



TUV



CE

## 鑽孔機 / 攻牙機

# DRILLING / TAPPING MACHINE



ENGLISH



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中文版



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Manual Drill Machine



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Automatic Drill Machine



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Pneumatic / Hydraulic  
Drill Machine



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Manual Tap Machine



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中文  
版



ENGLISH



# 訂製機台範例

## Customized Machine



操作影片  
Operating Video

- ▶ 自動分割鑽孔  
Auto Index Drill Machine



操作影片  
Operating Video

- ▶ 自動鑽孔攻牙 & 分度盤  
Auto Drill & Tap Machine  
with Indexer



- ▶ 油壓鑽床 & 大尺寸多軸器  
Hydraulic Drill Machine  
& Wide Range Multiple Spindle Head



- ▶ 立式攻牙機 & 臥式鑽孔機  
Automatic Drill & Tap Machine  
Vertical & Horizontal Models



操作影片  
Operating Video



操作影片  
Operating Video

- ▶ 自動鑽孔+倒角+攻牙  
Automatic Drill & Chamfer  
& Tap Machine



操作影片  
Operating Video

- ▶ 全自動氣動腳踏車架鑽床  
Fully Automatic Bicycle Frame  
Drill Machine



- ▶ 自動滑台退料  
Tapping with  
Sliding Table



操作影片  
Operating Video



- ▶ 自動攻牙 & 轉盤  
Automatic Tap Machine  
with Indexer



操作影片  
Operating Video

# 客製化伺服改善方案

## Customized Servo Motor Control



操作影片  
Operating Video

- ▶ 伺服鑽孔 & 滾光機  
Servo Drill Machine  
with Ball Burnish



- ▶ 滾光機 & 伺服滑台  
Ball Burnish with Servo Slide



操作影片  
Operating Video

- ▶ 多軸鑽孔 & 伺服滑台  
Drill Machine with Servo Slide



操作影片  
Operating Video

- ▶ 雙伺服鑽孔 / 攻牙機  
搭配伺服滑台  
Drill / Tap Machine  
with Dual Servo Motor Control  
with Servo Sliding Table



操作影片  
Operating Video

- ▶ 空油壓鑽床 搭配伺服轉盤  
Pneumatic Drill Machine  
with Servo Indexing Table

# 手動鑽床

## Manual Drilling Machine



操作影片  
Operating Video

▶ HD-14I



變頻無段變速  
Various Speed  
with Inverter

▶ HD-14

▶ HD-340



▶ HD-25



| 型號 Model                                  |                        | HD-14I       | HD-14        | HD-340       | HD-25        |
|---|------------------------|--------------|--------------|--------------|--------------|
| 規格 Specifications                         |                        | HD-14I       | HD-14        | HD-340       | HD-25        |
| 進刀方式 Stroke                               |                        | 手動<br>Manual | 手動<br>Manual | 手動<br>Manual | 手動<br>Manual |
| 主軸型式<br>Spindle Type                      | 主軸斜度<br>Inside Spindle | MT2          | MT2          | MT2          | MT3          |
|   | 鼻端斜度<br>For Chuck      | JT6          | JT6          | JT6          | JT6          |
| 工作能力<br>Working Ability                   | 中碳鋼<br>Steel (S45C)    | 3-16         | 3-16         | 3-16         | 5-25         |
| 主軸行程 Spindle Travel (mm)                  |                        | 100          | 100          | 100          | 140          |
| 馬達 Motor                                  |                        | 1HP-4P       | 1HP-4P       | 1HP-4P       | 2HP-6P       |
| 主軸轉速 (段數)<br>Spindle Speed<br>RPM (Steps) | 50HZ                   | 400-2700     | 480-2300 (4) | 190-2800 (9) | 160-1342 (9) |
|   | 60HZ                   |              | 550-2700 (4) | 240-3400 (9) | 190-1610 (9) |
| 重量 Weight (kg)                            |                        | 95           | 91           | 94           | 199          |

1. 實際工作能力與刀具銳利度、潤滑及冷卻有密切關係。
2. 特殊材質、尺寸須配合特製轉速。

1. The practical working abilities are very related to sharpness on drill bit, good lubrication and suitable cooling.
2. Customized spindle speed might be required for particular materials or drilling sizes.

★ 外觀尺寸請參考 P.20 / 21

Appearance Dimensions Please View Page 20 / 21.

# 自動鑽床 (離合式)

## Automatic Drilling Machine (Clutch Type)



▶ HD-120



▶ HD-250



▶ HD-350



| 規格 Specifications   |                     | 型號 Model | HD-120       | HD-250       | HD-350       |
|---|---------------------|----------|--------------|--------------|--------------|
| 進刀方式 Stroke   |                     |          | 自動 Automatic | 自動 Automatic | 自動 Automatic |
| 主軸型式 Spindle Type   | 主軸斜度 Inside Spindle |          | MT2          | MT3          | MT4          |
|   | 鼻端斜度 For Chuck      |          | JT6          | JT6          |              |
| 工作能力 Working Ability  | 中碳鋼 Steel (S45C)    |          | 3-16         | 5-25         | 15-35        |
| 主軸行程 Spindle Travel (mm)  |                     |          | 93           | 133          | 153          |
| 馬達 Motor  |                     |          | 1HP-4P       | 2HP-6P       | 3HP-4*8P     |
| 主軸轉速 (段數) Spindle Speed RPM (Steps)   | 50HZ                |          | 466-1675 (4) | 200-1600 (9) | 127-961 (8)  |
|   | 60HZ                |          | 560-2010 (4) | 210-1700 (9) | 150-1140 (8) |
| 重量 Weight (kg)  |                     |          | 102          | 206          | 492          |
| 1. 實際工作能力與刀具銳利度、潤滑及冷卻有密切關係。<br>2. 特殊材質、尺寸須配合特製轉速。<br>1. The practical working abilities are very related to sharpness on drill bit, good lubrication and suitable cooling.<br>2. Customized spindle speed might be required for particular materials or drilling sizes. |                     |          |              |              |              |

★ 外觀尺寸請參考 P.20 / 21  
Appearance Dimensions Please View Page 20 / 21.

