

# 鑽削刀桿系列

Drilling Toolholders Series

泛用鋼材  $\leq 50\text{HRC}$

不銹鋼

鋁合金 / 銅合金

鑄鐵

For general steel ( $\leq 50\text{HRC}$ ), stainless steel, cast iron and aluminum/copper alloy machining.



# 產品選擇表 Product Selection Table

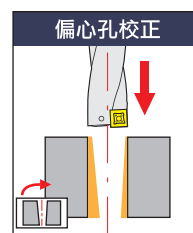
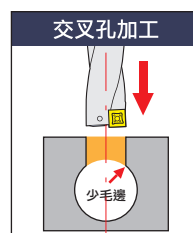
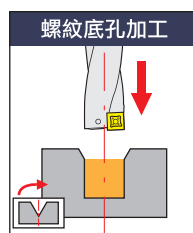
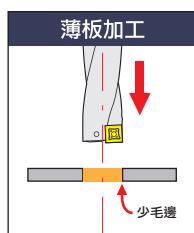
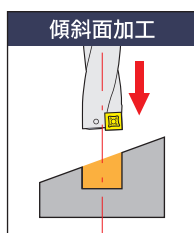
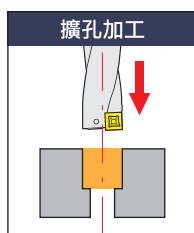
## 鎢鋼鑽刀片 Carbide Drilling Inserts

刀片單面使用  
Single-Sided  
Inserts



## 多功能鑽削加工 Multipurpose Drilling

刀片單面使用  
Single-Sided  
Inserts



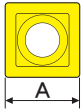
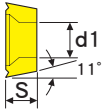
## 鑽削加工 Drilling

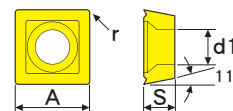
刀片單面使用  
Single-Sided  
Inserts



# 鎢鋼鑽刀片

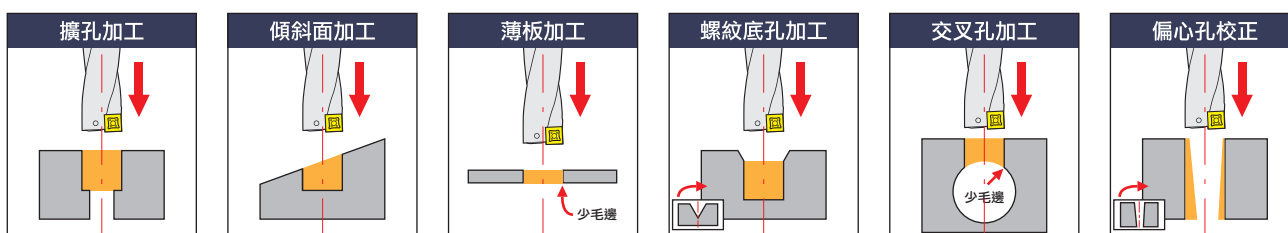
## CARBIDE DRILLING INSERTS

|                                                                                           |   |                       |               |        |        |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|-------------------------------------------------------------------------------------------|---|-----------------------|---------------|--------|--------|--------|--------|--------|-------------------|--------|---|----------------------------------------------------------------------------|----|-----------------|----------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 加工材質                                                                                      | P | 鋼材 Alloy Steels       |               |        |        |        |        |        | ◎                 | ◎      | ◎ | ◎：第一推薦 First Recommend<br>○：第二推薦 Second Recommend<br>—：不推薦 NO Recommend    |    |                 |                |      |                                                                                                                                                                             |            |
|                                                                                           | M | 不銹鋼 Stainless Steels  |               |        |        |        |        |        | ◎                 | ◎      | ◎ |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|                                                                                           | K | 鑄鐵 Cast Iron          |               |        |        |        |        |        | ◎                 | ◎      | ◎ |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|                                                                                           | N | 鋁合金 Aluminum Alloys   |               |        |        |        |        |        | —                 | —      | — | F：精加工 Finishing<br>S：半精加工 Semi Finishing<br>M：中加工 Medium<br>R：粗加工 Roughing |    |                 |                |      |                                                                                                                                                                             |            |
|                                                                                           | S | 高溫合金 High-Temp Alloys |               |        |        |        |        |        | ◎                 | ◎      | ◎ |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|                                                                                           | H | 調質鋼 Hardened Steels   |               |        |        |        |        |        | ◎                 | ◎      | — |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
| 刀片 Insert                                                                                 |   | 訂購編號 Order No.        | 材質碼 Grade     |        |        |        |        |        | 尺寸 Dimension (mm) |        |   |                                                                            |    | 刀片 2D 圖 Drawing | 刀桿頁數 Tool Page |      |                                                                                                                                                                             |            |
|                                                                                           |   |                       |               | CVD    | PVD    |        |        |        | A                 | B      | S | r                                                                          | d1 |                 |                |      |                                                                                                                                                                             |            |
|                                                                                           |   |                       | CM10          | CM6337 | CM6347 | CM6213 | CM6223 | CM6032 | CM6233            | CM6243 |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
| 應用於盲孔加工、穿孔加工【刀片單面使用】。 Blind Hole Drilling & Through Hole Drilling 【Single-Sided Inserts】。 |   |                       |               |        |        |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|          |   | T                     | SPMG050204-MG |        |        |        |        |        | ●                 | ●      | ● | 5.00                                                                       | —  | 2.38            | 0.4            | 2.30 |   | 402<br>407 |
|                                                                                           |   | F                     | S             | M      | R      |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|          |   | T                     | SPMG060204-MG |        |        |        |        |        | ●                 | ●      | ● | 6.00                                                                       | —  | 2.38            | 0.4            | 2.65 |                                                                                                                                                                             |            |
|                                                                                           |   | F                     | S             | M      | R      |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|        |   | T                     | SPMG07T308-MG |        |        |        |        |        | ●                 | ●      | ● | 7.94                                                                       | —  | 3.97            | 0.8            | 2.85 |                                                                                                                                                                             |            |
|                                                                                           |   | F                     | S             | M      | R      |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|        |   | T                     | SPMG090408-MG |        |        |        |        |        | ●                 | ●      | ● | 9.80                                                                       | —  | 4.30            | 0.8            | 4.05 |                                                                                                                                                                             |            |
|                                                                                           |   | F                     | S             | M      | R      |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|        |   | T                     | SPMG090408-RG |        |        |        |        |        | ●                 | ●      | ● | 9.80                                                                       | —  | 4.30            | 0.8            | 4.05 |                                                                                                                                                                             |            |
|                                                                                           |   | F                     | S             | M      | R      |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|        |   | T                     | SPMG110408-MG |        |        |        |        |        | ●                 | ●      | ● | 11.5                                                                       | —  | 4.80            | 0.8            | 4.45 |                                                                                                                                                                             |            |
|                                                                                           |   | F                     | S             | M      | R      |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |
|        |   | T                     | SPMG110408-RG |        |        |        |        |        | ●                 | ●      | ● | 11.5                                                                       | —  | 4.80            | 0.8            | 4.45 |                                                                                                                                                                             |            |
|                                                                                           |   | F                     | S             | M      | R      |        |        |        |                   |        |   |                                                                            |    |                 |                |      |                                                                                                                                                                             |            |



