



CNC 職人のこだわり



MONGTEC.COM

## 廖宇駿 Jun Liao

盟鈦精密 MONGTEC 創辦人  
Founder of MONGTEC



### 創辦人介紹

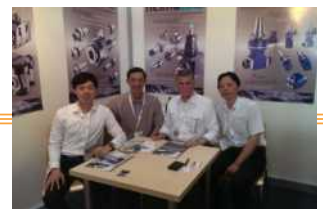
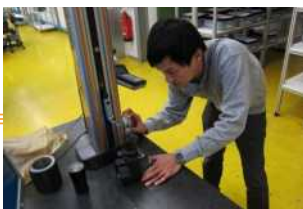
熱愛鑽研機械加工的盟鈦精密創辦人廖宇駿，多年前前往德國，這個眾所皆知的機械製造和汽車工業大國，在工廠從材料、加工、成品、售後、維修、營運...等，歷經了各個階段完整的扎實訓練。

接著接手整個亞太區的營運及展覽，走遍亞洲各國，負責開發並管理亞太 13 個國家的代理商與營運策略。

### Founder & CEO

The founder Jun Liao, who has great passion for mechanical processing, set out on his journey in Germany many years ago, where he has explored and expanded his horizons at a driven tools factory. While working there, he underwent comprehensive and solid training by engaging in each stage of the process, from materials to processing, finished products, after-sales service, maintenance, and operations.

Later, he was responsible for the operation and exhibitions throughout Asia-Pacific region. At that time, he traveled alone for business in Asia and devoted his energies on developing and managing agents and operations in 13 countries in Asia-Pacific region.



## 成為 MONGTEC

經歷過多年的磨練，為了將德國、瑞士、義大利等高階 CNC 配件的核心理念導入台灣，廖宇駿創立了盟鈦精密，不斷開發並引進世界第一流的動力刀座與快換夾具等加工配件，並致力於推廣突破傳統思維的歐系加工觀念。同時與歐洲一線動力刀座品牌 ALGRA 簽約亞太區七國總代理，包含台灣、日本、越南、泰國、新加坡、馬來西亞、印尼，負責經銷通路建立與經銷商管理、領導參展、教育訓練等等業務。

除了原有車銑刀塔動力刀座產品外，另以自有品牌 MONTEC 加入加工中心與車銑複合機專用：刀桿、角度頭、ER 筒夾、測試棒、走心式刀座.....等產品，出口全世界。

## Becoming MONGTEC

After hard training for years, Jun Liao hoped to promote the core belief in high-end CNC components acquired from Germany, Switzerland, Italy, etc. into Taiwan, he founded MONGTEC Precision, continuously to develop and introduce advanced European processing mindset like driven tools and quick change collect chucks, etc.

At the same time, he signed a contract with ALGRA, the European first-line driven tool brand, as the general agent in the Asia-Pacific region included Taiwan, Japan, Vietnam, Thailand, Singapore, Malaysia, and Indonesia. We are responsible for the establishment of distribution channels, dealer management, leadership participation in exhibitions, education and training, etc.

We also build our own brand, MONGTEC, which offers a variety of products including tool holders, angle heads, ER collets, test bars, and swiss-type tooling, in addition to original line of turret power tool holders and milling machine accessories. All these products are exported worldwide.

盟鈦精密與 ALGRA.S.P.A. 於義大利總部進行亞太區總代理授權簽約儀式

**The authorization signing ceremony between ALGRA SPA and MONGTEC Precision for the Asia-Pacific region which held at ALGRA SPA's headquartes located at Italy**



# ALGRA 得獎證明 Award certificate



## TOOLHOLDER SPECIALIST

- Quality- 高品質
- Efficiency- 高效率
- Reliability- 可靠
- Innovation- 創新
- Flexibility- 靈活

■ ALGRA 近期獲頒  
 2019年度DMG MORI集團 -  
 全球兩千多個DMG MORI供應商評選 -

➤ 冠軍



## MONGTEC 究極產品

盟鈦精密一直以來不斷思考如何讓加工工具不只是價格戰爭，MONGTEC 掌握不同的加工思維帶領客戶往更高精度、更有效率的方式取得突破，我們希望客戶能超越削價競爭，擁有自主訂價權，因為當您掌握不同的加工工具、方法與技術，做出同業做不到的精度與效率，才能在這如此競爭的時代仍保有利潤，這是 MONGTEC 的使命，也是我們努力想成就客戶乘載驕傲的品質一起走向全世界！

## MONGTEC ultimate products

At MONGTEC Precision, we continuously figure out ways to transform machining tools into a price-independently market. By grasping different machining concepts, we lead our customers towards breakthroughs with higher precision and efficiency. Our expectation is to support our customers in setting their own price without worrying about if it is not competitive. Among so many competitors, we believe the only way to make stable profits is by mastering different machining tools, methods, and technologies while achieving higher precision and efficiency. This is MONGTEC's mission, and we strive to achieve it. It is MONGTEC's commitment to help our customers take pride in the quality of their products and get into global markets with us!



航太工業 Aerospace industry



汽車工業 Automotive Industry



能源工業 Energy industry



醫療工業 Medical industry



- ◆ 車銑複合機 ◆ Milling and turning machines
- ◆ 五軸加工中心 ◆ 5-axis machining centers
- ◆ 特殊專用機 ◆ Specialized machines



- |        |          |                     |                       |
|--------|----------|---------------------|-----------------------|
| ◆ 動力刀座 | ◆ 刀桿配件   | ◆ Driven Tools      | ◆ Tools Holders       |
| ◆ 角度頭  | ◆ 增速器    | ◆ Power Angle Heads | ◆ Jet Spindles        |
| ◆ 快換系統 | ◆ 特殊訂製配件 | ◆ Unichange         | ◆ Special Accessories |



# CNC職人のこだわり

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## 本體

經過特殊處理，搭配德國抗腐蝕性鋼材達到最佳剛性 & 耐震性

## BODY

Re-designed main body to improve rigidity and reduce vibration.

Specially treated corrosion resistant steel body

## 扭力 & 轉速

搭配增速器轉速：32,000 Rpm  
 (標準品轉：6000-12000Rpm)  
 最大切削扭力：160Nm

## Torque and Speed

With Speeder 1:4：32,000 Rpm  
 Standard 1:1：6000~12000Rpm  
 Max Torque：160Nm

## 中心出水 + 外部出水

最大出水壓力：100 Bar

## Internal Coolant

Max Pressure：70-100 bar

## 軸承

斜角滾珠軸承 + 預壓組立，搭配精密 P4 等級滾珠軸承與滾柱軸承，來達到心軸切削時，有最佳剛性與使用壽命。

## 格里森螺旋斜傘齒

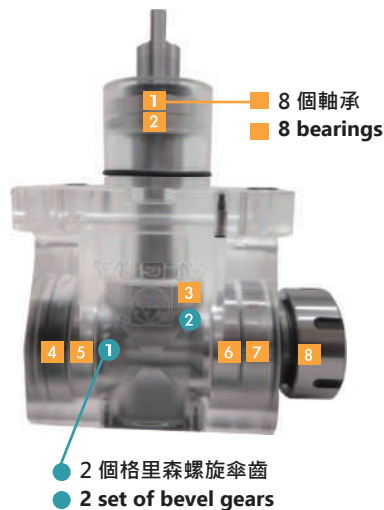
成對研磨來達到最佳精度與傳輸扭力、低噪音與低發熱

## Bearings

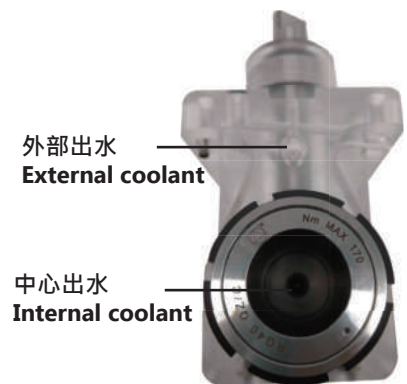
Angular contact preloaded ball bearings of precision class P4 / ABEC 9.

## Internal Coolant

Gleason computer based calculations for the Gleason cut spiral bevel drive gears with ground teeth in order to guarantee a bigger torque.