# 自動鑽床 (空油壓)

## Automatic Drilling Machine (Pneumatic)



操作影片  
Operating Video

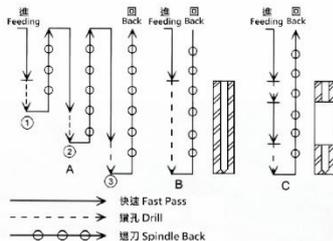


▶ HD-PAM520



▶ HD-PAM520L

- A: 退屑多段進刀 Multiple Step
- B: 單段進刀 Single Step
- C: 二段進刀 Two Step



| 型號 Model  |                       | HD-PAM520                          | HD-PAM520L                         |
|---|-----------------------|------------------------------------|------------------------------------|
| 規格 Specifications   |                       | HD-PAM520                          | HD-PAM520L                         |
| 進刀方式 Stroke   |                       | 自動 (空油壓式)<br>Automatic (Pneumatic) | 自動 (空油壓式)<br>Automatic (Pneumatic) |
| 主軸型式<br>Spindle Type  | 主軸斜<br>Inside Spindle | MT2                                | MT3                                |
|   | 鼻端斜<br>For Chuck      | JT6                                | JT6                                |
| 工作能力<br>Working Ability   | 中碳鋼<br>Steel (S45C)   | 3-12                               | 3-12                               |
| 主軸行程 Spindle Travel (mm)  |                       | 93                                 | 133                                |
| 馬達 Motor  |                       | 1HP-4P                             | 1HP-4P                             |
| 主軸轉速 (段數)<br>Spindle Speed<br>RPM (Steps)   | 50HZ                  | 480-2300 (4)                       | 190-1850 (9)                       |
|   | 60HZ                  | 550-2700 (4)                       | 230-2380 (9)                       |
| 重量 Weight (kg)  |                       | 121                                | 209                                |
| 1. 實際工作能力與刀具銳利度、潤滑及冷卻有密切關係。<br>2. 特殊材質、尺寸須配合特製轉速。<br>1. The practical working abilities are very related to sharpness on drill bit, good lubrication and suitable cooling.<br>2. Customized spindle speed might be required for particular materials or drilling sizes. |                       |                                    |                                    |

★ 外觀尺寸請參考 P.22

Appearance Dimensions Please View Page 22.

# 自動鑽床 (油壓)

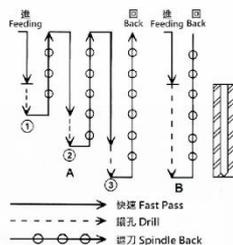
## Automatic Drilling Machine (Hydraulic)



操作影片  
Operating Video



▶ HD-POM750



| 型號 Model  |                        | HD-POM750                            |
|---|------------------------|--------------------------------------|
| 規格 Specifications   |                        |                                      |
| 進刀方式 Stroke   |                        | 自動 (油壓式)<br>Automatic (Hydraulic)    |
| 主軸型式<br>Spindle Type  | 主軸斜度<br>Inside Spindle | MT3                                  |
|   | 鼻端斜度<br>For Chuck      | JT6                                  |
| 工作能力<br>Working Ability   | 中碳鋼<br>Steel (S45C)    | 5-25                                 |
| 主軸行程 Spindle Travel (mm)  |                        | 133                                  |
| 馬達 Motor  |                        | 2HP-6P                               |
| 主軸轉速 (段數)<br>Spindle Speed<br>RPM (Steps)   | 50HZ                   | 160-1342 (9)                         |
|   | 60HZ                   | 190-1610 (9)                         |
| 重量 Weight (kg)  |                        | 229<br>(含油壓動力單元 With Hydraulic Unit) |
| 1. 實際工作能力與刀具銳利度、潤滑及冷卻有密切關係。<br>2. 特殊材質、尺寸須配合特製轉速。<br>1. The practical working abilities are very related to sharpness on drill bit, good lubrication and suitable cooling.<br>2. Customized spindle speed might be required for particular materials or drilling sizes. |                        |                                      |

★ 外觀尺寸請參考 P.22

Appearance Dimensions Please View Page 22.

# 手動攻牙鑽孔機

## Manual Tapping & Drilling Machine



▶ HDT-340



▶ HDT-25



▶ HDT-32



|   |                          | 型號 Model | HDT-340      | HDT-25       | HDT-32       |
|---|--------------------------|----------|--------------|--------------|--------------|
| 規格 Specifications   |                          |          |              |              |              |
| 進刀方式 Stroke   |                          |          | 手動<br>Manual | 手動<br>Manual | 手動<br>Manual |
| 主軸型式<br>Spindle Type  | 主軸斜度<br>Inside Spindle   |          | MT2          | MT3          | MT3          |
|   | 鼻端斜度<br>For Chuck        |          | JT6          | JT6          | JT6          |
| 工作能力<br>Working Ability<br>(Steel S45C)   | 鑽孔能力<br>Drill Capacity   |          | 3-16         | 5-25         | 15-32        |
|   | 攻牙能力<br>Tapping Capacity |          | 3-13         | 5-20         | 15-32        |
| 主軸行程 Spindle Travel (mm)  |                          |          | 100          | 140          | 140          |
| 馬達 Motor  |                          |          | 1HP-4P       | 2HP-6P       | 2HP-6P       |
| 主軸轉速 (段數)<br>Spindle Speed<br>RPM (Steps)   | 50HZ                     |          | 250-960 (9)  | 160-1342 (9) | 55-175 (4)   |
|   | 60HZ                     |          | 300-1150 (9) | 190-1610 (9) | 65-210 (4)   |
| 重量 Weight (kg)  |                          |          | 101          | 204          | 221          |
| 1. 實際工作能力與刀具銳利度、潤滑及冷卻有密切關係。<br>2. 特殊材質、尺寸須配合特製轉速。<br>1. The practical working abilities are very related to sharpness on drill bit, good lubrication and suitable cooling.<br>2. Customized spindle speed might be required for particular materials or drilling sizes. |                          |          |              |              |              |

★ 外觀尺寸請參考 P.20 / 21

Appearance Dimensions Please View Page 20 / 21.