402  
407

→ 切削條件表 Cutting Condition P.610

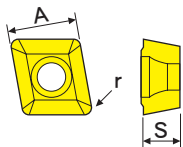


# 鎢鋼鑽刀片

## CARBIDE DRILLING INSERTS

|               |                   |                       |        |        |        |        |        |        |                   |   |                                                                            |   |    |                    |                          |
|---------------|-------------------|-----------------------|--------|--------|--------|--------|--------|--------|-------------------|---|----------------------------------------------------------------------------|---|----|--------------------|--------------------------|
| 加工材質          | P                 | 鋼材 Alloy Steels       |        |        |        |        |        |        | ◎                 |   | ◎：第一推薦 First Recommend<br>○：第二推薦 Second Recommend<br>—：不推薦 NO Recommend    |   |    |                    |                          |
|               | M                 | 不銹鋼 Stainless Steels  |        |        |        |        |        |        | ◎                 |   |                                                                            |   |    |                    |                          |
|               | K                 | 鑄鐵 Cast Iron          |        |        |        |        |        |        | ◎                 |   |                                                                            |   |    |                    |                          |
|               | N                 | 鋁合金 Aluminum Alloys   |        |        |        |        |        |        | —                 |   | F：精加工 Finishing<br>S：半精加工 Semi Finishing<br>M：中加工 Medium<br>R：粗加工 Roughing |   |    |                    |                          |
|               | S                 | 高溫合金 High-Temp Alloys |        |        |        |        |        |        | ◎                 |   |                                                                            |   |    |                    |                          |
|               | H                 | 調質鋼 Hardened Steels   |        |        |        |        |        |        | ◎                 |   |                                                                            |   |    |                    |                          |
| 刀 片<br>Insert | 訂購編號<br>Order No. | 材質碼 Grade             |        |        |        |        |        |        | 尺寸 Dimension (mm) |   |                                                                            |   |    | 刀片 2D 圖<br>Drawing | 刀桿<br>頁數<br>Tool<br>Page |
|               |                   |                       | CVD    |        | PVD    |        |        |        | A                 | B | S                                                                          | r | d1 |                    |                          |
|               |                   | CM10                  | CM6337 | CM6347 | CM6213 | CM6223 | CM6032 | CM6233 |                   |   |                                                                            |   |    |                    |                          |

應用於盲孔加工、穿孔加工【刀片單面使用】。 Blind Hole Drilling & Through Hole Drilling 【Single-Sided Inserts】。

|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|-------------------------------------------------------------------------------------|---|---------------|--|--|--|--|--|---|-----|---|-----|-----|---|--------------------------------------------------------------------------------------|------------|
|    | S | WDXT042004-MG |  |  |  |  |  | ● | 4.2 | — | 2.0 | 0.4 | — |  | 408<br>412 |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
| F S M R                                                                             |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|    | S | WDXT052504-MG |  |  |  |  |  | ● | 5.0 | — | 2.5 | 0.4 | — |                                                                                      |            |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
| F S M R                                                                             |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|  | S | WDXT063006-MG |  |  |  |  |  | ● | 6.0 | — | 3.0 | 0.6 | — |                                                                                      |            |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
| F S M R                                                                             |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|  | S | WDXT073506-MG |  |  |  |  |  | ● | 7.5 | — | 3.5 | 0.6 | — |                                                                                      |            |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
|                                                                                     |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |
| F S M R                                                                             |   |               |  |  |  |  |  |   |     |   |     |     |   |                                                                                      |            |

→ 切削條件表 Cutting Condition P.610

# 鎢鋼鑽刀片

## CARBIDE DRILLING INSERTS

|                                                                                             |   |                       |           |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------|---|-----------------------|-----------|--------|--------|--------|--------|--------|--------|-------------------|---|----------------------------------------------------------------------------|------|------|-----------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 加工材質                                                                                        | P | 鋼材 Alloy Steels       |           |        |        |        |        |        | ◎      | ◎                 | ◎ | ◎：第一推薦 First Recommend<br>○：第二推薦 Second Recommend<br>—：不推薦 NO Recommend    |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                             | M | 不銹鋼 Stainless Steels  |           |        |        |        |        |        | ◎      | ◎                 | ◎ |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                             | K | 鑄鐵 Cast Iron          |           |        |        |        |        |        | ◎      | ◎                 | ◎ |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                             | N | 鋁合金 Aluminum Alloys   |           |        |        |        |        |        | —      | —                 | — | F：精加工 Finishing<br>S：半精加工 Semi Finishing<br>M：中加工 Medium<br>R：粗加工 Roughing |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                             | S | 高溫合金 High-Temp Alloys |           |        |        |        |        |        | ◎      | ◎                 | ◎ |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                             | H | 調質鋼 Hardened Steels   |           |        |        |        |        |        | ◎      | ◎                 | — |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 刀片 Insert                                                                                   |   | 訂購編號 Order No.        | 材質碼 Grade |        |        |        |        |        |        | 尺寸 Dimension (mm) |   |                                                                            |      |      | 刀片 2D 圖 Drawing | 刀桿頁數 Tool Page |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                             |   |                       |           | CVD    | PVD    |        |        |        |        | A                 | B | S                                                                          | r    | d1   |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                             |   |                       | CM10      | CM6337 | CM6347 | CM6213 | CM6223 | CM6032 | CM6233 | CM6243            |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 應用於盲孔加工、穿孔加工【刀片單面使用】 ◦ Blind Hole Drilling & Through Hole Drilling 【Single-Sided Inserts】 . |   |                       |           |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|            | S | WCMT030208-MM         |           |        |        |        |        |        | ●      | ●                 | ● | 3.8                                                                        | 5.56 | 2.38 | 0.8             | 2.8            | <br><br><br><br><br><br><br><br><br> |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|            | S | WCMT040208-SG         |           |        |        |        |        |        | ●      | ●                 | ● | 4.3                                                                        | 6.35 | 2.38 | 0.8             | 3.0            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          | S | WCMT040208-MM         |           |        |        |        |        |        | ●      | ●                 | ● | 4.3                                                                        | 6.35 | 2.38 | 0.8             | 3.0            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          | S | WCMT050308-SG         |           |        |        |        |        |        | ●      | ●                 | ● | 5.4                                                                        | 7.94 | 3.18 | 0.8             | 3.4            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          | S | WCMT050308-MM         |           |        |        |        |        |        | ●      | ●                 | ● | 5.4                                                                        | 7.94 | 3.18 | 0.8             | 3.4            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          | S | WCMT06T308-SG         |           |        |        |        |        |        | ●      | ●                 | ● | 6.5                                                                        | 9.53 | 3.97 | 0.8             | 4.0            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          | S | WCMT06T308-MM         |           |        |        |        |        |        | ●      | ●                 | ● | 6.5                                                                        | 9.53 | 3.97 | 0.8             | 4.0            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          | S | WCMT080412-SG         |           |        |        |        |        |        | ●      | ●                 | ● | 8.7                                                                        | 12.7 | 4.76 | 1.2             | 4.3            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|          | S | WCMT080412-MM         |           |        |        |        |        |        | ●      | ●                 | ● | 8.7                                                                        | 12.7 | 4.76 | 1.2             | 4.3            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| F                                                                                           | S | M                     | R         |        |        |        |        |        |        |                   |   |                                                                            |      |      |                 |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

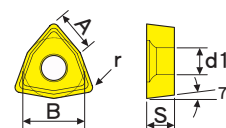

  
  
  
  
  
  
  
  
  

