299, IBR 275~299 | M5x45     | 10 |
| YTRI 300-324 □ |         | 13.1 | 183         | 123 | 96  | 248         | 188 | 161 | IR 300~324, IBR 300~324 | M6x40     |    |
| YTRI 325-349 □ |         | 13.8 | 190         | 130 | 103 | 260         | 200 | 173 | IR 325~349, IBR 325~349 | M6x45     |    |
| YTRI 350-374 □ | 40      | 14.6 | 215         | 145 | 110 | 290         | 220 | 185 | IR 350~374, IBR 350~374 | M8x50     | 12 |
| YTRI 375-400 □ |         | 15.4 | 222         | 152 | 117 | 302         | 232 | 197 | IR 375~400, IBR 375~400 | M8x50     |    |

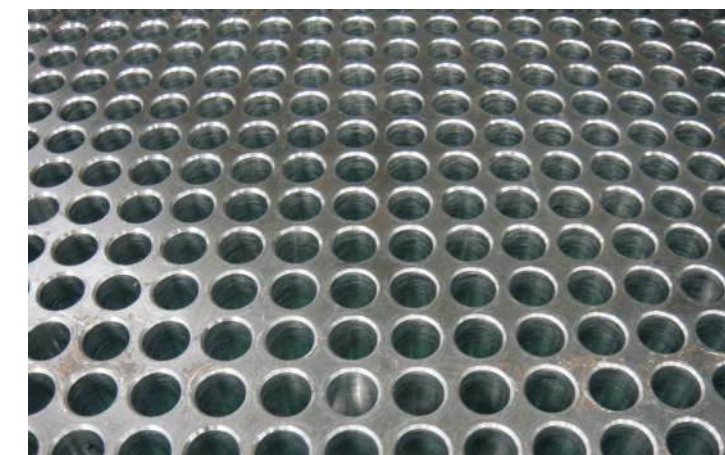
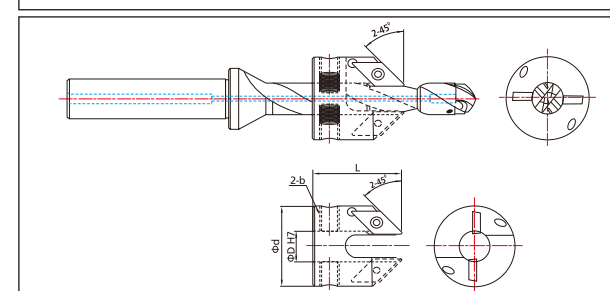
\*注: 加工盲孔, 底部带刃的铰刀可定制



## KRUZ可换式倒角组合刀具



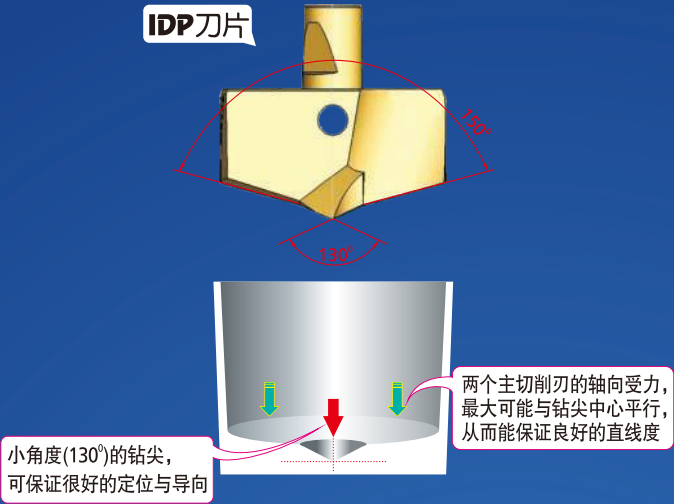
- ▶ 适当修改标准KRUZ刀体, 就能组合倒角刀架
- ▶ YCHR倒角刀架, 安装两个XCGX 1102倒角刀片
- ▶ 在KRUZ刀体部分, 设计了两个螺钉支撑面
- ▶ 使用范围为: KRUZ刀体直径8 ~ 50.0mm
- ▶ 特殊深度, 根据需求定制





|            |                                                                               |                                                                                                   |                                  |                                |
|------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------|
| 公司(工厂)名:   | 电 话:                                                                          | 日 期:                                                                                              | 操作员 / 操作的情况:                     |                                |
| 代销商名:      | 电 话:                                                                          | 工件材质与特性:                                                                                          |                                  | 硬 度<br>RC                  BRN |
| 产品名称:      | 内 冷                  外 冷<br><input type="checkbox"/> <input type="checkbox"/> | 卧式机床<br><input type="checkbox"/>                                                                  | 立式机床<br><input type="checkbox"/> |                                |
| 机床名称:      | 切削油(油性 / 水溶性)    品 牌                                                          | 切削油压力 (理论 / 实际)<br>Mpa or Bar                                                                     | 切削油流量 (实际)<br>GPM                |                                |
| 机床状态:      | 主轴功率(HP)                                                                      | 钻孔理由<br>螺纹底孔 <input type="checkbox"/> 精加工孔 <input type="checkbox"/> 粗加工孔 <input type="checkbox"/> |                                  |                                |
| 机床的工作情况描述: |                                                                               |                                                                                                   |                                  |                                |

| 项 目                | YesTool公司产品 | 其他公司产品(目前使用的产品) |
|--------------------|-------------|-----------------|
| 目前使用的钻头生产厂家(品牌)    |             |                 |
| 钻头的种类(高速钢或超硬) / 直径 |             |                 |
| 工件(被削件)的夹持方法       |             |                 |
| 可更换刀片式还是整体型?       |             |                 |
| 刀片种类及其生产厂家(品牌)     |             |                 |
| 粗加工? 孔径与公差?        |             |                 |
| 精加工? 孔径与公差?        |             |                 |
| 孔深(盲孔还是通孔)         |             |                 |
| 转速(rpm)            |             |                 |
| 线速 Vc (m/分钟)       |             |                 |
| 进给量 f (mm/每转)      |             |                 |
| 每分钟进给量 F(mm/分钟)    |             |                 |
| 每孔的加工时间(秒)         |             |                 |
| 排屑状态(屑的模样)         |             |                 |
| 孔的精度要求             |             |                 |
| 每一个钻头的可加工孔数        |             |                 |
| 每一个钻头的可加工总长(钻头寿命)  |             |                 |
| 换钻头品牌的理由           |             |                 |
| 每一个钻头刀体可用到替换多少个刀片? |             |                 |
| 目前使用的是否为刀片更换方式?    |             |                 |
| 刀片价格               |             |                 |
| 再磨计划               |             |                 |
| 再磨、钝化、再涂层费用        |             |                 |
| 机床的每小时生产率(费用)      |             |                 |
| 每一工件的孔数            |             |                 |
| 产品年生产量             |             |                 |



高效率、高精度、低成本孔加工--  
**Yes<sup>®</sup> 公司的刀具**  
为您提供最佳解决方案