# 自動攻牙機 (齒輪式) Automatic Tapping Machine (Gear Type)



牙距齒輪組  
Pitch Gears



- ▶ HT1-203
- ▶ HT2-223
- ▶ HT3-231

▶ HD-AT12



▶ HD-AT19



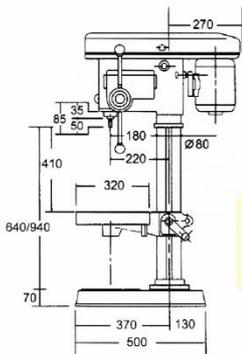
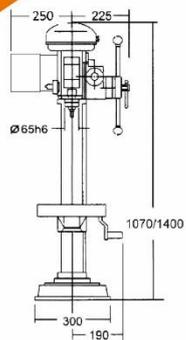
| 型號 Model                                  |                        | HD-AT12      | HD-AT19     | HT1-203      | HT2-223     | HT3-231    |
|---|------------------------|--------------|-------------|--------------|-------------|------------|
| 規格 Specifications                         |                        |              |             |              |             |            |
| 進刀方式 Stroke                               |                        | 自動 Automatic |             |              |             |            |
| 主軸型式<br>Spindle Type                      | 主軸斜度<br>Inside Spindle | MT2          | MT3         | X            | MT2         | MT3        |
|   | 鼻端斜度<br>For Chuck      | JT6          | JT6         | JT2          | JT6         | JT6        |
| 工作能力<br>Working Ability                   | 中碳鋼<br>Steel (S45C)    | 3-13         | 5-20        | 2-8          | 5-16        | 10-32      |
| 主軸行程<br>Spindle Travel (mm)               |                        | 93           | 133         | 45           | 65          | 65         |
| 馬達 Motor                                  |                        | 1HP-4P       | 2HP-6P      | 1/2HP-4P     | 1HP-6P      | 2HP-6P     |
| 主軸轉速 (段數)<br>Spindle Speed<br>RPM (Steps) | 50HZ                   | 256-1278 (8) | 166-829 (6) | 420-1340 (3) | 155-515 (3) | 50-200 (3) |
|   | 60HZ                   | 308-1534 (8) | 200-995 (6) | 500-1600 (3) | 190-620 (3) | 60-240 (3) |
| 重量 Weight (kg)                            |                        | 112          | 234         | 97           | 200         | 250        |

★ 外觀尺寸請參考 P.23 / 24 / 25  
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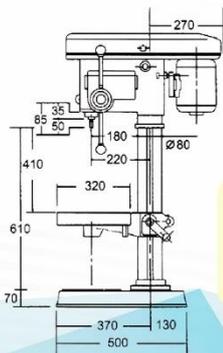
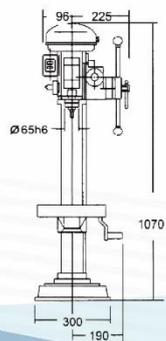
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2. Customized spindle speed might be required for particular materials or drilling sizes.

# 外觀尺寸

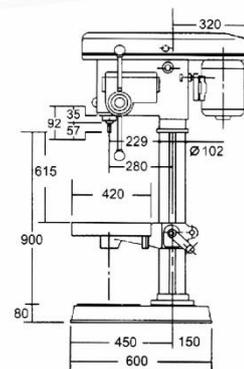
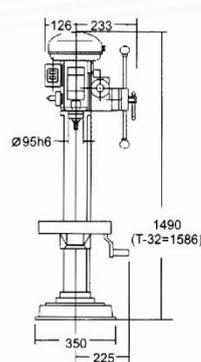
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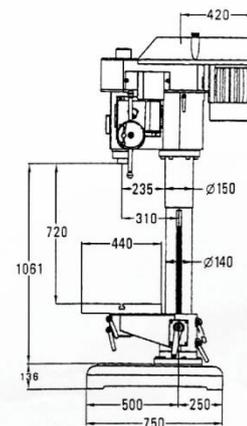
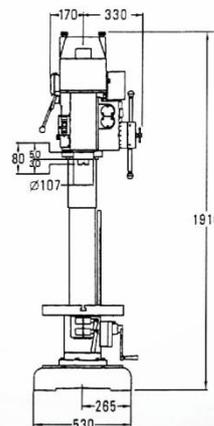
● HD-14I



● HD-120  
● HD-14  
● HD-340  
● HDT-340



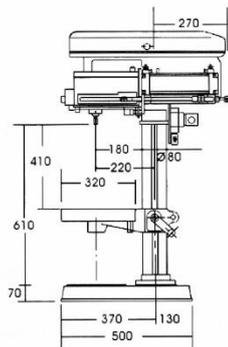
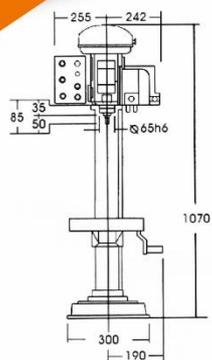
● HD-250  
● HD-25  
● HDT-25  
● HDT-32



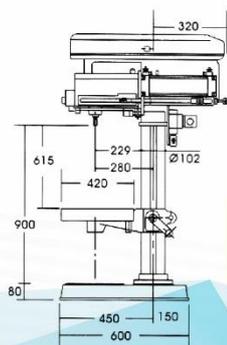
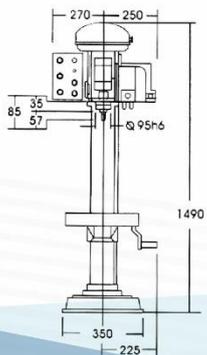
● HD-350