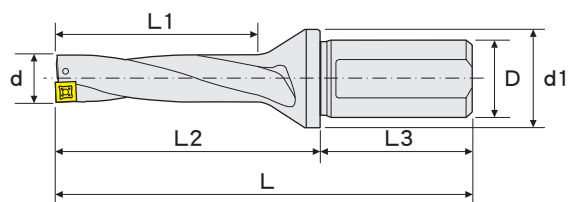



413  
415

→ 切削條件表  
Cutting Condition P.610

# DSP 快速鑽頭 - 2 倍長

INDEXABLE- HIGH SPEED DRILLS- DSP- 2xd



185

| 訂購編號<br>Order No.  | 尺寸 Dimensions (mm) |    |    |    |     |    |    | 搭配刀片<br>Insert | Screw<br> | Wrench<br> |
|--------------------|--------------------|----|----|----|-----|----|----|----------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|                    | d                  | L1 | L2 | L3 | L   | D  | d1 |                |                                                                                              |                                                                                               |
| DSP05-020125-02D-C | 12.5               | 26 | 44 | 50 | 94  | 20 | 25 | SPMG0502..     | TS2003                                                                                       | ETF06                                                                                         |
| DSP05-020133-02D-C | 13.0               | 26 | 44 | 50 | 94  | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020135-02D-C | 13.5               | 28 | 46 | 50 | 96  | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020144-02D-C | 14.0               | 28 | 46 | 50 | 96  | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020145-02D-C | 14.5               | 30 | 49 | 50 | 99  | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020155-02D-C | 15.0               | 30 | 49 | 50 | 99  | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP06-020155-02D-C | 15.5               | 32 | 52 | 56 | 108 | 25 | 33 | SPMG0602..     | TS2205                                                                                       | ETF06                                                                                         |
| DSP06-020166-02D-C | 16.0               | 32 | 52 | 56 | 108 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020165-02D-C | 16.5               | 34 | 54 | 56 | 110 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020177-02D-C | 17.0               | 34 | 54 | 56 | 110 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020175-02D-C | 17.5               | 36 | 57 | 56 | 113 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020188-02D-C | 18.0               | 36 | 57 | 56 | 113 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020185-02D-C | 18.5               | 38 | 59 | 56 | 115 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020199-02D-C | 19.0               | 38 | 59 | 56 | 115 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020195-02D-C | 19.5               | 40 | 63 | 56 | 119 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020200-02D-C | 20.0               | 40 | 63 | 56 | 119 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020205-02D-C | 20.5               | 42 | 65 | 56 | 121 | 25 | 33 | SPMG07T3..     | TS2511                                                                                       | ETF08                                                                                         |
| DSP06-020211-02D-C | 21.0               | 42 | 65 | 56 | 121 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020215-02D-C | 21.5               | 44 | 67 | 56 | 123 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP07-020222-02D-C | 22.0               | 44 | 67 | 56 | 123 | 25 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020225-02D-C | 22.5               | 46 | 71 | 60 | 131 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020233-02D-C | 23.0               | 46 | 71 | 60 | 131 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020235-02D-C | 23.5               | 48 | 74 | 60 | 134 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020244-02D-C | 24.0               | 48 | 74 | 60 | 134 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020245-02D-C | 24.5               | 50 | 77 | 60 | 137 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020255-02D-C | 25.0               | 50 | 77 | 60 | 137 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020255-02D-C | 25.5               | 52 | 79 | 60 | 139 | 32 | 43 | SPMG07T3..     | TS2511                                                                                       | ETF08                                                                                         |
| DSP07-020266-02D-C | 26.0               | 52 | 79 | 60 | 139 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020265-02D-C | 26.5               | 54 | 81 | 60 | 142 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020277-02D-C | 27.0               | 54 | 81 | 60 | 142 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020275-02D-C | 27.5               | 56 | 84 | 60 | 144 | 32 | 43 |                |                                                                                              |                                                                                               |

→ 搭配刀片  
Insert P.399

→ 切削條件表  
Cutting Condition P.610

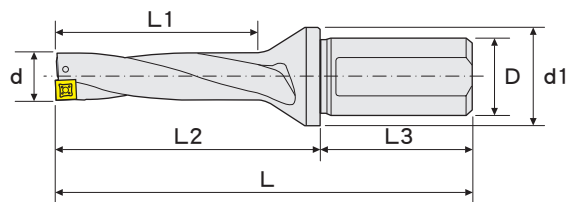
※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 調質鋼<br>Hardened Steels | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|------------------------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45               | HRC45~55                | HRC55~63        | HRC<30                 | HRC<30                   |
|                       | ◎                    | ◎                   | ◎                      | —                       | —               | ○                      | ◎                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

# DSP 快速鑽頭 - 2 倍長

INDEXABLE- HIGH SPEED DRILLS- DSP- 2xd



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| 訂購編號<br>Order No.  | 尺寸 Dimensions (mm) |    |     |    |     |    |    | 搭配刀片<br>Insert | Screw<br> | Wrench<br> |
|--------------------|--------------------|----|-----|----|-----|----|----|----------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|                    | d                  | L1 | L2  | L3 | L   | D  | d1 |                |                                                                                              |                                                                                               |
| DSP09-02028-02D-C  | 28.0               | 56 | 84  | 60 | 144 | 32 | 43 | SPMG0904..     | TS3504                                                                                       | ETF15                                                                                         |
| DSP09-020285-02D-C | 28.5               | 58 | 86  | 60 | 146 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-02029-02D-C  | 29.0               | 58 | 86  | 60 | 146 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-020295-02D-C | 29.5               | 60 | 88  | 60 | 148 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-02030-02D-C  | 30.0               | 60 | 88  | 60 | 148 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-020305-02D-C | 30.5               | 62 | 90  | 60 | 150 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-02031-02D-C  | 31.0               | 62 | 90  | 60 | 150 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-020315-02D-C | 31.5               | 64 | 92  | 60 | 152 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-02032-02D-C  | 32.0               | 64 | 92  | 60 | 152 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-020325-02D-C | 32.5               | 66 | 94  | 60 | 154 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP09-02033-02D-C  | 33.0               | 66 | 94  | 60 | 154 | 32 | 43 | SPMG1104..     | TS4006                                                                                       | ETF15                                                                                         |
| DSP11-02034-02D-C  | 34.0               | 68 | 96  | 60 | 156 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP11-02035-02D-C  | 35.0               | 70 | 98  | 60 | 158 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP11-02036-02D-C  | 36.0               | 72 | 100 | 60 | 160 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP11-02037-02D-C  | 37.0               | 74 | 102 | 60 | 162 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP11-02038-02D-C  | 38.0               | 76 | 104 | 60 | 164 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP11-02039-02D-C  | 39.0               | 78 | 106 | 60 | 166 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP11-02040-02D-C  | 40.0               | 80 | 115 | 60 | 175 | 40 | 53 |                |                                                                                              |                                                                                               |
| DSP11-02041-02D-C  | 41.0               | 82 | 117 | 60 | 177 | 40 | 53 |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |
|                    |                    |    |     |    |     |    |    |                |                                                                                              |                                                                                               |