- 獨家動力刀座專用軸承螺帽  
 ER 16/20/25/32/40
- Exclusive bearing Nut  
 ER 16/20/25/32/40



專利快換系統

Quick Change



中心出水  
 Max 100 bar

Internal coolant



高轉速

Speed



客製化

Special tools



亞太區總部

Asia service center



不限品牌在地維修

Maintenance service



最佳服務

Quality

## 合作廠商 Our Partners

各式機床廠規格，超過6000種組合搭配  
Toolholders for more than 6000 combinations

VDI / BMT / 外部出水 / 中心出水  
VDI / BMT / External coolant / Internal coolant



零度動力刀座  
0 degree driven toolholders

6000~12000 rpm



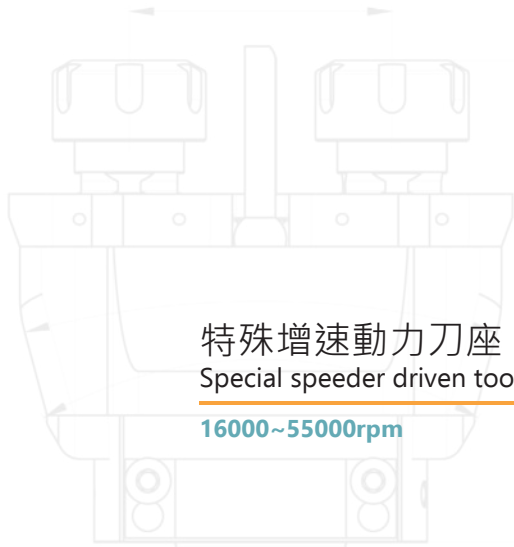
90度動力刀座  
90 degree driven toolholders

4000~12000 rpm



90度雙向動力刀座  
Double 90 degree driven toolholders

4000~12000 rpm



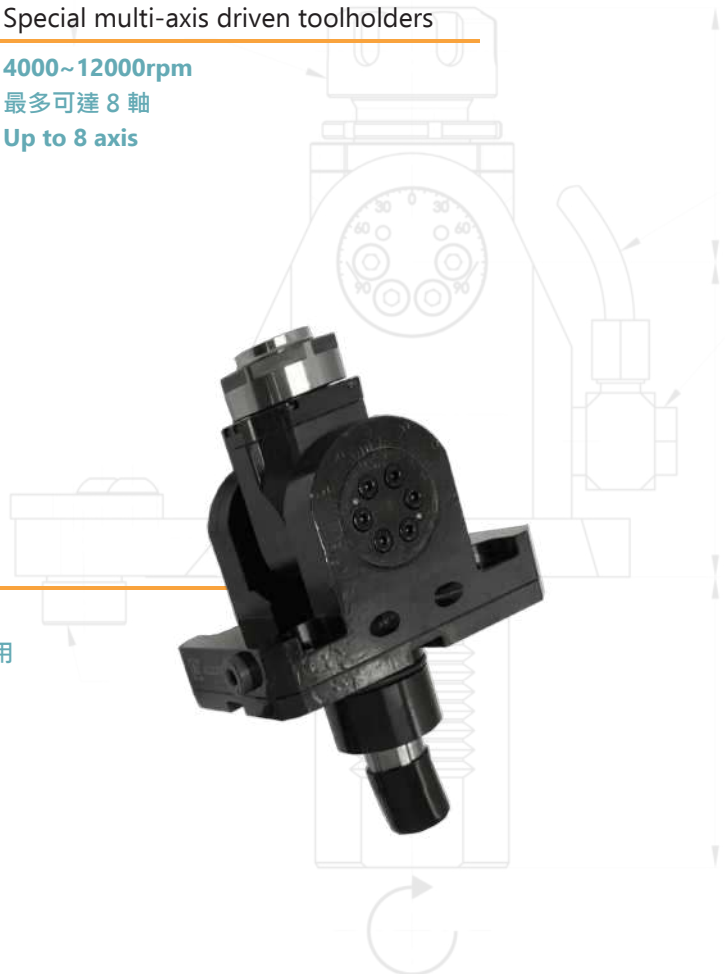
特殊增速動力刀座  
Special speeder driven toolholders

16000~55000rpm



特殊多軸動力刀座  
Special multi-axis driven toolholders

4000~12000rpm  
最多可達 8 軸  
Up to 8 axis



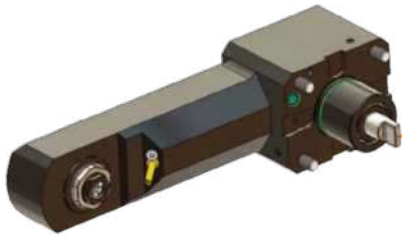
萬向動力刀座  
Universal driven toolholders

4500~12000rpm  
±90 度可調角度 · 滿足斜面斜孔加工應用  
Adjustable angle of ±90 degree



若有其他特殊刀座應用需求，請與盟鈦精密業務聯繫

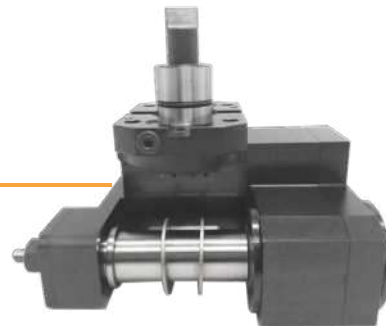
If you have other application requirements for special toolholders, please contact Mongtec sales team.



特殊內槽動力刀座  
Special internal groove driven toolholders

滾齒動力刀座  
Gear hobbing driven toolholders

心軸 16/22/27 · 可調整傾角  $\pm 30^\circ \sim 50^\circ$   
Arbor 16/22/27, Adjustable angle  $\pm 30^\circ \sim 50^\circ$



## CAPTO 快換系統

各式刀座刀桿規格可根據客戶需求訂製

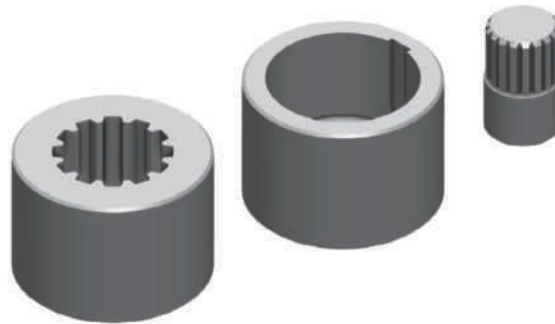
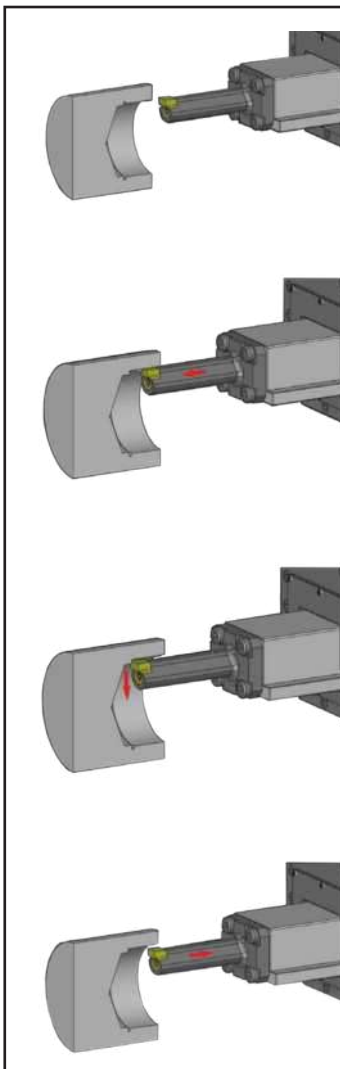
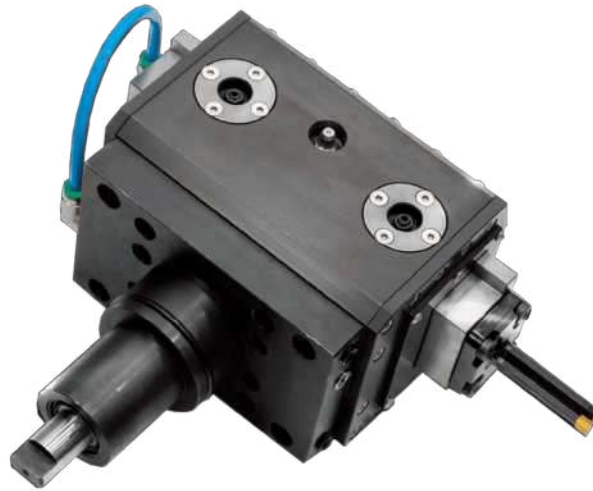
## CAPTO Quick Change System

Toolholders can be customized according to customer's requirement



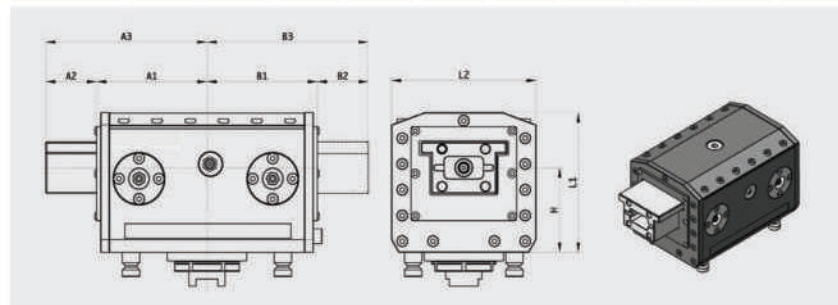
三角拘束錐體 Polygonal cone	重覆定位精度為 $\pm 2\mu\text{m}$ 。 Repeat accuracy is $\pm 2\mu\text{m}$ .
可耐高壓出水 High pressure coolant	耐高壓達 130 bar 可延長刀具使用壽命與工件精度。 High pressure coolant supply up to 130 bar increases efficiency and extends tool life.
快速換刀 Quick change	30 秒內即可完成換刀任務。 Quick change inserts within 30 seconds.

衝齒刀座 Broaching Unit Toolholders



DIFFERENT SIZES

SLOTTER NUMBER	STROKE (mm)	A1 (mm)	A2 (mm)	A3 (mm)	B1 (mm)	B2* (mm)	B3 (mm)	L1 (mm)	L2 (mm)	L3 (mm)
ALST-25	25	50	27	77	46	27	73	52	63	30
ALST-35	35	76	35	111	76	35	111	95	100	58
ALST-50	50	91	50	141	76	50	126	95	110	58
ALST-65	65	106	65	171	76	65	141	97	125	57.5



\* Dimension to consider during machining

若有其他特殊刀座應用需求，請與盟鈦精密業務聯繫，量大接受OEM 代工生產  
If you have other application requirements for special toolholders, please contact Mongtec team, we accept OEM service for machine makers