# 外觀尺寸

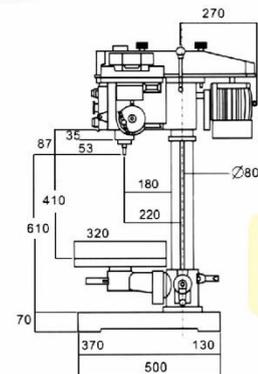
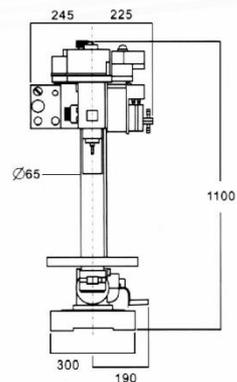
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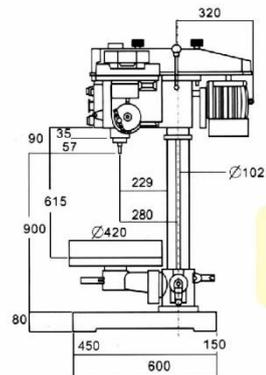
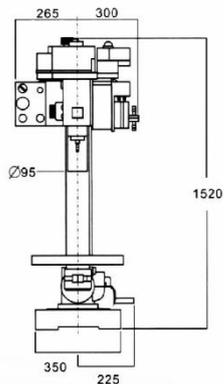
● HD-PAM520



● HD-PAM520L  
● HD-POM750



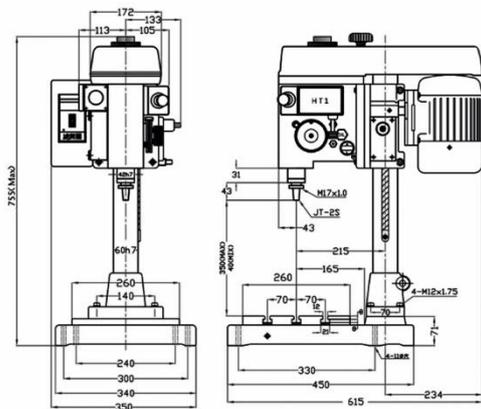
● HD-AT12



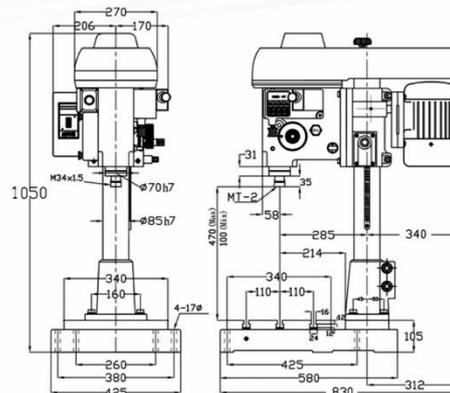
● HD-AT19

# 外觀尺寸

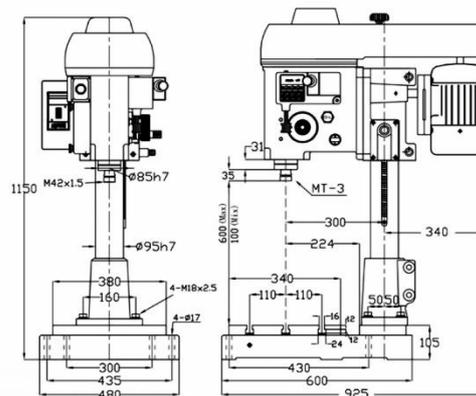
## Appearance Dimensions



● HT1-203



● HT2-223



● HT3-231

# 常用配件 Accessories



▶ 安全斷電遮罩  
Safety Shield



操作影片  
Operating Video



▶ 空 / 油壓夾頭  
Pneumatic / Hydraulic Chuck



▶ 鑽夾頭  
Drill Chuck

▶ 快速夾頭  
Keyless Chuck



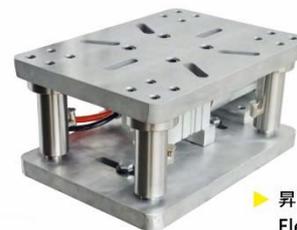
▶ 攻牙夾頭  
Tapping Chuck



▶ 鑽床虎鉗  
Drill Vise



操作影片  
Operating Video



▶ 昇降工作台  
Elevating Working Table

# 常用配件 (精密十字滑台)

## Accessories

### (Cross Slide Table)



- ▶ 整組滑台軌道，經由精密研磨
- ▶ 可搭配所有機型鑽孔機 / 攻牙機
- ▶ 螺桿背隙小
- ▶ 定位準確高負載
- ▶ 總高度低，適合搭配刀具使用

▶ This is more accurate cross table and perfect for the machinist.

▶ Features:

- Fine graduations precision grinding
- The backlash is adjustable
- Locks for precise location
- Heavy load on the center