→ 搭配刀片  
Insert P.399

→ 切削條件表  
Cutting Condition P.610

※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

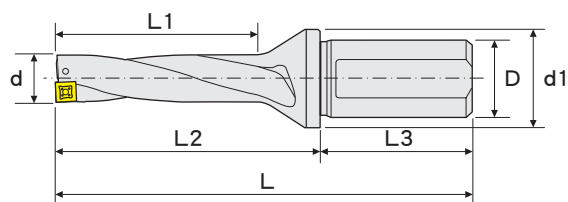
HOLEMAKING

Drilling Toolholders

鑽削刀桿

# DSP 快速鑽頭 - 3 倍長

INDEXABLE- HIGH SPEED DRILLS- DSP- 3xd



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| 訂購編號<br>Order No.  | 尺寸 Dimensions (mm) |    |     |    |     |    |    | 搭配刀片<br>Insert | Screw<br> | Wrench<br> |
|--------------------|--------------------|----|-----|----|-----|----|----|----------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|                    | d                  | L1 | L2  | L3 | L   | D  | d1 |                |                                                                                              |                                                                                               |
| DSP05-020125-03D-C | 12.5               | 39 | 57  | 50 | 107 | 20 | 25 | SPMG0502..     | TS2003                                                                                       | ETF06                                                                                         |
| DSP05-020133-03D-C | 13.0               | 39 | 57  | 50 | 107 | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020135-03D-C | 13.5               | 42 | 60  | 50 | 110 | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020143-03D-C | 14.0               | 42 | 60  | 50 | 110 | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020145-03D-C | 14.5               | 45 | 64  | 50 | 114 | 20 | 25 |                |                                                                                              |                                                                                               |
| DSP05-020153-03D-C | 15.0               | 45 | 64  | 50 | 114 | 20 | 25 | SPMG0602..     | TS2205                                                                                       | ETF06                                                                                         |
| DSP06-020155-03D-C | 15.5               | 48 | 68  | 56 | 124 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020163-03D-C | 16.0               | 48 | 68  | 56 | 124 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020165-03D-C | 16.5               | 51 | 71  | 56 | 127 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020173-03D-C | 17.0               | 51 | 71  | 56 | 127 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020175-03D-C | 17.5               | 54 | 75  | 56 | 131 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020183-03D-C | 18.0               | 54 | 75  | 56 | 131 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020185-03D-C | 18.5               | 57 | 78  | 56 | 134 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020193-03D-C | 19.0               | 57 | 78  | 56 | 134 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020195-03D-C | 19.5               | 60 | 83  | 56 | 139 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020203-03D-C | 20.0               | 60 | 83  | 56 | 139 | 25 | 33 | SPMG07T3..     | TS2511                                                                                       | ETF08                                                                                         |
| DSP06-020205-03D-C | 20.5               | 63 | 86  | 56 | 142 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020213-03D-C | 21.0               | 63 | 86  | 56 | 142 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP06-020215-03D-C | 21.5               | 66 | 89  | 56 | 145 | 25 | 33 |                |                                                                                              |                                                                                               |
| DSP07-020223-03D-C | 22.0               | 66 | 89  | 56 | 145 | 25 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020225-03D-C | 22.5               | 69 | 94  | 60 | 154 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020233-03D-C | 23.0               | 69 | 94  | 60 | 154 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020235-03D-C | 23.5               | 72 | 98  | 60 | 158 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020243-03D-C | 24.0               | 72 | 98  | 60 | 158 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020245-03D-C | 24.5               | 75 | 102 | 60 | 162 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020253-03D-C | 25.0               | 75 | 102 | 60 | 162 | 32 | 43 | SPMG07T3..     | TS2511                                                                                       | ETF08                                                                                         |
| DSP07-020255-03D-C | 25.5               | 78 | 105 | 60 | 165 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020263-03D-C | 26.0               | 78 | 105 | 60 | 165 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020265-03D-C | 26.5               | 81 | 108 | 60 | 168 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020273-03D-C | 27.0               | 81 | 108 | 60 | 168 | 32 | 43 |                |                                                                                              |                                                                                               |
| DSP07-020275-03D-C | 27.5               | 84 | 112 | 60 | 172 | 32 | 43 |                |                                                                                              |                                                                                               |

→ 搭配刀片  
Insert P.399

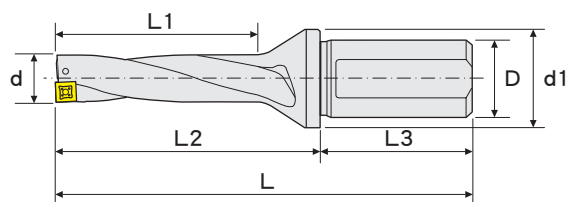
→ 切削條件表  
Cutting Condition P.610

※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

## INDEXABLE- HIGH SPEED DRILLS- DSP- 3xd



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➡ 切削條件表 P.610  
Cutting Condition

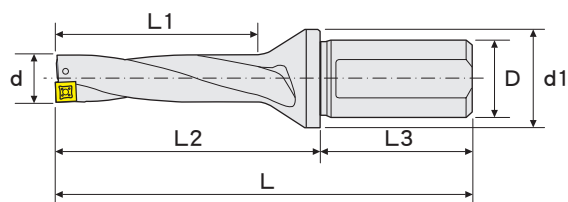
| 應用材質<br>Work<br>Material | 碳素鋼<br>Carbon<br>Steels | 合金鋼<br>Alloy<br>Steels |          | 調質鋼<br>Hardened<br>Steels |          | 不銹鋼<br>Stainless<br>Steels | 鑄鐵<br>Cast<br>Iron | 鋁合金<br>Aluminum<br>Alloys | 高溫合金<br>High-Temp<br>Alloys |
|--------------------------|-------------------------|------------------------|----------|---------------------------|----------|----------------------------|--------------------|---------------------------|-----------------------------|
|                          | HRC<20                  | HRC20~30               | HRC30~45 | HRC45~55                  | HRC55~63 |                            | HRC<30             |                           | HRC<30                      |
|                          | ◎                       | ◎                      | ◎        | —                         | —        | ○                          | ◎                  | —                         | —                           |

# HOLEMAKING

鑽削刀桿

# DSP 快速鑽頭 - 4 倍長

INDEXABLE- HIGH SPEED DRILLS- DSP- 4xd



185

| 訂購編號<br>Order No.  | 尺寸 Dimensions (mm) |     |     |    |     |    |    | 搭配刀片<br>Insert | Screw  | Wrench |
|--------------------|--------------------|-----|-----|----|-----|----|----|----------------|--------|--------|
|                    | d                  | L1  | L2  | L3 | L   | D  | d1 |                |        |        |
| DSP05-020125-04D-C | 12.5               | 52  | 70  | 50 | 120 | 20 | 25 | SPMG0502..     | TS2003 | ETF06  |
| DSP05-020130-04D-C | 13.0               | 52  | 70  | 50 | 120 | 20 | 25 |                |        |        |
| DSP05-020135-04D-C | 13.5               | 56  | 74  | 50 | 124 | 20 | 25 |                |        |        |
| DSP05-020140-04D-C | 14.0               | 56  | 74  | 50 | 124 | 20 | 25 |                |        |        |
| DSP05-020145-04D-C | 14.5               | 60  | 79  | 50 | 129 | 20 | 25 |                |        |        |
| DSP05-020150-04D-C | 15.0               | 60  | 79  | 50 | 129 | 20 | 25 | SPMG0602..     | TS2205 | ETF06  |
| DSP06-020155-04D-C | 15.5               | 64  | 84  | 56 | 140 | 25 | 33 |                |        |        |
| DSP06-020160-04D-C | 16.0               | 64  | 84  | 56 | 140 | 25 | 33 |                |        |        |
| DSP06-020165-04D-C | 16.5               | 68  | 88  | 56 | 144 | 25 | 33 |                |        |        |
| DSP06-020170-04D-C | 17.0               | 68  | 88  | 56 | 144 | 25 | 33 |                |        |        |
| DSP06-020175-04D-C | 17.5               | 72  | 92  | 56 | 148 | 25 | 33 |                |        |        |
| DSP06-020180-04D-C | 18.0               | 72  | 92  | 56 | 148 | 25 | 33 |                |        |        |
| DSP06-020185-04D-C | 18.5               | 76  | 96  | 56 | 152 | 25 | 33 |                |        |        |
| DSP06-020190-04D-C | 19.0               | 76  | 96  | 56 | 152 | 25 | 33 |                |        |        |
| DSP06-020195-04D-C | 19.5               | 80  | 100 | 56 | 156 | 25 | 33 |                |        |        |
| DSP06-020200-04D-C | 20.0               | 80  | 100 | 56 | 156 | 25 | 33 | SPMG07T3..     | TS2511 | ETF08  |
| DSP06-020205-04D-C | 20.5               | 84  | 104 | 56 | 160 | 25 | 33 |                |        |        |
| DSP06-020210-04D-C | 21.0               | 84  | 104 | 56 | 160 | 25 | 33 |                |        |        |
| DSP06-020215-04D-C | 21.5               | 88  | 108 | 56 | 164 | 25 | 33 |                |        |        |
| DSP07-020220-04D-C | 22.0               | 88  | 108 | 56 | 164 | 25 | 43 |                |        |        |
| DSP07-020225-04D-C | 22.5               | 92  | 117 | 60 | 177 | 32 | 43 |                |        |        |
| DSP07-020230-04D-C | 23.0               | 92  | 117 | 60 | 177 | 32 | 43 |                |        |        |
| DSP07-020235-04D-C | 23.5               | 96  | 121 | 60 | 181 | 32 | 43 |                |        |        |
| DSP07-020240-04D-C | 24.0               | 96  | 121 | 60 | 181 | 32 | 43 |                |        |        |
| DSP07-020245-04D-C | 24.5               | 100 | 125 | 60 | 185 | 32 | 43 |                |        |        |
| DSP07-020250-04D-C | 25.0               | 100 | 125 | 60 | 185 | 32 | 43 |                |        |        |
| DSP07-020255-04D-C | 25.5               | 104 | 129 | 60 | 189 | 32 | 43 |                |        |        |
| DSP07-020260-04D-C | 26.0               | 104 | 129 | 60 | 189 | 32 | 43 |                |        |        |
| DSP07-020265-04D-C | 26.5               | 108 | 136 | 60 | 196 | 32 | 43 |                |        |        |
| DSP07-020270-04D-C | 27.0               | 108 | 136 | 60 | 196 | 32 | 43 |                |        |        |
| DSP07-020275-04D-C | 27.5               | 112 | 140 | 60 | 200 | 32 | 43 |                |        |        |