外徑固定刀座  
OD static toolholders

端面固定刀座  
Face static toolholders



雙側外徑固定刀座  
Double OD static toolholders

訂製固定刀座  
Custom made toolholders





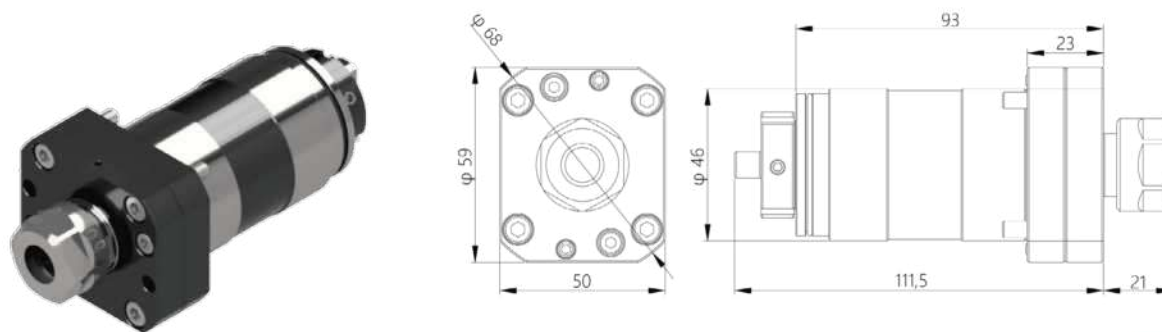
內徑刀座  
ID static toolholders

雙內孔內徑刀座  
Double boring static toolholders

分度內孔固定刀座  
Index boring toolholders



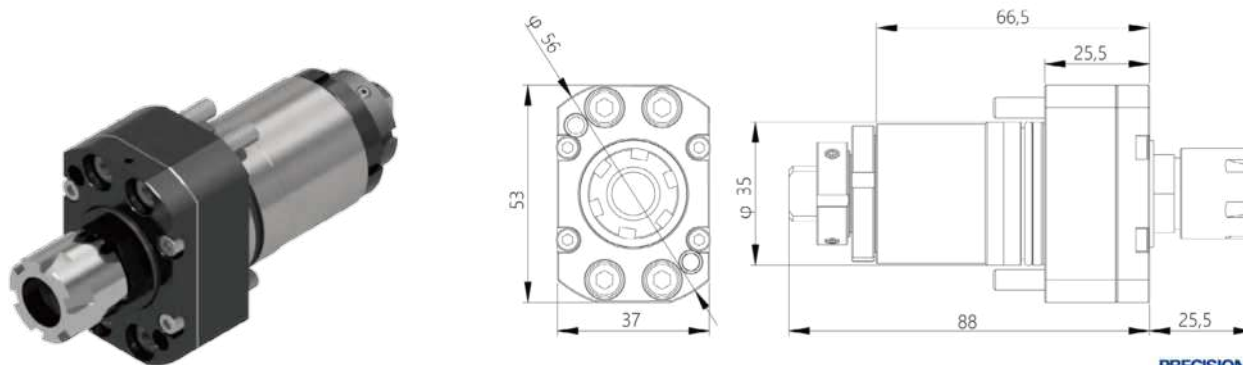
## 正面側銑直柄動力刀座 Axial toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	46	1 : 1	6000rpm	ER16	3268-T051	3268-T051

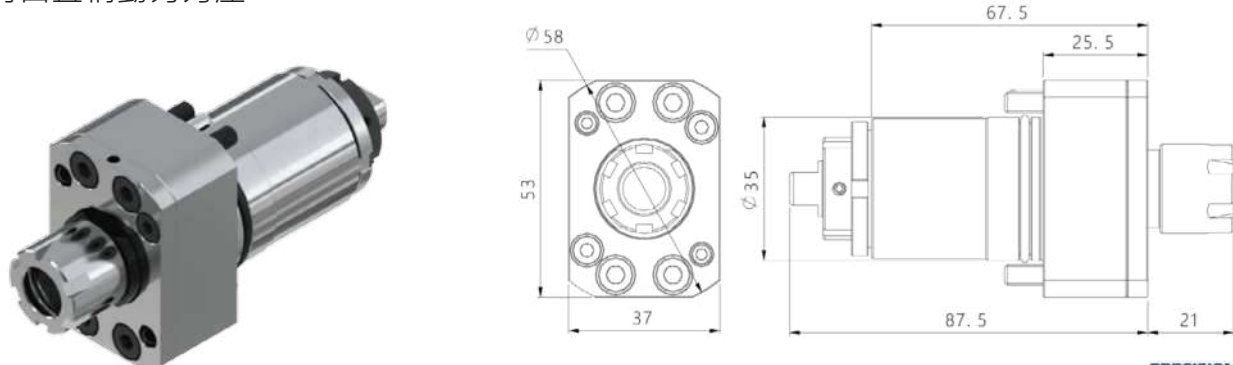
## 背面直柄動力刀座 Axial toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	35	1 : 1	8000rpm	ER16	3281-S080	3281-S080

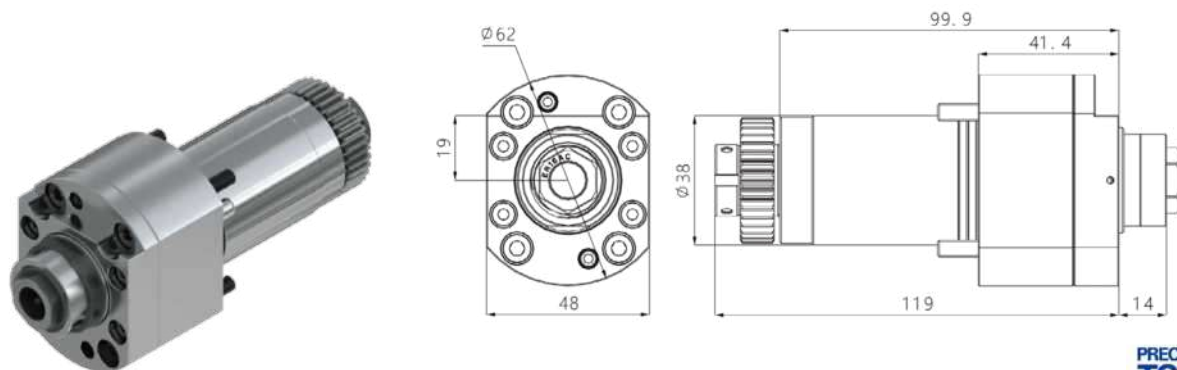
## 背面直柄動力刀座 Axial toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	35	1 : 1	8000rpm	ER16	3281-Z79098	3281-Z79098

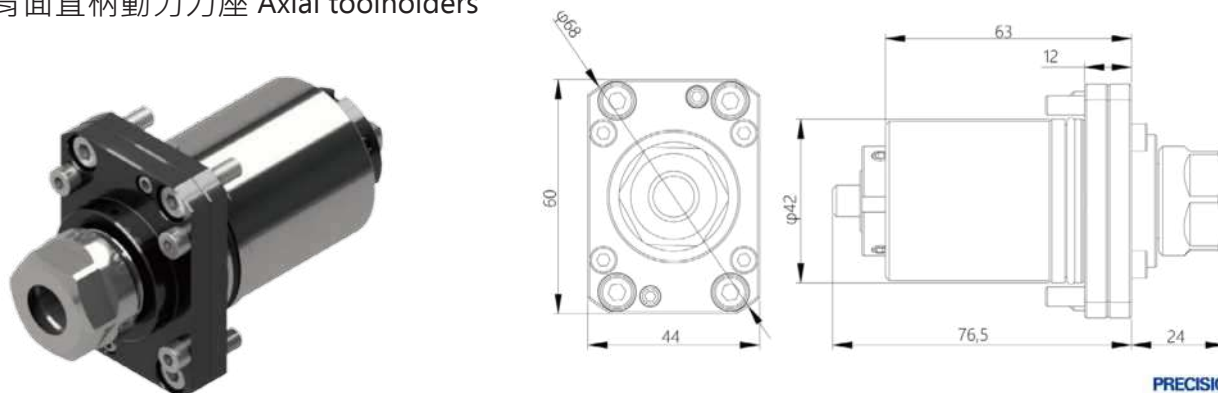
## 正面側銑直柄動力刀座 Axial toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	38	1 : 1	6000rpm	ER16	3281-Z74045-0100	3281-Z74045-0100

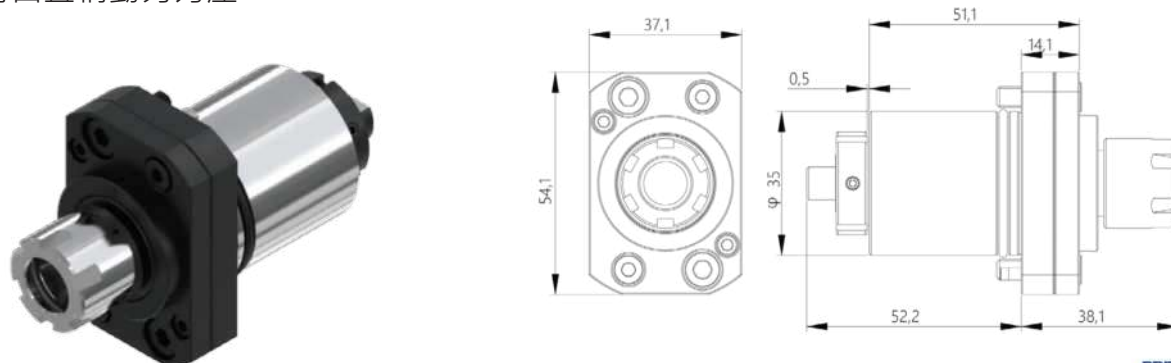
## 背面直柄動力刀座 Axial toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	42	1 : 1	6000rpm	ER16	3282-Y041	3282-Y041

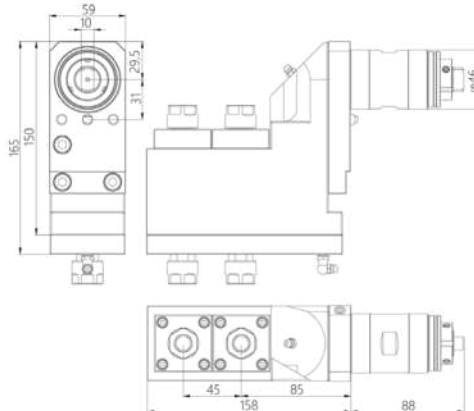
## 背面直柄動力刀座 Axial toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	35	1 : 1	6000rpm	ER16	3220-Y7072	3220-Y7072

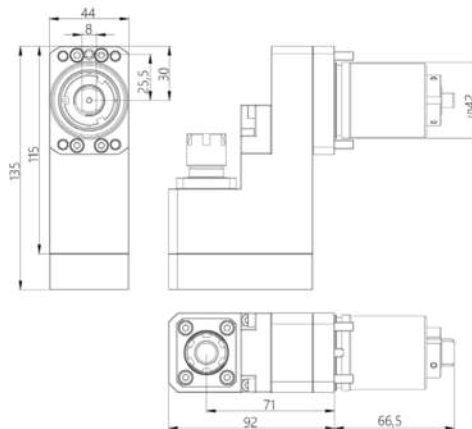
## 正面 2 軸雙向動力刀座 Radial 4 spindles toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	46	1 : 1	6000rpm	ER16	3282-Y901	3282-Y901