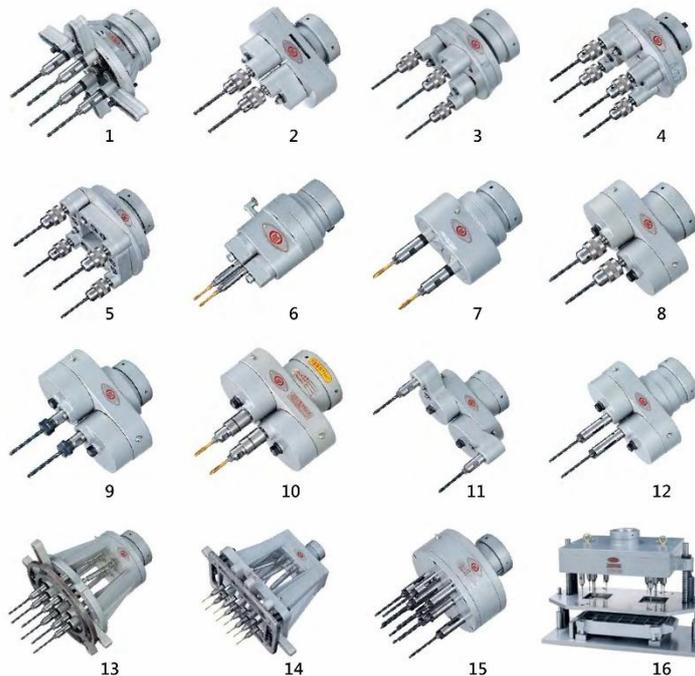
|  |   |
|--|---|
| 工作台尺寸 Table Size                                     | 520mm x 210mm   |
| 行程 Travel  | X300mm Y250mm *   |
| 總高度 Overall Height                                   | 115mm<br>(較它牌產品總高度減少 30%)<br>(30% thinner than former type) |
| 手輪刻度 Graduations                                     | 0.05  |
| T 型槽尺寸 T-Slot Size                                   | 8mm (5/16")   |
| 重量 Weight  | 50kg  |
| 表面直度 Straightness Of Surface                         | 0.05  |
| 底面與工作台面平行度<br>Parallelism Between Surface And Bottom | +/- 0.03 / 100mm  |

可加裝光學尺 Optical scale (linear) is available.

\* 加裝於 1HP 機種，加裝光學尺，Y 軸行程將略為減少  
\* Y axis may cut short when mounted on 1HP drill machine.



## ★ 多軸鑽孔攻牙器 Multiple Spindle Head



## Multiple Spindle Head Order Information



▶ 初步報價請提供：

- (1) 軸數
- (2) 鑽孔 / 攻牙直徑
- (3) 軸間距
- (4) 工作物材質

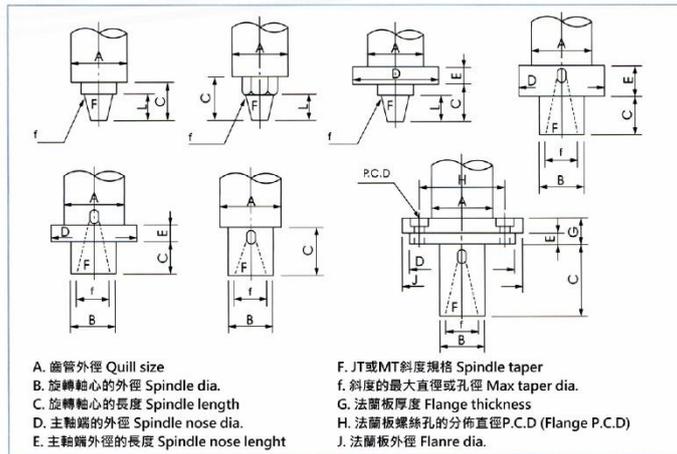


▶ Need Following Info To Offer Basic Quotation :

- (1) Number Of Spindles
- (2) Drill / Tap Diameter
- (3) Distance Between Spindles
- (4) Material Working Object Made Of

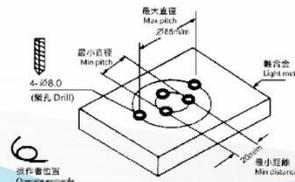


▶ 組裝頭部規格 Type Of Spindle To Install



| 機台頭部尺寸 Machine Detail |                       |        |   |   |        |   |   |   |   |   |   |   |
|-----------------------|-----------------------|--------|---|---|--------|---|---|---|---|---|---|---|
| 機牌<br>Company<br>Name | 機型<br>Machine<br>Type | A±0.01 | B | C | D±0.01 | E | F | f | G | H | J | L |
|                       |                       |        |   |   |        |   |   |   |   |   |   |   |

| 機種選擇注意事項 Specification & Selection |               |                     |            |                       |                       |                   |                   |                    |                      |                |                        |                    |             |
|------------------------------------|---------------|---------------------|------------|-----------------------|-----------------------|-------------------|-------------------|--------------------|----------------------|----------------|------------------------|--------------------|-------------|
| 加工方式<br>Machining Way              |               | 加工材質及類數<br>Material |            |                       | 螺絲攻大小<br>Drill Dia.   |                   |                   |                    | 2 軸間距離<br>Hold Pitch |                | 機台使用方向<br>Machine Type |                    | 銑雲板<br>Bush |
| 鑽孔<br>Drilling                     | 攻牙<br>Tapping | 銼孔<br>Boring        | 鋼<br>Steel | 鑄鐵<br>Casting<br>iron | 輕合金<br>Light<br>metal | 最大<br>Max<br>dia. | 最小<br>Min<br>dia. | 最大<br>Max<br>pitch | 最小<br>Min<br>pitch   | 立式<br>Vertical | 臥式<br>Horizont<br>al   | 低角<br>Low<br>angle |             |
|                                    |               |                     |            |                       |                       |                   |                   |                    |                      |                |                        |                    |             |



| 導桿孔<br>Pitch Between<br>Guiding Poles | 定位孔<br>Positioning Holes | 防水板<br>Water Proof Plate |
|---------------------------------------|--------------------------|--------------------------|
|                                       |                          |                          |



# 多軸鑽孔攻牙器 T 型

## Multiple Spindle Head

### Type T



- ▶ T-70
- ▶ T-72
- ▶ T-90



- ▶ T-214
- ▶ T-226

(浮動型 Floating Model)