→ 搭配刀片  
Insert P.399

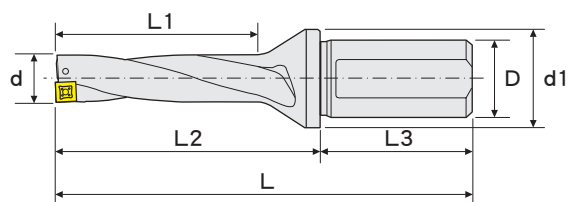
→ 切削條件表  
Cutting Condition P.610

※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

## INDEXABLE- HIGH SPEED DRILLS- DSP- 4xd



185

➡ 切削條件表 P.610  
Cutting Condition

| 應用材質<br>Work<br>Material | 碳素鋼<br>Carbon<br>Steels | 合金鋼<br>Alloy<br>Steels |          | 調質鋼<br>Hardened<br>Steels |          | 不銹鋼<br>Stainless<br>Steels | 鑄鐵<br>Cast<br>Iron | 鋁合金<br>Aluminum<br>Alloys | 高溫合金<br>High-Temp<br>Alloys |
|--------------------------|-------------------------|------------------------|----------|---------------------------|----------|----------------------------|--------------------|---------------------------|-----------------------------|
|                          | HRC<20                  | HRC20~30               | HRC30~45 | HRC45~55                  | HRC55~63 |                            | HRC<30             |                           | HRC<30                      |
|                          | ◎                       | ◎                      | ◎        | —                         | —        | ○                          | ◎                  | —                         | —                           |

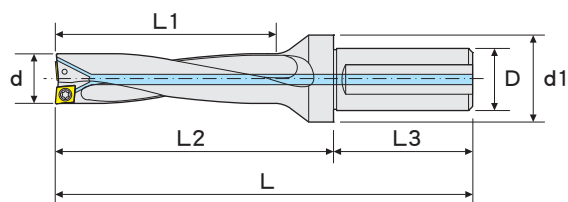
# HOLEMAKING

## Drilling Toolholders

鑽削刀桿

# DWD 快速鑽頭 - 3 倍長

INDEXABLE- HIGH SPEED DRILLS- DWD- 3xd



184

| 訂購編號<br>Order No.  | 尺寸 Dimensions (mm) |    |     |    |     |    |    | 搭配刀片<br>Insert | Screw  | Wrench |
|--------------------|--------------------|----|-----|----|-----|----|----|----------------|--------|--------|
|                    | d                  | L1 | L2  | L3 | L   | D  | d1 |                |        |        |
| DWD04-02013-03D-C  | 13.0               | 39 | 57  | 50 | 107 | 20 | 27 | WD..0420..     | TS1801 | ETF06  |
| DWD04-020135-03D-C | 13.5               | 42 | 60  | 50 | 110 | 20 | 27 |                |        |        |
| DWD04-02014-03D-C  | 14.0               | 42 | 60  | 50 | 110 | 20 | 27 |                |        |        |
| DWD04-020145-03D-C | 14.5               | 45 | 64  | 50 | 114 | 20 | 27 |                |        |        |
| DWD04-02015-03D-C  | 15.0               | 45 | 64  | 50 | 114 | 20 | 27 |                |        |        |
| DWD05-020155-03D-C | 15.5               | 48 | 67  | 50 | 117 | 20 | 27 | WD..0525..     | TS2003 | ETF06  |
| DWD05-02016-03D-C  | 16.0               | 48 | 67  | 50 | 117 | 20 | 27 |                |        |        |
| DWD05-020165-03D-C | 16.5               | 51 | 70  | 50 | 120 | 20 | 27 |                |        |        |
| DWD05-02017-03D-C  | 17.0               | 51 | 70  | 50 | 120 | 20 | 27 |                |        |        |
| DWD05-020175-03D-C | 17.5               | 54 | 73  | 50 | 123 | 20 | 27 |                |        |        |
| DWD05-02018-03D-C  | 18.0               | 54 | 73  | 50 | 123 | 20 | 27 | WD..0630..     | TS2203 | ETF07  |
| DWD06-020185-03D-C | 18.5               | 57 | 76  | 50 | 126 | 20 | 27 |                |        |        |
| DWD06-02019-03D-C  | 19.0               | 57 | 76  | 50 | 126 | 20 | 27 |                |        |        |
| DWD06-020195-03D-C | 19.5               | 60 | 79  | 50 | 129 | 20 | 27 |                |        |        |
| DWD06-02020-03D-C  | 20.0               | 60 | 79  | 50 | 129 | 20 | 27 |                |        |        |
| DWD06-020205-03D-C | 20.5               | 63 | 87  | 56 | 143 | 25 | 33 |                |        |        |
| DWD06-02021-03D-C  | 21.0               | 63 | 87  | 56 | 143 | 25 | 33 |                |        |        |
| DWD06-020215-03D-C | 21.5               | 66 | 90  | 56 | 146 | 25 | 33 |                |        |        |
| DWD06-02022-03D-C  | 22.0               | 66 | 90  | 56 | 146 | 25 | 33 | WD..0735..     | TS2511 | ETF08  |
| DWD06-020225-03D-C | 22.5               | 69 | 93  | 56 | 149 | 32 | 43 |                |        |        |
| DWD07-02023-03D-C  | 23.0               | 69 | 93  | 56 | 149 | 32 | 43 |                |        |        |
| DWD07-020235-03D-C | 23.5               | 72 | 96  | 56 | 152 | 32 | 43 |                |        |        |
| DWD07-02024-03D-C  | 24.0               | 72 | 96  | 56 | 152 | 32 | 43 |                |        |        |
| DWD07-020245-03D-C | 24.5               | 75 | 99  | 56 | 155 | 32 | 43 |                |        |        |
| DWD07-02025-03D-C  | 25.0               | 75 | 99  | 56 | 155 | 32 | 43 |                |        |        |
| DWD07-020255-03D-C | 25.5               | 78 | 105 | 60 | 165 | 32 | 43 |                |        |        |
| DWD07-02026-03D-C  | 26.0               | 78 | 105 | 60 | 165 | 32 | 43 |                |        |        |
| DWD07-020265-03D-C | 26.5               | 81 | 109 | 60 | 169 | 32 | 43 |                |        |        |
| DWD07-02027-03D-C  | 27.0               | 81 | 109 | 60 | 169 | 32 | 43 |                |        |        |
| DWD07-020275-03D-C | 27.5               | 84 | 112 | 60 | 172 | 32 | 43 |                |        |        |
| DWD07-02028-03D-C  | 28.0               | 84 | 112 | 60 | 172 | 32 | 43 |                |        |        |