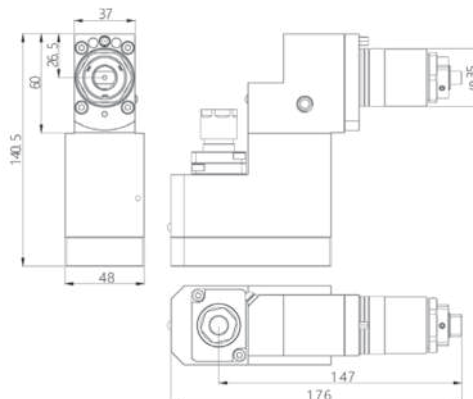
## 背面側銑單向動力刀座 Radial offset toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	42	1 : 1	6000rpm	ER16	3290-Y041	3290-Y041

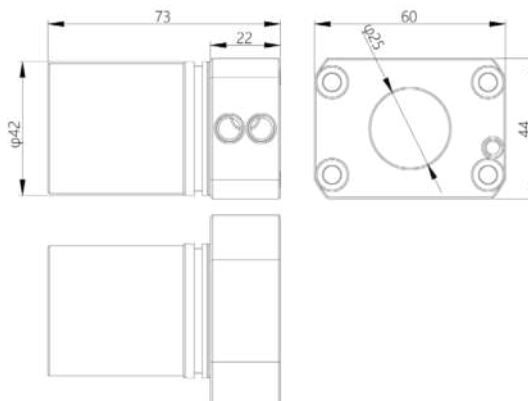
## 背面側銑單向動力刀座 Radial offset toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	35	1 : 1	8000rpm	ER16	3281-Y461-9010	3281-Y461-9010

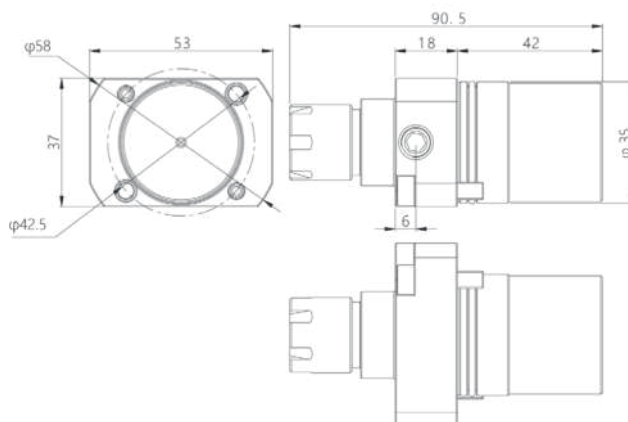
## 變徑套 (中心出水) Sleeves(internal coolant)



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
25.0	42	-	-	-	3282-Y212	3282-Y212

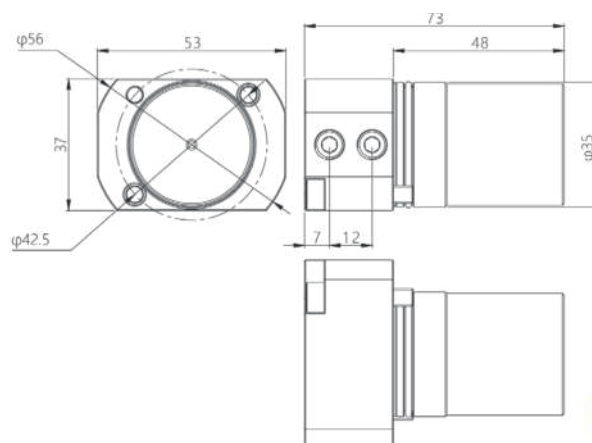
## 背面鑽孔座 Static drilling toolholders



PRECISION  
TSUGAMI

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
10.0	35	-	-	ER16	3282-Z71051-9010	3282-Z71051-9010

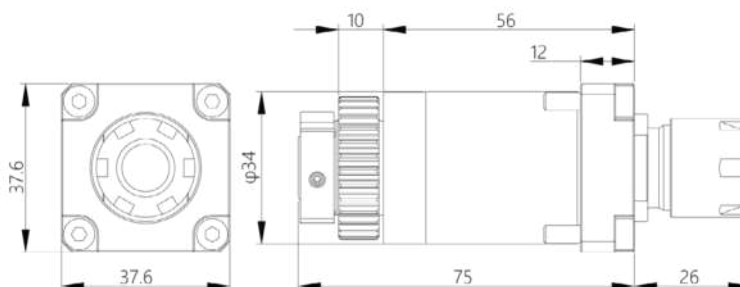
## 變徑套 Sleeves



PRECISION  
TSUGAMI

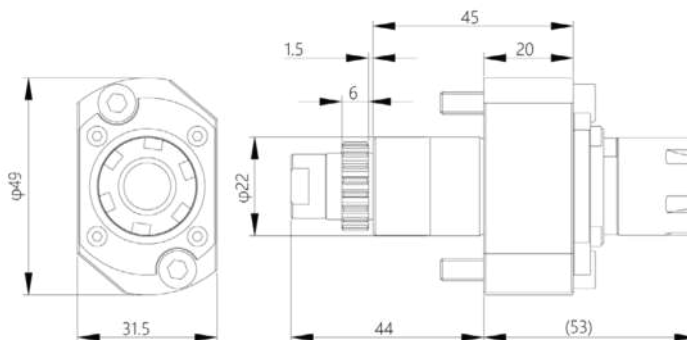
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	TSUGAMI 編號 TSUGAMI Code
20.0	35	-	-	-	3281-Z79055-0302	3281-Z79055-0302

## 側銑直柄動力刀座 Axial toolholders



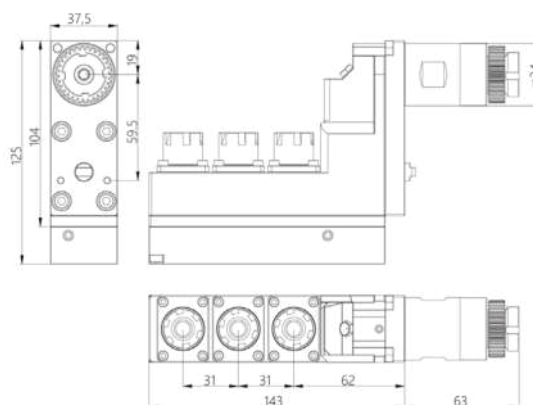
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0	34	1 : 1	8000rpm	ER16	33150	33150

## 背面直柄動力刀座 Axial toolholders



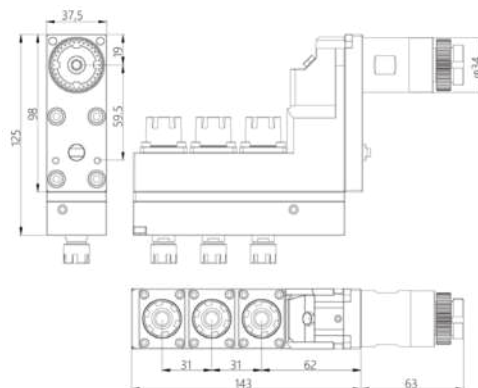
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0	22	1 : 1	6000rpm	ER16	57161	57161

## 正面 3 軸單向動力刀座 Radial 3 spindles toolholders



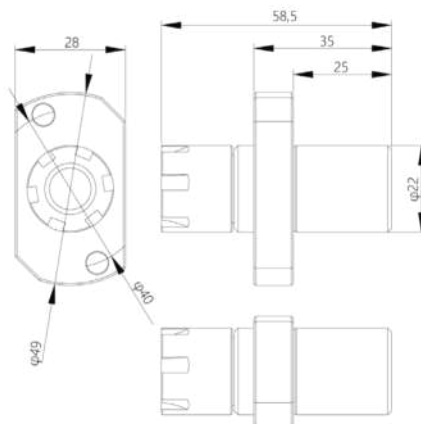
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0	34	1 : 1	6000rpm	ER16	66151	66151

## 正面 3 軸雙向動力刀座 Radial 6 spindles toolholders



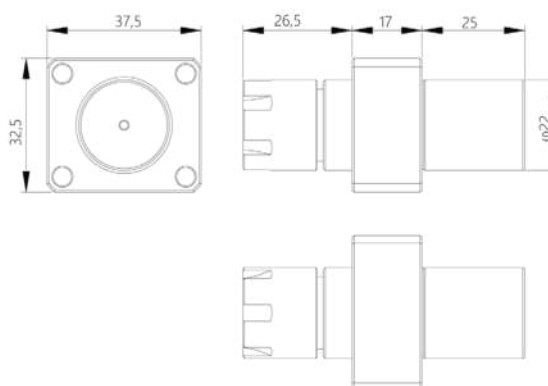
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0/7.0	34	1 : 1	6000rpm	ER16/ER11	67161	67161/OM155

## 背面鑽孔座 Static drilling toolholders



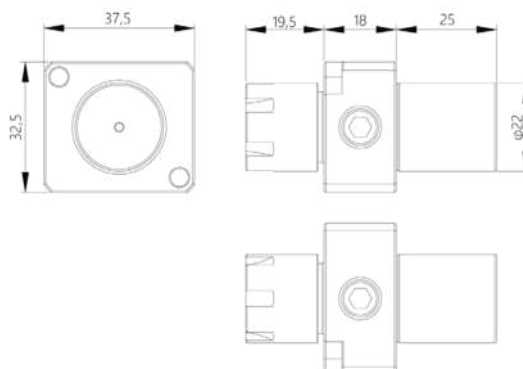
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0	22	-	-	ER16	54121-01	54121-01

## 背面鑽孔座 Static drilling toolholders



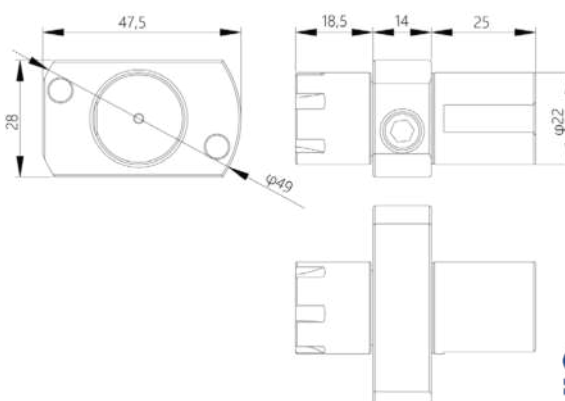
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0	22	-	-	ER16	OR122	OR122