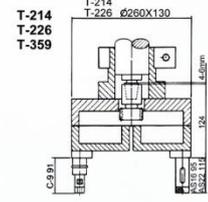
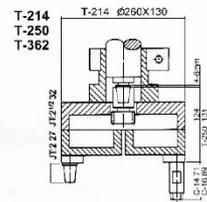
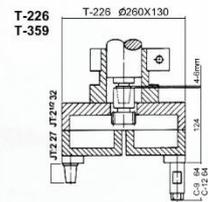
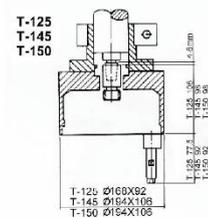
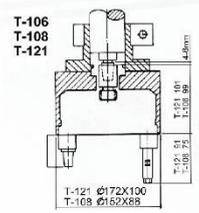
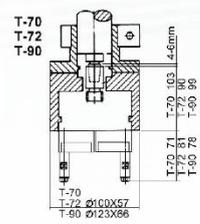
★ 專利字號 79022  
Taiwan Patent No. 79022



- ▶ T-106
- ▶ T-108
- ▶ T-121



- ▶ T-359
- ▶ T-362



| 型號 Type   | T70                      | T72  | T90 | T106 | T108 | T121 | T125 | T145 | T150 | T214 | T226 | T250 | T359 | T362 |     |     |
|---|--------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|
| 規格 Dimensions   |                          |      |     |      |      |      |      |      |      |      |      |      |      |      |     |     |
| 最大軸心距 (mm) Max. Spindle PCD   | 70                       | 72   | 90  | 108  | 108  | 121  | 125  | 146  | 151  | 214  | 226  | 250  | 359  | 362  |     |     |
| 最小軸心距 (mm) Min. Spindle PCD   | 10                       | 12.7 | 15  | 18   | 18   | 24   | 29   | 29   | 24   | 46   | 34   | 60   | 56   | 56   |     |     |
| 最大工作能力 Max. Working Capacity  | 鑽孔能力 (mm) Drill Capacity |      | 3   | 4    | 5    | 6    | 6    | 8    | 8    | 10   | 8    | 12   | 10   | 16   | 10  | 12  |
|   | 攻牙能力 Tapping Capacity    |      | M3  | M4   | M5   | M6   | M6   | M7   | M7   | M9   | M7   | M12  | M10  | M15  | M10 | M12 |
| 與主軸轉速比 RPM Ratio To Main Spindle                                    | 1:1                      | 1:1  | 1:1 | 1:1  | 1:1  | 1:1  | 1:1  | 1:1  | 1:1  | 1:1  | 1:1  | 1:1  | 1:1  | 1:1  |     |     |
| 軸數 Numbers Of Spindle   | 2                        | 2    | 2   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |     |     |
| 軸承型式 Support Bearing Type (B=滾珠軸承, C=銅套) (B=Ball Bearing, C=Copper) | C                        | C    | C   | B    | C    | C    | B    | B    | B    | B    | B    | B    | B    | B    |     |     |

★ 可換成ER夾頭或鑽夾頭 ER Collets And Drill Chuck Models Are Available

# 多軸鑽孔攻牙器 QU / QNU 型

## Multiple Spindle Head

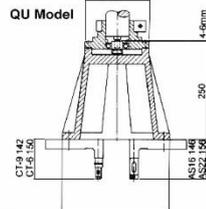
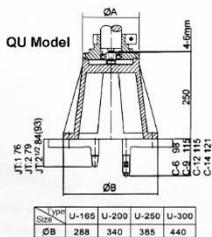
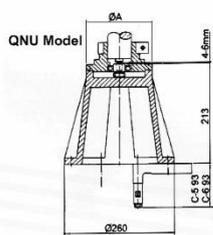
### Type QU / QNU



▶ QU / QNU Model



▶ QU / QNU Model



| 型號 Type  | QNU165                      | QU165                    | QU200              | QU250              | QU300              |
|--|-----------------------------|--------------------------|--------------------|--------------------|--------------------|
| 規格 Dimensions  |                             |                          |                    |                    |                    |
| 最大軸心圓 (mm)<br>Max. Spindle PCD                             | 165                         | 165                      | 200                | 250                | 300                |
| 最小 2 軸心距 (mm)<br>Min. Spindle Pitch<br>By Every 2 Spindles | 12.7                        | C6= 18.7<br>C9= 29       | C6= 18.7<br>C9= 29 | C6= 18.7<br>C9= 29 | C6= 18.7<br>C9= 29 |
| 最大工作能力<br>Max. Working<br>Capacity                         | 鑽孔能力 (mm)<br>Drill Capacity | 4.5                      | C6= 6.0<br>C9= 8.0 | C6= 6.0<br>C9= 8.0 | C6= 6.0<br>C9= 8.0 |
|  |                             | 攻牙能力<br>Tapping Capacity | M4                 | C6= M6<br>C9= M10  | C6= M6<br>C9= M10  |
| 與主軸轉速比<br>RPM Ratio To Main Spindle                        | 1:1                         |                          | 1:1                | 1:1                | 1:1                |
| 軸數 Numbers Of Spindle                                      | 2-8                         | 2-8                      | 2-10               | 2-12               | 2-12               |

★ 可換成ER夾頭 ER Collets Models Are Available

# 多軸鑽孔攻牙器 NA / D 型

## Multiple Spindle Head Type NA / D



▶ NA-100  
▶ NA-124



▶ D-170



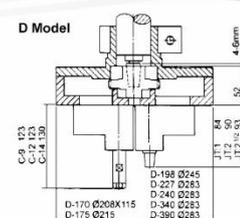
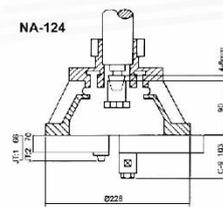
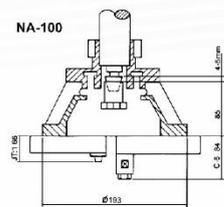
▶ D-192  
▶ D-198  
▶ D-240



▶ D-175  
(3 軸 3-spindle)  
▶ D-240  
(3 軸 3-spindle)