→ 搭配刀片  
Insert P.400

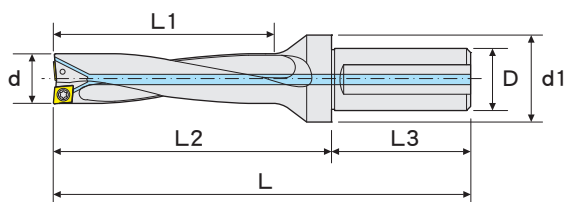
→ 切削條件表  
Cutting Condition P.610

※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

## INDEXABLE- HIGH SPEED DRILLS- DWD- 3xd



184

➡ 切削條件表 P.610  
Cutting Condition

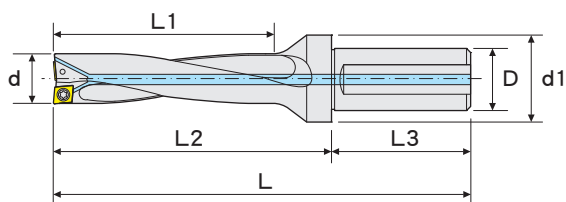
| 應用材質<br>Work<br>Material | 碳素鋼<br>Carbon<br>Steels | 合金鋼<br>Alloy<br>Steels |          | 調質鋼<br>Hardened<br>Steels |          | 不銹鋼<br>Stainless<br>Steels | 鑄鐵<br>Cast<br>Iron | 鋁合金<br>Aluminum<br>Alloys | 高溫合金<br>High-Temp<br>Alloys |
|--------------------------|-------------------------|------------------------|----------|---------------------------|----------|----------------------------|--------------------|---------------------------|-----------------------------|
|                          | HRC<20                  | HRC20~30               | HRC30~45 | HRC45~55                  | HRC55~63 |                            | HRC<30             |                           | HRC<30                      |
|                          | ◎                       | ◎                      | ◎        | —                         | —        | ○                          | ◎                  | —                         | —                           |

# HOLEMAKING

鑽削刀桿

# DWD 快速鑽頭 - 4 倍長

INDEXABLE- HIGH SPEED DRILLS- DWD- 4xd



184

| 訂購編號<br>Order No.  | 尺寸 Dimensions (mm) |    |     |    |     |    |    | 搭配刀片<br>Insert | Screw  | Wrench |
|--------------------|--------------------|----|-----|----|-----|----|----|----------------|--------|--------|
|                    | d                  | L1 | L2  | L3 | L   | D  | d1 |                |        |        |
| DWD04-02013-04D-C  | 13.0               | 52 | 70  | 50 | 120 | 20 | 27 | WD..0420..     | TS1801 | ETF06  |
| DWD04-020135-04D-C | 13.5               | 56 | 74  | 50 | 124 | 20 | 27 |                |        |        |
| DWD04-02014-04D-C  | 14.0               | 56 | 74  | 50 | 124 | 20 | 27 |                |        |        |
| DWD04-020145-04D-C | 14.5               | 60 | 79  | 50 | 129 | 20 | 27 |                |        |        |
| DWD04-02015-04D-C  | 15.0               | 60 | 79  | 50 | 129 | 20 | 27 |                |        |        |
| DWD05-020155-04D-C | 15.5               | 64 | 83  | 50 | 133 | 20 | 27 | WD..0525..     | TS2003 | ETF06  |
| DWD05-02016-04D-C  | 16.0               | 64 | 83  | 50 | 133 | 20 | 27 |                |        |        |
| DWD05-020165-04D-C | 16.5               | 68 | 87  | 50 | 137 | 20 | 27 |                |        |        |
| DWD05-02017-04D-C  | 17.0               | 68 | 87  | 50 | 137 | 20 | 27 |                |        |        |
| DWD05-020175-04D-C | 17.5               | 72 | 91  | 50 | 141 | 20 | 27 |                |        |        |
| DWD05-02018-04D-C  | 18.0               | 72 | 91  | 50 | 141 | 20 | 27 | WD..0630..     | TS2203 | ETF07  |
| DWD06-020185-04D-C | 18.5               | 76 | 95  | 50 | 145 | 20 | 27 |                |        |        |
| DWD06-02019-04D-C  | 19.0               | 76 | 95  | 50 | 145 | 20 | 27 |                |        |        |
| DWD06-020195-04D-C | 19.5               | 80 | 99  | 50 | 149 | 20 | 27 |                |        |        |
| DWD06-02020-04D-C  | 20.0               | 80 | 99  | 50 | 149 | 20 | 27 |                |        |        |
| DWD06-020205-04D-C | 20.5               | 63 | 108 | 56 | 164 | 25 | 33 |                |        |        |
| DWD06-02021-04D-C  | 21.0               | 63 | 108 | 56 | 164 | 25 | 33 |                |        |        |
| DWD06-020215-04D-C | 21.5               | 66 | 112 | 56 | 168 | 25 | 33 |                |        |        |
| DWD06-02022-04D-C  | 22.0               | 66 | 112 | 56 | 168 | 25 | 33 | WD..0735..     | TS2511 | ETF08  |
| DWD06-020225-04D-C | 22.5               | 69 | 116 | 56 | 172 | 25 | 33 |                |        |        |
| DWD07-02023-04D-C  | 23.0               | 69 | 116 | 56 | 172 | 25 | 33 |                |        |        |
| DWD07-020235-04D-C | 23.5               | 72 | 120 | 56 | 176 | 25 | 33 |                |        |        |
| DWD07-02024-04D-C  | 24.0               | 72 | 120 | 56 | 176 | 25 | 33 |                |        |        |
| DWD07-020245-04D-C | 24.5               | 75 | 124 | 56 | 180 | 25 | 33 |                |        |        |
| DWD07-02025-04D-C  | 25.0               | 75 | 124 | 56 | 180 | 25 | 33 |                |        |        |
| DWD07-020255-04D-C | 25.5               | 78 | 131 | 60 | 191 | 32 | 43 |                |        |        |
| DWD07-02026-04D-C  | 26.0               | 78 | 131 | 60 | 191 | 32 | 43 |                |        |        |
| DWD07-020265-04D-C | 26.5               | 81 | 136 | 60 | 196 | 32 | 43 |                |        |        |
| DWD07-02027-04D-C  | 27.0               | 81 | 136 | 60 | 196 | 32 | 43 |                |        |        |
| DWD07-020275-04D-C | 27.5               | 84 | 140 | 60 | 200 | 32 | 43 |                |        |        |
| DWD07-02028-04D-C  | 28.0               | 84 | 140 | 60 | 200 | 32 | 43 |                |        |        |