## 背面鑽孔座 ( 中心出水 ) Static drilling toolholders ( Internal coolant )



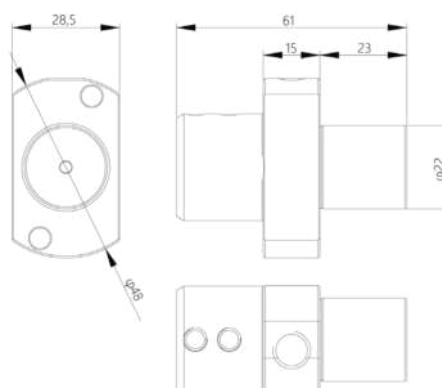
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0	22	-	-	ER16	OR123	OR123

## 背面鑽孔座 ( 中心出水 ) Static drilling toolholders ( Internal coolant )



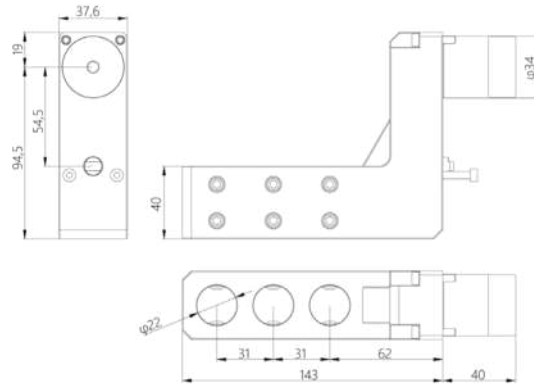
最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
10.0	22	-	-	ER16	67127	67127

## 背面側固刀座 ( 中心出水 ) Static drilling toolholders ( Internal coolant )

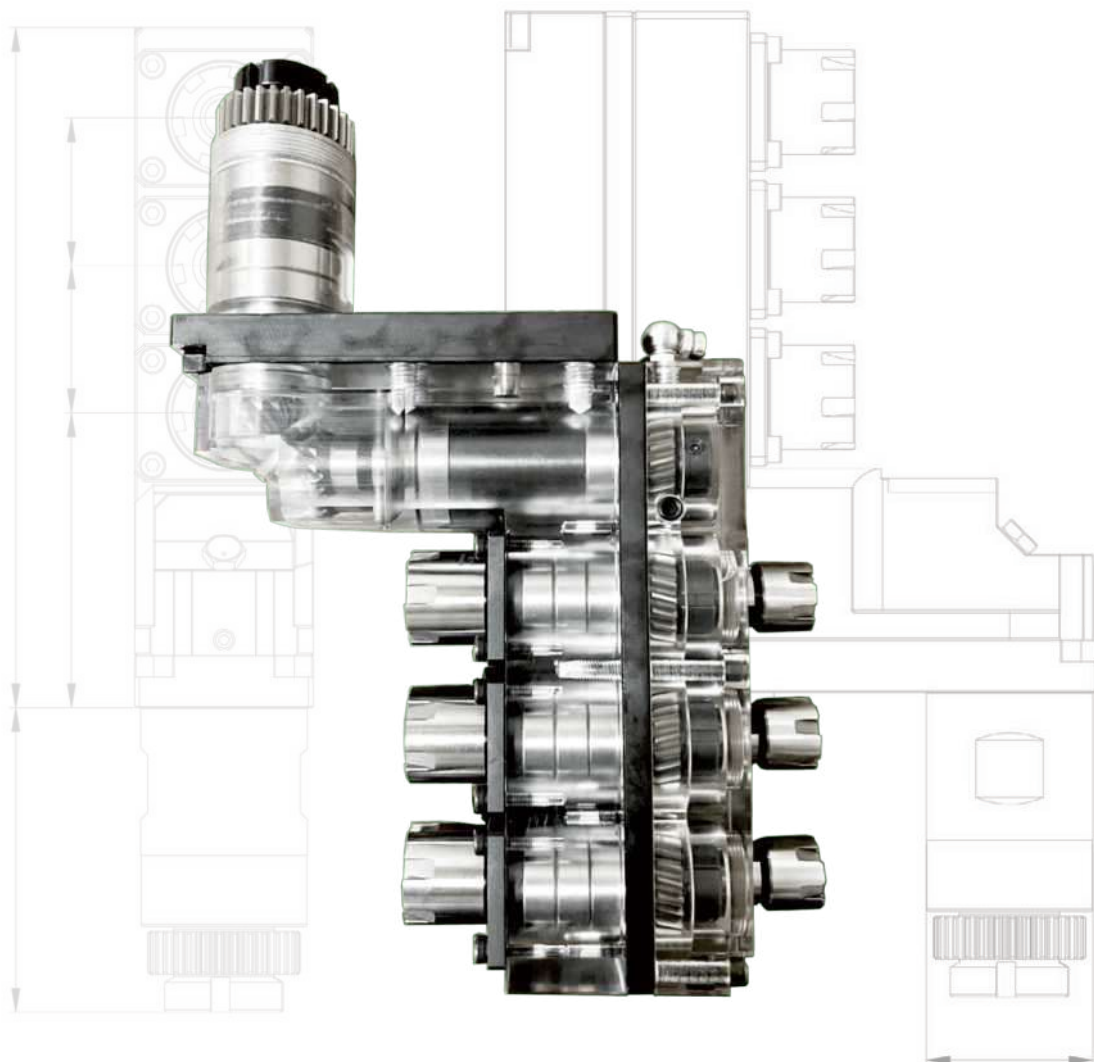


最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
6/8/10/12/16	22	-	-	-	B2E22	B2E22

正面 3 孔 / 鑽孔座 Static 3 toolholders

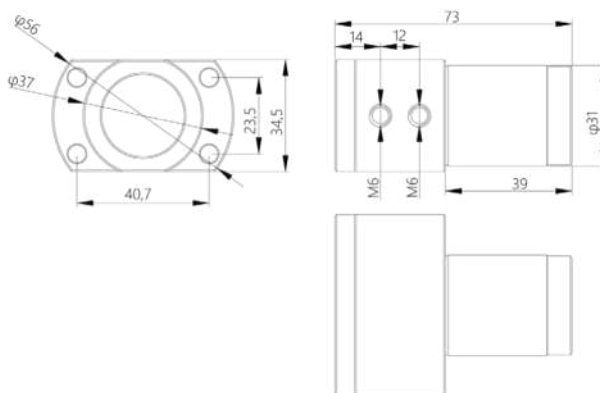


最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	STAR 編號 STAR Code
22	34	-	-	-	STAR34322	STAR34322





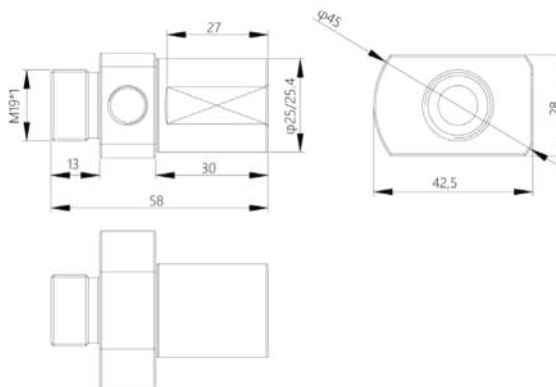
## 變徑套 Sleeves



CITIZEN

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	CITIZEN 編號 CITIZEN Code
25.4	31	-	-	-	SAU825	SAU825

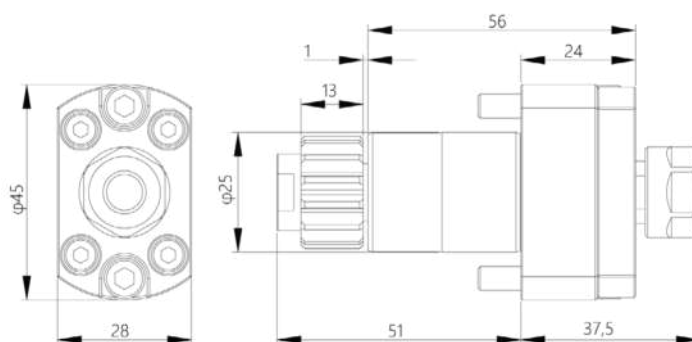
## 背面鑽孔座 (中心出水) Static drilling toolholders (Internal coolant)



CITIZEN

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	CITIZEN 編號 CITIZEN Code
19.05	25/25.4	-	-	-	CDE1025/GDE10254	-

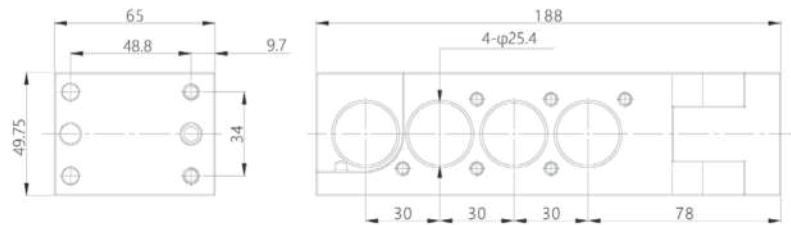
## 背面回轉刀座 Axial toolholders



CITIZEN

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	CITIZEN 編號 CITIZEN Code
7.0	25	1 : 1	10000rpm	ER11	MSC507	MSC507

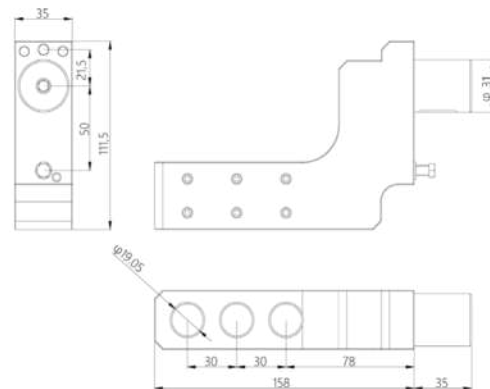
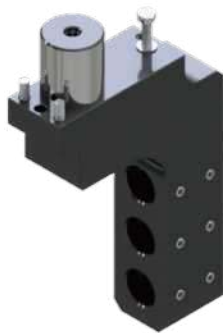
## 正面 4 孔鑽孔座 Static 4 holes drilling toolholders



CITIZEN

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	CITIZEN 編號 CITIZEN Code
25.4	-	-	-	-	GDF1801	GDF1801