▶ D-340  
▶ D-390



| 規格 Dimensions   | 型號 Type                     | NA100              | NA124              |
|---|-----------------------------|--------------------|--------------------|
| 最大軸心距 Max. Spindle PCD (mm)                             |                             | 100                | 125                |
| 最小軸心距 Min. Spindle PCD (mm)                             |                             | 25 (4 軸 4-spindle) | 38 (4 軸 4-spindle) |
| 最小 2 軸心距 (mm)<br>Min. Spindle Pitch By Every 2 Spindles |                             | 18.7               | 27                 |
| 最大工作能力 Max. Working Capacity                            | 鑽孔能力 (mm)<br>Drill Capacity | 6                  | 8                  |
|   | 攻牙能力<br>Tapping Capacity    | M6                 | M8                 |
| 與主軸轉速比 RPM Ratio To Main Spindle                        |                             | 1:1 or 1:1.3       | 1:1 or 1:1.3       |
| 軸數 Numbers Of Spindle                                   |                             | 2-4                | 2-4                |

| 規格 Dimensions   | 型號 Type                     | D170  | D175  | D192 | D198  | D227  | D240  | D340  | D390  |
|---|-----------------------------|-------|-------|------|-------|-------|-------|-------|-------|
| 最大軸心距 (mm)<br>Max. Spindle PCD                          |                             | 170   | 170   | 177  | 198   | 227   | 240   | 342   | 390   |
| 最小軸心距 (mm)<br>Min. Spindle PCD                          |                             | 38    | 43    | 52   | 61    | 98    | 85    | 208   | 245   |
| 最小 2 軸心距 (mm)<br>Min. Spindle Pitch By Every 2 Spindles |                             | 38    | 38    | 38   | 43    | 37    | 56    | 56    | 56    |
| 最大工作能力 Max. Working Capacity                            | 鑽孔能力 (mm)<br>Drill Capacity | 13    | 13    | 6.5  | 10    | 6.5   | 13    | 13    | 13    |
|   | 攻牙能力<br>Tapping Capacity    | M10   | M10   | M8   | M10   | M8    | M10   | M10   | M10   |
| 與主軸轉速比<br>RPM Ratio To Main Spindle                     |                             | 1:2.7 | 1:2.7 | 1:3  | 1:2.9 | 1:5.1 | 1:3.3 | 1:3.3 | 1:3.3 |
| 軸數 Numbers Of Spindle                                   |                             | 2     | 3     | 4    | 4     | 6     | 4     | 4     | 4     |

★ 可換成ER夾頭或鑽夾頭 ER Collets And Drill Chuck Models Are Available

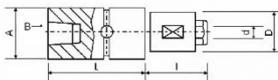
# 筒夾與特製心軸

## Collets & Special Spindles



### ▶ 浮動單軸心軸

#### Floating Spindle For Tapping



| 規格 Dimensions | 尺寸 Size | A            | B | L   | I  | D   | d       |
|---------------|---------|--------------|---|-----|----|-----|---------|
| FCJ-5         | Ø26     | JT2, JT6     |   | 65  | 46 | Ø12 | Ø2~Ø5.5 |
| FCJ-6         | Ø26     | JT2, JT6     |   | 65  | 50 | Ø17 | Ø2~Ø6   |
| FCJ-9         | Ø26     | JT2, JT6     |   | 65  | 66 | Ø19 | Ø3~Ø8   |
| FCJ-9         | Ø34     | JT6          |   | 72  | 37 | Ø26 | Ø3~Ø8   |
| FCJ-9         | Ø34     | M17xP1.0+JT2 |   | 77  | 37 | Ø26 | Ø3~Ø8   |
| FCJ-9         | Ø34     | M20xP1.0+JT6 |   | 78  | 37 | Ø26 | Ø3~Ø8   |
| FCJ-12        | Ø34     | JT6          |   | 72  | 37 | Ø26 | Ø6~Ø11  |
| FCJ-12        | Ø34     | M17xP1.0+JT2 |   | 77  | 37 | Ø26 | Ø6~Ø11  |
| FCJ-12        | Ø34     | M20xP1.0+JT6 |   | 78  | 37 | Ø26 | Ø6~Ø11  |
| FCJ-14        | Ø34     | JT6          |   | 72  | 68 | Ø30 | Ø8~Ø13  |
| FCJ-14        | Ø34     | M17xP1.0+JT2 |   | 77  | 68 | Ø30 | Ø8~Ø13  |
| FCJ-14        | Ø34     | M20xP1.0+JT6 |   | 78  | 68 | Ø30 | Ø8~Ø13  |
| FCJ-16        | Ø58     | JT3          |   | 98  | 43 | Ø44 | Ø10~Ø16 |
| FCJ-16        | Ø58     | JT4          |   | 110 | 43 | Ø44 | Ø10~Ø16 |
| FCJ-20        | Ø58     | JT3          |   | 98  | 46 | Ø44 | Ø13~Ø18 |
| FCJ-20        | Ø58     | JT4          |   | 110 | 47 | Ø44 | Ø13~Ø18 |
| FCJ-30        | Ø58     | JT4          |   | 110 | 48 | Ø58 | Ø16~Ø28 |

★ 以上均可供單軸使用 Both Available For Single And Multiple Spindle

### ▶ 筒夾規格 Dimensions Of Collets

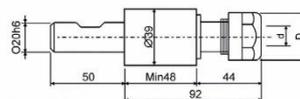
|  |  |   |  |
|--|--|---|--|
| <b>CT Type</b><br>(攻牙用 For Tapping)<br>                          | <b>N1</b><br>NT1<br>7 30<br><br>Ø1.1~Ø4.0    | <b>C-9</b><br>CT-9<br>14 45<br><br>Ø3.0~Ø6.0    | <b>C-16</b><br>CT-16<br>26 70<br><br>Ø10.0~Ø16.0 |
| <b>C Type</b><br>(鑽孔用 For Drilling)<br>                          | <b>C-5</b><br>CT-5<br>8 30<br><br>Ø1.1~Ø5.0  | <b>C-12</b><br>CT-12<br>17 48<br><br>Ø6.1~Ø11.0 |  |
| <b>CS Type</b><br>(鑽孔用·內付牙)<br>(For Drilling And Chamfering)<br> | <b>C-6</b><br>CT-6<br>10 36<br><br>Ø1.1~Ø6.0 | <b>C-14</b><br>CT-14<br>21 53<br><br>Ø6.0~Ø13.0 |  |
| <b>(後攻牙深度調整)</b><br>(Depth Setting Screw Inside Collets)         |  |   |  |

註：銼刀、圓棒、鑄銼刀、倒角刀、高螺旋鑽頭、或左旋螺絲等刀具使用時，請於訂購時說明。

Please notice us the type of cutting tool you are using (Ex: Reamer · Milling · Drilling · Tapping ...)