→ 搭配刀片  
Insert P.400

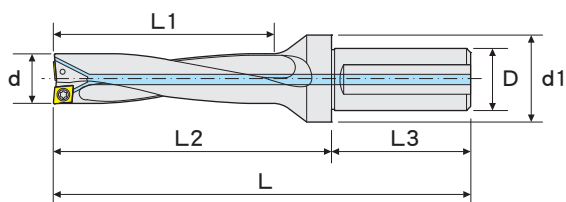
→ 切削條件表  
Cutting Condition P.610

※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

## INDEXABLE- HIGH SPEED DRILLS- DWD- 4xd



184

➡ 切削條件表 P.610  
Cutting Condition

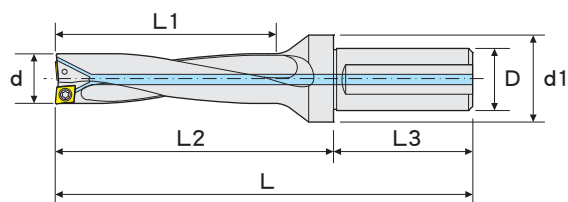
| 應用材質<br>Work<br>Material | 碳素鋼<br>Carbon<br>Steels | 合金鋼<br>Alloy<br>Steels |          | 調質鋼<br>Hardened<br>Steels |          | 不銹鋼<br>Stainless<br>Steels | 鑄鐵<br>Cast<br>Iron | 鋁合金<br>Aluminum<br>Alloys | 高溫合金<br>High-Temp<br>Alloys |
|--------------------------|-------------------------|------------------------|----------|---------------------------|----------|----------------------------|--------------------|---------------------------|-----------------------------|
|                          | HRC<20                  | HRC20~30               | HRC30~45 | HRC45~55                  | HRC55~63 |                            | HRC<30             |                           | HRC<30                      |
|                          | ◎                       | ◎                      | ◎        | —                         | —        | ○                          | ◎                  | —                         | —                           |

# HOLEMAKING

## 鑽削刀桿

# DWD 快速鑽頭 - 5 倍長

INDEXABLE- HIGH SPEED DRILLS- DWD- 5xd



184

| 訂購編號<br>Order No. | 尺寸 Dimensions (mm) |     |     |    |     |    |    | 搭配刀片<br>Insert | Screw  | Wrench |
|-------------------|--------------------|-----|-----|----|-----|----|----|----------------|--------|--------|
|                   | d                  | L1  | L2  | L3 | L   | D  | d1 |                |        |        |
| DWD04-02013-05D-C | 13                 | 65  | 83  | 50 | 133 | 20 | 25 | WD..0420..     | TS1801 | ETF06  |
| DWD04-02014-05D-C | 14                 | 70  | 88  | 50 | 138 | 20 | 25 |                |        |        |
| DWD04-02015-05D-C | 15                 | 75  | 94  | 50 | 144 | 20 | 25 |                |        |        |
| DWD05-02016-05D-C | 16                 | 80  | 100 | 50 | 149 | 20 | 25 | WD..0525..     | TS2003 | ETF06  |
| DWD05-02017-05D-C | 17                 | 85  | 105 | 50 | 154 | 20 | 25 |                |        |        |
| DWD05-02018-05D-C | 18                 | 90  | 110 | 50 | 159 | 20 | 25 |                |        |        |
| DWD06-02019-05D-C | 19                 | 95  | 115 | 50 | 164 | 20 | 25 | WD..0630..     | TS2203 | ETF07  |
| DWD06-02020-05D-C | 20                 | 100 | 120 | 50 | 169 | 20 | 25 |                |        |        |
| DWD06-02021-05D-C | 21                 | 105 | 125 | 56 | 185 | 25 | 33 |                |        |        |
| DWD06-02022-05D-C | 22                 | 110 | 130 | 56 | 190 | 25 | 33 | WD..0735..     | TS2511 | ETF08  |
| DWD07-02023-05D-C | 23                 | 115 | 140 | 56 | 195 | 25 | 33 |                |        |        |
| DWD07-02024-05D-C | 24                 | 120 | 145 | 56 | 200 | 25 | 33 |                |        |        |
| DWD07-02025-05D-C | 25                 | 125 | 150 | 56 | 205 | 25 | 33 |                |        |        |
| DWD07-02026-05D-C | 26                 | 130 | 155 | 60 | 217 | 32 | 43 |                |        |        |
| DWD07-02027-05D-C | 27                 | 135 | 163 | 60 | 223 | 32 | 43 |                |        |        |
| DWD07-02028-05D-C | 28                 | 140 | 168 | 60 | 228 | 32 | 43 | WD..0940..     | TS3510 | ETF15  |
| DWD09-02029-05D-C | 29                 | 145 | 173 | 60 | 233 | 32 | 43 |                |        |        |
| DWD09-02030-05D-C | 30                 | 150 | 178 | 60 | 238 | 32 | 43 |                |        |        |
| DWD09-02031-05D-C | 31                 | 155 | 183 | 60 | 243 | 32 | 43 |                |        |        |
| DWD09-02032-05D-C | 32                 | 160 | 188 | 60 | 248 | 32 | 43 |                |        |        |
| DWD09-02033-05D-C | 33                 | 165 | 193 | 60 | 253 | 32 | 43 |                |        |        |
| DWD09-02034-05D-C | 34                 | 170 | 198 | 60 | 257 | 32 | 43 |                |        |        |
| DWD09-02035-05D-C | 35                 | 175 | 203 | 60 | 263 | 32 | 43 |                |        |        |
| DWD09-02036-05D-C | 36                 | 180 | 208 | 60 | 268 | 32 | 43 | WD..1250..     | TS5008 | ETF20  |
| DWD12-02044-05D-C | 44                 | 220 | 255 | 70 | 325 | 40 | 53 |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |
|                   |                    |     |     |    |     |    |    |                |        |        |

→ 搭配刀片  
Insert P.400

→ 切削條件表  
Cutting Condition P.610

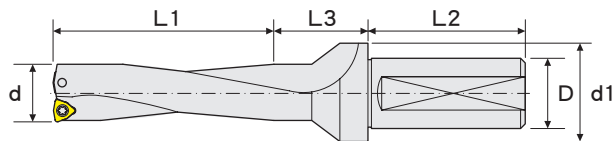
※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