## 正面 3 孔 / 鑽孔座 Static 3 holes drilling toolholders



CITIZEN

最大刀具夾持 Max tool shank	柄徑 Shank diameter	速比 Ratio	最高轉速 Maximum speed	筒夾規格 Collet	型號 Model	CITIZEN 編號 CITIZEN Code
19.05	31	-	-	-	GDF1207	GDF1207



## 角度頭系列 Power Angle Heads

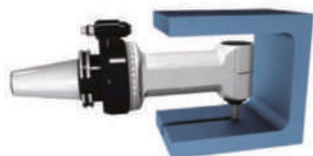
- ◆ BT/HSK/CAPTO 接口
- ◆ 角度頭方向可作360 度調整
- ◆ BT/HSK/CAPTO interface



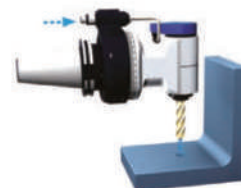
在有限制的空間下加工  
Ideal for Micromachining in narrow spaces



各式銑削·鑽孔·攻牙加工  
Ideal for milling, drilling, tapping at  $\pm 90^\circ$



加長型本體可在深/長空間加工  
Long Series for machining at deep position



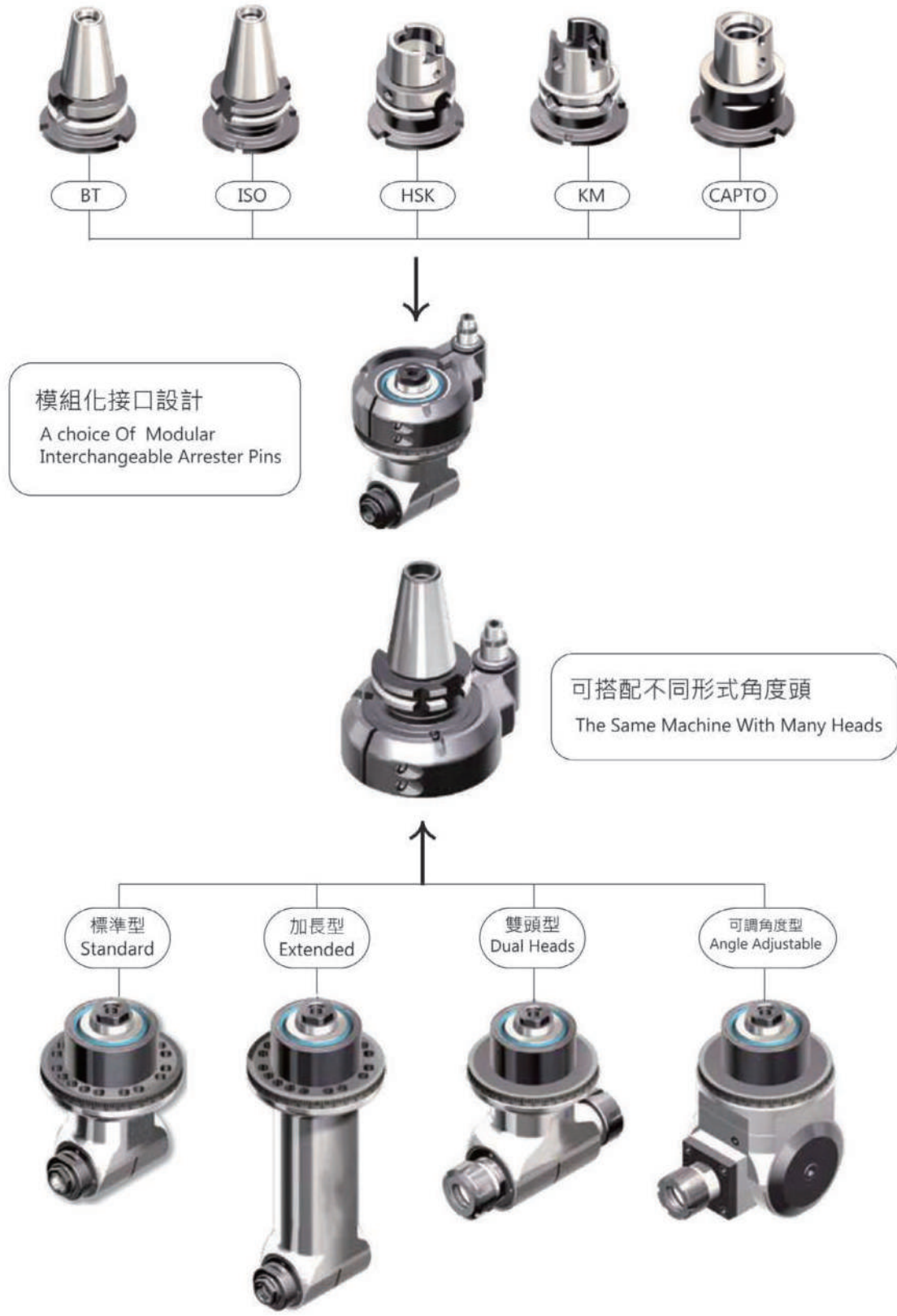
通過定位銷的切削液來達到刀具中心出水功能  
With coolant input from positioning Pin and output through the tool



後縮型本體可閃避空間上的干涉·也具有  
刀具中心出水功能  
Offset series for machining in narrow spaces with coolant input directly from machine spindle and output through the tool at 70 BAR



可調式角度頭適合任意角度工件加工  
Adjustable output at  $\pm 90^\circ$  for tilt drilling, milling and tapping



## 水壓增速器 Jet Spindles

### 使用優勢

- ◆ 一般主軸加工僅6000-15000rpm, 透過15-70bar 水壓可將刀具推升到55000rpm, 節省70% 加工時間
- ◆ 各種接口可選擇 BT/HSK/ER/Capto/ 直柄
- ◆ 可ATC 換刀, 無須定位
- ◆ 搭配晶片傳輸顯示加工刀具轉速
- ◆ 優異精度達0.003mm

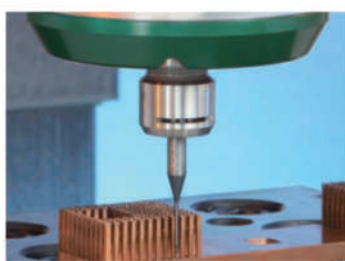


### Advantage

- ◆ The general spindle speed is only 6000-15000rpm, and the tool can be pushed up to 55000rpm through 15-70bar coolant pressure, saving 70% of cycle time
- ◆ Various interfaces can choose BT/HSK/ER/Capto/straight
- ◆ Tool can be changed by ATC
- ◆ Display processing tool speed with chip transmission
- ◆ Excellent run out within 0.003mm



### 水壓增速器的應用 Applications



銑削  
MILLING



鑽孔  
DRILLING



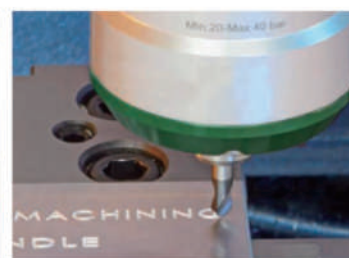
研磨  
GRINDING



銑牙  
THREAD MILLING



導角  
CHAMFERING



精雕  
ENGRAVING

## 歸零螺帽 Zero Nuts

歸零螺帽是超精密加工萬用型的秘密武器  
 本身除了鎖固筒夾以外，透過螺帽上有的「六個」螺絲調整  
 刀具的偏擺精度讓您的鉸刀、鑽頭、銑刀 不受刀具伸  
 長後的偏擺影響

### Product Features:

- ◆ Correction of runout errors and misalignment
- ◆ For metallic sealed and normal collets as per DIN 6499 / ISO 15488

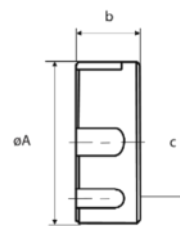
### Product Advantages:

- ◆ Compatible with all tool holders for collets as per DIN 6499 / ISO 15488
- ◆ Easy to set
- ◆ Maximum process capability due to correction of runout
- ◆ Extended tool life due to perfect runout
- ◆ Highest quality of bores due to correction of runout



共 6 顆油路螺絲孔位  
 A total of 6 oil circuit screw holes

搭配 AA 級筒夾  
 With AA grade collet



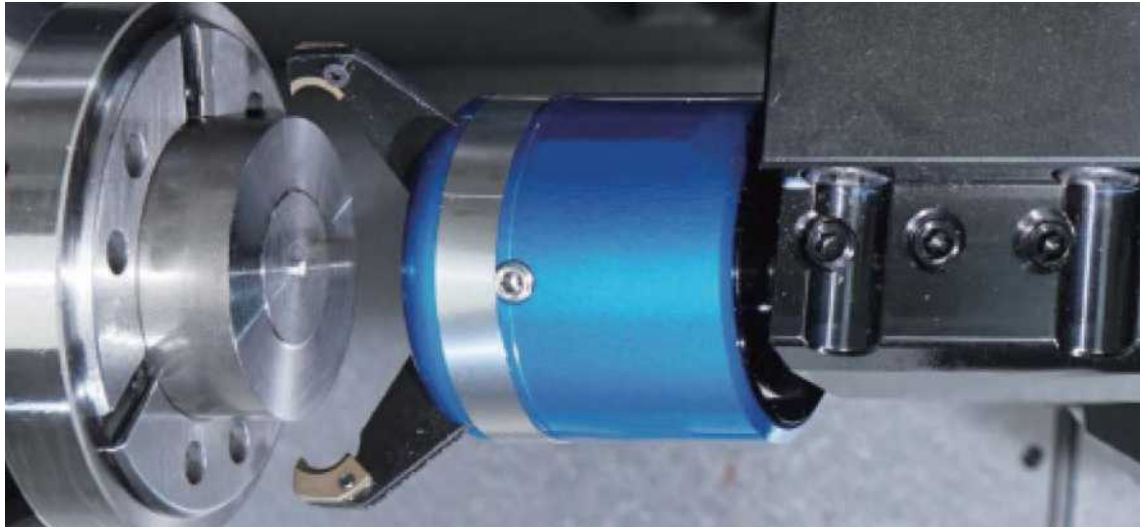
### 規格表 Specification Sheet

Part Number	Tool Max	$\phi$ a	b	Hex Key
ER 16	10 mm	34 mm	20 mm	2.0 mm
ER 20	13 mm	42 mm	20 mm	2.0 mm
ER 25	16 mm	50 mm	22 mm	2.5 mm
ER 32	20 mm	63 mm	23 mm	2.5 mm
ER 40	30 mm	79 mm	28 mm	3.0 mm