### ▶ 浮動心軸

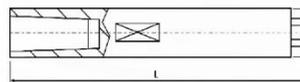
#### Floating Spindle For Tapping



| 規格 Dimensions | 尺寸 Size | L   | B   | D   | d       |
|---------------|---------|-----|-----|-----|---------|
| JC-9          |         | 85  | JT6 | Ø24 | Ø3~Ø8   |
| JC-12         |         | 85  | JT6 | Ø24 | Ø6~Ø11  |
| JC-14         |         | 92  | JT6 | Ø30 | Ø8~Ø13  |
| JC-16         |         | 115 | JT3 | Ø42 | Ø10~Ø16 |
|               |         |     |     | Ø10 | Ø1.1~Ø4 |

### ▶ 延長軸 (可客製DØ10以上)

#### Length Extending Spindle



★ 以上均可供單軸使用 Both Available For Single And Multiple Spindle

# 冷卻鐵筒架 Coolant

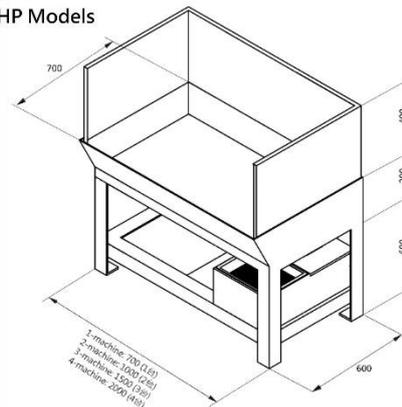


▶ 1HP 機型  
For 1HP Models

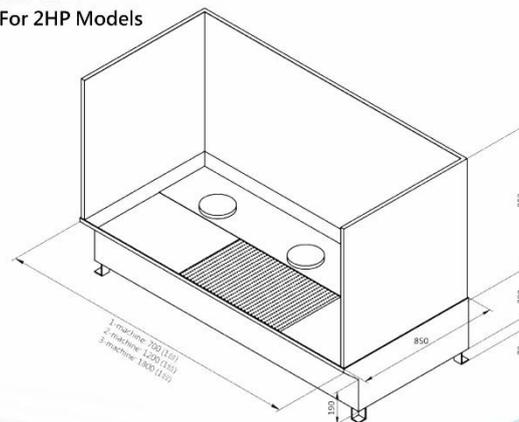


▶ 2HP 機型  
For 2HP Models

▶ 1HP 機型  
For 1HP Models



▶ 2HP 機型  
For 2HP Models

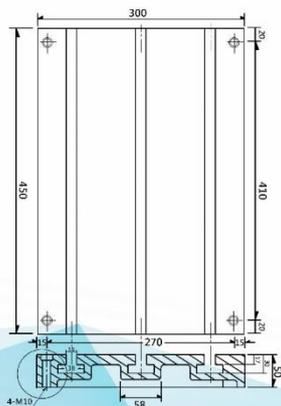
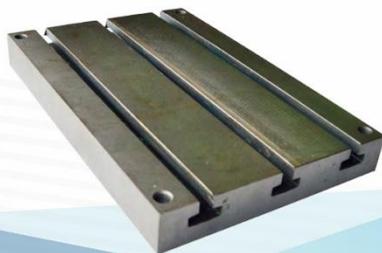


★ 接受客製訂單 Customized Service Is Available

# 連立工作桌合冷卻 Working Table

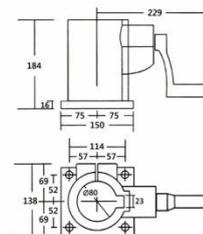
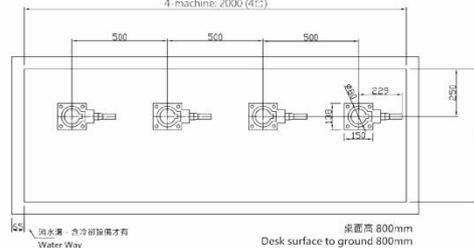


▶ 選配：T型槽治具板  
Additional Attached：Fixture Plate



## ▶ 1HP 機型 For 1HP Models

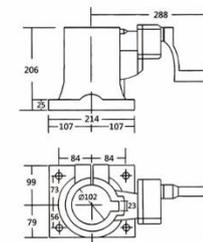
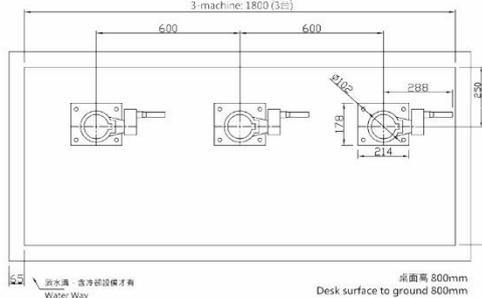
- 1-machine: 600 (1台)
- 2-machine: 1000 (2台)
- 3-machine: 1500 (3台)
- 4-machine: 2000 (4台)



▲ 建立中區 Table Base

## ▶ 2HP 機型 For 2HP Models

- 1-machine: 700 (1台)
- 2-machine: 1200 (2台)
- 3-machine: 1800 (3台)



▲ 建立中區 Table Base

★ 接受客製訂單 Customized Service Is Available