# DW 快速鑽頭 - 2 倍長

INDEXABLE- HIGH SPEED DRILLS- DW- 2xd



185

| 訂購編號<br>Order No.     | 尺寸 Dimensions (mm) |    |    |    |    |    | 搭配刀片<br>Insert | Screw<br> | Wrench<br> |
|-----------------------|--------------------|----|----|----|----|----|----------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|                       | d                  | L1 | L2 | L3 | D  | d1 |                |                                                                                              |                                                                                               |
| DW03-02018-02D-C      | 18.0               | 36 | 52 | 24 | 20 | 29 | WC..0302..     | MS2506E                                                                                      | ETF08                                                                                         |
| DW03-02019-02D-C      | 19.0               | 38 | 52 | 24 | 20 | 29 |                |                                                                                              |                                                                                               |
| DW03-02020-02D-C      | 20.0               | 40 | 52 | 24 | 20 | 29 |                |                                                                                              |                                                                                               |
| DW03-02018-02D-116L-C | 18.0               | 36 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW03-02018-02D-117L-C | 18.5               | 37 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW03-02019-02D-118L-C | 19.0               | 38 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW03-02020-02D-120L-C | 20.0               | 40 | 56 | 24 | 25 | 35 | WC..0402..     | MS2506E                                                                                      | ETF08                                                                                         |
| DW04-02021-02D-C      | 21.0               | 42 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02022-02D-C      | 22.0               | 44 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02023-02D-C      | 23.0               | 46 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02024-02D-C      | 24.0               | 48 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02025-02D-C      | 25.0               | 50 | 56 | 24 | 25 | 35 | WC..0503..     | MS3008E                                                                                      | ETF09                                                                                         |
| DW05-02026-02D-C      | 26.0               | 52 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02027-02D-C      | 27.0               | 54 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02028-02D-C      | 28.0               | 56 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02029-02D-C      | 29.0               | 58 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02030-02D-C      | 30.0               | 60 | 60 | 29 | 32 | 43 | WC..06T3..     | MS3510E                                                                                      | ETF10                                                                                         |
| DW06-02031-02D-C      | 31.0               | 62 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02032-02D-C      | 32.0               | 64 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02033-02D-C      | 33.0               | 66 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02034-02D-C      | 34.0               | 68 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02035-02D-C      | 35.0               | 70 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02036-02D-C      | 36.0               | 72 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02037-02D-C      | 37.0               | 74 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02038-02D-C      | 38.0               | 76 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02039-02D-C      | 39.0               | 78 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02040-02D-C      | 40.0               | 80 | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
|                       |                    |    |    |    |    |    |                |                                                                                              |                                                                                               |
|                       |                    |    |    |    |    |    |                |                                                                                              |                                                                                               |
|                       |                    |    |    |    |    |    |                |                                                                                              |                                                                                               |
|                       |                    |    |    |    |    |    |                |                                                                                              |                                                                                               |

→ 搭配刀片  
Insert P.401

→ 切削條件表  
Cutting Condition P.610

※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

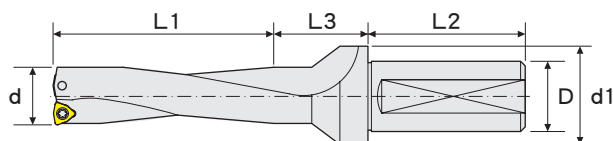
HOLEMAKING

Drilling Toolholders

鑽削刀桿

# DW 快速鑽頭 - 3 倍長

INDEXABLE- HIGH SPEED DRILLS- DW- 3xd



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| 訂購編號<br>Order No.     | 尺寸 Dimensions (mm) |      |    |    |    |    | 搭配刀片<br>Insert | Screw<br> | Wrench<br> |
|-----------------------|--------------------|------|----|----|----|----|----------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
|                       | d                  | L1   | L2 | L3 | D  | d1 |                |                                                                                              |                                                                                               |
| DW03-02018-03D-C      | 18.0               | 54   | 52 | 24 | 20 | 29 | WC..0302..     | MS2506E                                                                                      | ETF08                                                                                         |
| DW03-02019-03D-C      | 19.0               | 57   | 52 | 24 | 20 | 29 |                |                                                                                              |                                                                                               |
| DW03-02020-03D-C      | 20.0               | 60   | 52 | 24 | 20 | 29 |                |                                                                                              |                                                                                               |
| DW03-02018-03D-134L-C | 18.0               | 54   | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW03-02018-03D-135L-C | 18.5               | 55.5 | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW03-02019-03D-137L-C | 19.0               | 57   | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW03-02020-03D-140L-C | 20.0               | 60   | 56 | 24 | 25 | 35 | WC..0402..     | MS2506E                                                                                      | ETF08                                                                                         |
| DW04-02021-03D-C      | 21.0               | 63   | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02022-03D-C      | 22.0               | 66   | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02023-03D-C      | 23.0               | 69   | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02024-03D-C      | 24.0               | 72   | 56 | 24 | 25 | 35 |                |                                                                                              |                                                                                               |
| DW04-02025-03D-C      | 25.0               | 75   | 56 | 24 | 25 | 35 | WC..0503..     | MS3008E                                                                                      | ETF09                                                                                         |
| DW05-02026-03D-C      | 26.0               | 78   | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02027-03D-C      | 27.0               | 81   | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02028-03D-C      | 28.0               | 84   | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02029-03D-C      | 29.0               | 87   | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW05-02030-03D-C      | 30.0               | 90   | 60 | 29 | 32 | 43 | WC..06T3..     | MS3510E                                                                                      | ETF10                                                                                         |
| DW06-02031-03D-C      | 31.0               | 93   | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02032-03D-C      | 32.0               | 96   | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02033-03D-C      | 33.0               | 99   | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02034-03D-C      | 34.0               | 102  | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02035-03D-C      | 35.0               | 105  | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02036-03D-C      | 36.0               | 108  | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02037-03D-C      | 37.0               | 111  | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02038-03D-C      | 38.0               | 114  | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02039-03D-C      | 39.0               | 117  | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
| DW06-02040-03D-C      | 40.0               | 120  | 60 | 29 | 32 | 43 |                |                                                                                              |                                                                                               |
|                       |                    |      |    |    |    |    |                |                                                                                              |                                                                                               |
|                       |                    |      |    |    |    |    |                |                                                                                              |                                                                                               |
|                       |                    |      |    |    |    |    |                |                                                                                              |                                                                                               |
|                       |                    |      |    |    |    |    |                |                                                                                              |                                                                                               |

→ 搭配刀片  
Insert P.401

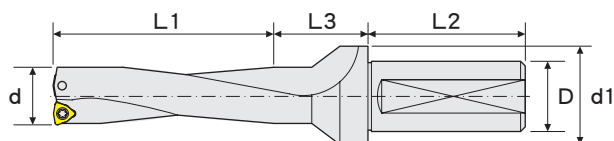
→ 切削條件表  
Cutting Condition P.610

※ 型號後端 -C 為出水孔設計。 Product number end in -C are coolant-through design.

| 應用材質<br>Work Material | 碳素鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels |          | 調質鋼<br>Hardened Steels |          | 不銹鋼<br>Stainless Steels | 鑄鐵<br>Cast Iron | 鋁合金<br>Aluminum Alloys | 高溫合金<br>High-Temp Alloys |
|-----------------------|----------------------|---------------------|----------|------------------------|----------|-------------------------|-----------------|------------------------|--------------------------|
|                       | HRC<20               | HRC20~30            | HRC30~45 | HRC45~55               | HRC55~63 |                         | HRC<30          |                        | HRC<30                   |
|                       | ◎                    | ◎                   | ◎        | —                      | —        | ○                       | ◎               | —                      | —                        |

◎：第一推薦 First Recommend ○：第二推薦 Second Recommend —：不推薦 NO Recommend

## INDEXABLE- HIGH SPEED DRILLS- DW- 4xd



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➡ 切削條件表 P.610  
Cutting Condition

| 應用材質<br>Work<br>Material | 碳素鋼<br>Carbon<br>Steels | 合金鋼<br>Alloy<br>Steels |          | 調質鋼<br>Hardened<br>Steels |          | 不銹鋼<br>Stainless<br>Steels | 鑄鐵<br>Cast<br>Iron | 鋁合金<br>Aluminum<br>Alloys | 高溫合金<br>High-Temp<br>Alloys |
|--------------------------|-------------------------|------------------------|----------|---------------------------|----------|----------------------------|--------------------|---------------------------|-----------------------------|
|                          | HRC<20                  | HRC20~30               | HRC30~45 | HRC45~55                  | HRC55~63 |                            | HRC<30             |                           | HRC<30                      |
|                          | ◎                       | ◎                      | ◎        | —                         | —        | ○                          | ◎                  | —                         | —                           |

# HOLEMAKING

鑽削刀桿



# Drilling Toolholders

[illegible]