### 使用步驟 Steps for usage

<p>Step 1.</p> <p>先放鬆調整螺絲 Loosen and adjust the screws first.</p>	<p>Step 2.</p> <p>將刀具鎖上後，再鎖上側邊的調整螺絲 Lock the cutting tool first, and then lock the side adjustment screw.</p>	<p>Step 3.</p> <p>測量要歸零的刀具現行偏擺精度 Measure the current runout accuracy of the tool that needs to be zeroed</p>	<p>Step 4.</p> <p>調整側邊螺絲偏擺精度校正到所需要的精度 Adjust the runout accuracy of the tool by adjusting the side screw until the desired accuracy is achieved.</p>	<p>Step 5.</p> <p>完成 Done.</p>
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## 水壓抓料器 Grippers

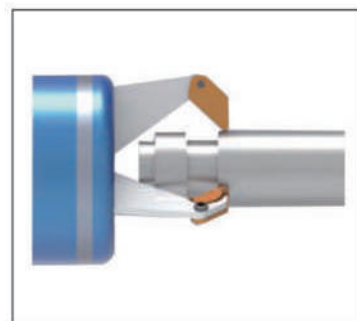
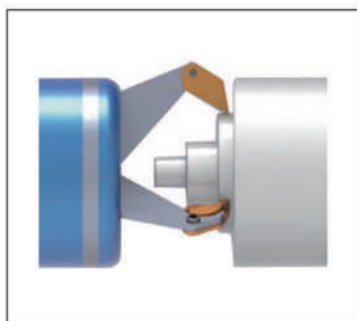
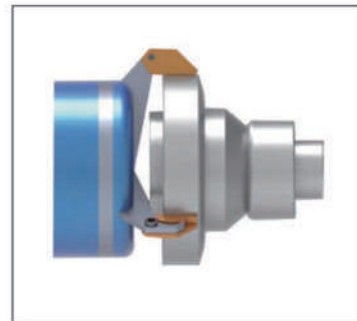
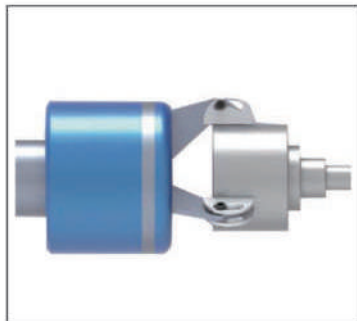


### 優勢

- ◆ 可用冷卻液或壓縮空氣來驅動
- ◆ 快速安裝，無需另外安裝其他件
- ◆ 夾爪可以很靠近夾具，棒材殘材短
- ◆ 直接安裝機台切削水即可使用
- ◆ 可直接夾持六腳棒材
- ◆ 只需 0.5 Bar 就可驅動水壓抓料器

### Advantage

- ◆ Stationed at the turret
- ◆ Driven by coolant
- ◆ Controlled by the NC-PROGRAMME





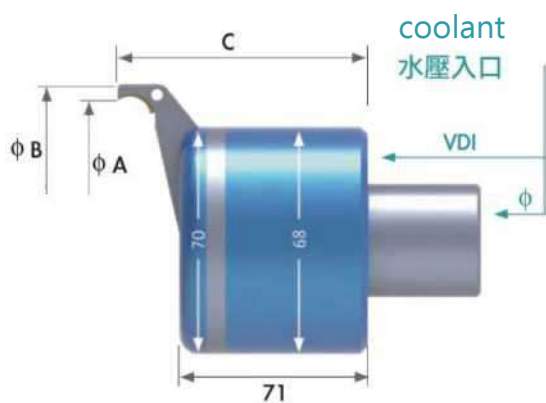
標準本體 Standard  
 $\phi 2$  : 60 mm  
 $\phi 3$  : 80 mm  
 $\phi 7$  : 105 mm



小型本體 Small  
 $\phi 2$  : 52 mm

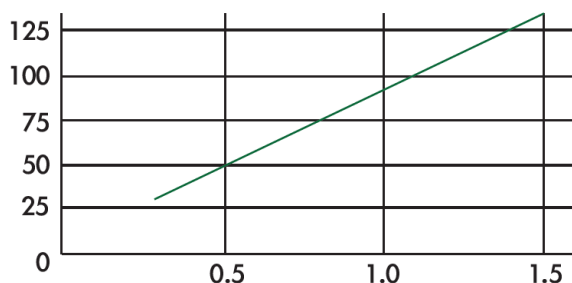


迷你型本體 Mini  
 $\phi 0$  : 38 mm



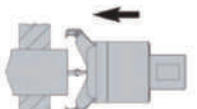
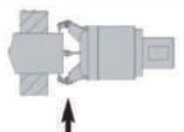
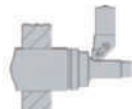
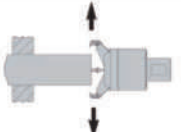
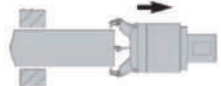
	$\phi A$	$\phi B$	C
2 - 60 mm	64 mm	83 mm	89 mm
3 - 80 mm	83 mm	102 mm	94 mm
7 - 105 mm (Option)	110 mm	129 mm	108 mm

夾持力 (KG)



水壓壓力 (Bar)

## 使用步驟 Steps for usage

 <p>Step 1.快速接近工件 Grippex approaches bar to be pulled</p>	 <p>Step 2.開啟切削水夾住工件 Coolant ON for Grippex to clamp</p>	 <p>Step 3.鬆開夾具後拉取工件 Chuck unclamp, turret moves back along Z-axis and stops exactly at programmed position</p>	 <p>Step 4.夾持工件 · 關閉水壓 Chuck clamp; coolant OFF. Grippex unclamp; turret retracts</p>	 <p>Step 5.啟動程式加工工件 Being machining new par</p>
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# 十秒快換夾具 10 seconds quick change collet chucks

## 優勢

- ◆ 更好夾持力與剛性
- ◆ 可承受高切削能力
- ◆ 縮短工件加工時間
- ◆ 大大提升產能
- ◆ 公司獲利與成長力道大幅提升

## Advantage

- ◆ Exceptional Grip Force and Rigidity
- ◆ More Aggressive Chip Removal Rates
- ◆ Faster Cycle Times
- ◆ Increased Throughput
- ◆ Higher Profits



## 手動卸爪器

輕鬆壓放快速換置夾固頭只需數秒

### Collet Changing Tools

Pressing and releasing the trigger, collet changes take only few seconds.



### 規格 TYPE

32

42

52

65

80

100

125

160

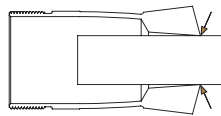
## 比較 Comparison

### 快換夾頭 Collet Chucks



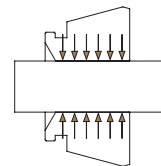
傳統彈簧筒夾  
Traditional spring type collet

更換時間長  
單點夾持力較不足  
Longer setup time  
Only single point gripping



快換夾固頭  
Quick Change collet

10 秒快換  
整段平行夾持力提升數倍  
Collet changes less than 10 seconds  
Better parallel workpiece gripping



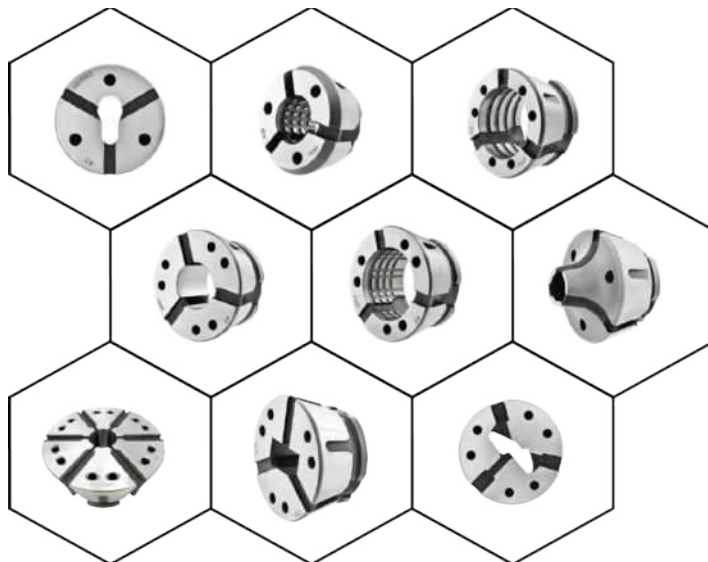
### 銑床 / 五軸加工機專用夾頭 Mill/5 Axis Machining Center Chucks



### 十秒快換 Less than 10 seconds



## 夾固頭 Collets



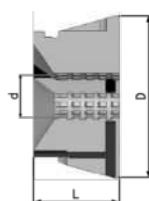
### 優勢

- ◆ 夾固頭錐度貼合夾固頭本體，在動作時，呈現整段平行夾持，夾力是傳統筒夾的 5-10 倍
- ◆ 硫化橡膠提供優異的彈性
- ◆ 良好的制震能力
- ◆ 減低加工刀具磨耗
- ◆ 減低夾固頭磨耗
- ◆ 10 秒快換
- ◆ 硬度達 HRC60 度以上，良好的剛性與壽命
- ◆ 可提供特殊形狀訂製

### Advantage

- ◆ Parallel workpiece gripping
- ◆ Vulcanized rubber creates great gripping range
- ◆ Reduction of vibrations
- ◆ Less tool wear
- ◆ Less wear on the collet
- ◆ Collet changes less than 10 seconds
- ◆ Heat treated up to HRC60 with vulcanized rubber, which performs best rigidity and life time
- ◆ Capable of custom designed collets

## 夾固頭規格 Collet Apifications



A = 孔 / Bore		
L	研磨型	smooth
R	粗齒型(R)	with radial grooves
S	粗齒型(S)	with radial and longitudinal grooves
W	可修型	emergency collet

Type	Ref.	L	D	d	d	d	d	d	d
32	32L	44	57.7	4-32	L	7-27	L	7-22	L
	32R	44	57.7	8-32	R	8-27	R	8-22	R
	32S	44	57.7	11-32	S				
	32EM	44	57.7	4-32	W				

Type	Ref.	L	Ref.	L	D	d	d	d	d
42	42L	42	42BL	47	79.3	4-42	L	7-36	L
	42R	42	42BR	47	79.3	8-42	R	8-36	R
	42S	42	42BS	47	79.3	11-42	S		
	42EM	42			79.3	4-42	W		

Type	d	A
42	7-30	L
	8-30	R

※尺寸為mm  
Dimensions in mm  
※其他尺寸與特殊形狀可接單客製  
Capable of custom designed collets

Type	Ref.	L	D	d	d	d	d	d	d
52	52L	46	79.3	4-52	L	7-45	L	7-36	L
	52R	46	79.3	8-52	R	8-45	R	8-36	R
	52S	46	79.3	11-52	S				
	52EM	46	79.3	4-52	W				

Type	Ref.	L	Ref.	L	D	d	d	d	d
65	65L	53	65BL	58	99.5	4-65	L	7-56	L
	65R	53	65BR	58	99.5	8-65	R	8-56	R
	65S	53	65BS	58	99.5	11-65	S		
	65EM	53			99.5	4-65	W		

Type	d	A
65	7-46	L
	8-46	R

Type	Ref.	L	D	d	d	d	d	d	d
80	80L	53	114.5	4-80	L	7-68	L	7-56	L
	80R	53	114.5	8-80	R	8-68	R	8-56	R
	80S	53	114.5	11-80	S				
	80EM	53	114.5	4-80	W				

## 專利快換系統 Patented Unichange



- ◆ 模組化快換系統 - 適用所有 ER 系統 - 不限品牌
  - ◆ 減少換刀時間，提升加工效率
  - ◆ 萬用模組化高扭力快換系統
  - ◆ 不綁規 - 可用於市面上任何品牌
    - ◆ ER 系統 - VDI/BMT 刀座
    - ◆ BT/HSK 角度頭與刀桿
  - ◆ 替換簡單
  - ◆ 減少客戶開銷
  - ◆ 無論中心出水或外部出水，皆可適用
- ◆ Universal: suitable for all ER collet.
  - ◆ Easy to remove with the one-hand wrench.
  - ◆ Presetting inside or out of the machine.
  - ◆ All UNI-CHANGE adapters are suitable for ER toolholder with external and internal coolant supply

專利軸承螺帽 Bearing Nut



### 內牙式快換系統 For ID Thread

專利軸承螺帽 Bearing Nut



### 外牙式快換系統 For OD Thread

專利軸承螺帽 Bearing Nut



## 不銹鋼萬向曲管 Stainless Tubes



應用於金屬加工  
[ 給水、給油、吹氣 ]  
可結合各式噴嘴、本體、延長桿、接頭

Applications on Metal  
[ Water、Oil、Air Blow ]  
High Pressure 100Bar



# 主軸精密測試棒 Spindle Test Bars

BT/BBT/HSK/SK/CAPTO/ER



材質：SNCM420H



錐度公差 Taper Tolerance	真圓度	表面粗糙度 Surface roughness	偏擺精度 Yaw accuracy	圓筒度 Cylindricity
AT2	1µm	Ra < 0.15µm	3µm	5µm

## 100% 精度保證 100% Accuracy Guarantee

每一只主軸精密測試棒皆經由高精度量測儀器把關，出廠附有專屬的檢驗報告

Every test bars is checked by high-precision measuring machines, and a factory inspection report will be included in the product



## 主軸精密測試棒的使用效益？ Advantage



1. 量測機台主精度最理想的工具
2. 定期檢驗主軸精度，使刀桿發揮最大加工性能提高產量
3. 確保加工精度、延長刀具使用壽命
4. 及早發現及早治療，檢視主軸潛在問題的利器，省下停機、時間和不必要的成本。
5. 提升刀具壽命、刀桿性能及產能

1. The most ideal tool for measuring the main precision of the machine
2. Regularly check the accuracy of the spindle to maximize the processing performance of the tool holder Yield
3. Ensure machining accuracy and prolong tool life
4. Improve tool life, tool holder performance and productivity

## DIN6499 - ER 3μ 止水筒夾 ER Sealed Collets

高壓中心出水 刀座/ 刀桿適用，100Bar 耐高溫  
 High-pressure 100Bar high temperature resistance



ER11	MM	3	3.5	4	4.5	5	5.5	6	6.5	-	-	-
	INCHES	3/32	1/8	5/32	7/32	1/4	-	-	-	-	-	-

ER16	MM	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
		8.5	9	9.5	10	-	-	-	-	-	-	-
	INCHES	3/32	1/8	5/32	7/32	1/4	9/32	5/16	11/32	3/8	13/32	-

ER20	MM	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
		9	9.5	10	10.5	11	11.5	12	12.5	13	-	-	-
	INCHES	1/8	5/32	7/32	1/4	9/32	5/16	11/32	3/8	13/32	7/16	15/32	1/2

ER25	MM	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
		9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5
		15	15.5	16	-	-	-	-	-	-	-	-	-
	INCHES	7/32	1/4	9/32	5/16	11/32	3/8	13/32	7/16	15/32	1/2	17/32	9/16
		19/32	5/8	-	-	-	-	-	-	-	-	-	-

ER32	MM	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
		9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5
		15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	-
	INCHES	7/32	1/4	9/32	5/16	11/32	3/8	13/32	7/16	15/32	1/2	17/32	9/16
		19/32	5/8	21/32	11/16	23/32	3/4	-	-	-	-	-	-

ER40	MM	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5
		9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5
		15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5
		21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	-
	INCHES	7/32	1/4	9/32	5/16	11/32	3/8	13/32	7/16	15/32	1/2	17/32	9/16
		19/32	5/8	21/32	11/16	23/32	3/4	7/8	1	-	-	-	-

# 減徑刀套 Sleeves for boring bars



D16	無水孔 Non-coolant SIZE	D16-D3	D16-D4	D16-D5	D16-D6	D16-D8	D16-D10	D16-D12	-
D20	無水孔 Non-coolant SIZE	D20-D4	D20-D5	D20-D6	D20-D7	D20-D8	D20-D10	D20-D12	D20-D11
		D20-D14	D20-D16	-	-	-	-	-	-
D25	無水孔 Non-coolant SIZE	D25-D14	D25-D15	D25-D16	D25-D17	D25-D18	D25-D20	D25-D22	-
	有水孔 coolant SIZE	D25-D4	D25-D5	D25-D6	D25-D7	D25-D8	D25-D9	D25-D10	D25-D11
		D25-D12	D25-D13	-	-	-	-	-	-
D32	無水孔 Non-coolant SIZE	D32-D4	D32-D5	D32-D6	D32-D7	D32-D8	D32-D10	D32-D12	D32-D14
		D32-D15	D32-D18	D32-D20	D32-D22	D32-D25	-	-	-
D40	無水孔 Non-coolant SIZE	D40-D5	D40-D6	D40-D7	D40-D8	D40-D10	D40-D12	D40-D14	D40-D15
		D40-D16	D40-D18	D40-D20	D40-D22	D40-D25	D40-D32	-	-
	有水孔 coolant SIZE	D40-D5	D40-D6	D40-D8	D40-D10	D40-D12	D40-D16	D40-D17	D40-D18
		D40-D20	D40-D25	D40-D32	-	-	-	-	-
D50	無水孔 Non-coolant SIZE	D50-D8	D50-D10	D50-D12	D50-D14	D50-D16	D50-D18	D50-D20	D50-D25
		D50-D32	D50-D40	-	-	-	-	-	-
D60	無水孔 Non-coolant SIZE	D60-D20	D60-D25	D60-D32	D60-D40	D60-D50	-	-	-



## 後拉式刀桿 Slim-Fit Collet Chuck



後拉式立銑刀夾頭  
Slim-Fit Collet Chuck



後拉式立銑刀夾頭  
(出水型)  
Slim-Fit Collet Chuck  
(With Coolant Through)



後拉式立銑刀夾頭  
Slim-Fit Collet Chuck



後拉式立銑刀夾頭  
Slim-Fit Collet Chuck

## 熱膨脹刀桿 Shrink Fit Chuck



熱膨脹刀桿  
Shrink Fit Chuck



熱膨脹刀桿  
(威力曲線型)  
Shrink Fit Chuck  
(CUL Type)



熱膨脹刀桿  
(出水孔型)  
Shrink Fit Chuck  
(With CP Coolant Hole)



後拉式刀桿  
Slim-Fit Collet Chuck

## 銑床夾頭 Milling Chuck



防脫刀刀桿  
Non-Pullout Milling Chuck



直式筒夾銑床夾頭  
Multi-Lock Milling Chuck

## 筒夾式刀桿 Collet Chuck



筒夾式刀桿  
Collet Chuck



立銑刀夾頭  
Collet Chuck



筒夾式刀桿  
Collet Chuck



立銑刀夾頭  
Collet Chuck



高速機專用夾頭  
Collet Chuck



立銑刀夾頭  
Collet Chuck



立銑刀夾頭  
Collet Chuck



立銑刀夾頭  
Collet Chuck

## 攻牙刀桿 Tapping Chuck



伸縮 ER 攻牙器  
Expansion ER Tapper



快換式扭力攻牙刀桿  
Quick Change Tapping  
Chuck



同步補償攻牙刀桿  
Synchronized Tapping  
Holder

## 平面銑刀柄 Face Mill Arbor



平面銑刀柄  
Face Mill Arbor



平面銑刀柄  
Face Mill Arbor



平面銑刀柄  
Face Mill Arbor



平面銑刀柄 (加強斜度柄)  
Face Mill Arbor  
(Extension Type)



平面銑刀柄 (加強斜度柄)  
Face Mill Arbor  
(Extension Type)



平面銑刀柄  
(削平兩端輕量型)  
Face Mill Arbor  
(Light Weight Type-With Two  
Flat Sides)

## 可調式刀桿 Runout Adjustable Holder



徑向歸零刀桿  
Radial Zero Adjustable  
Holder



可調式刀桿  
Runout Adjustable Holder

## 車刀應用 Turning insert Application



CAPTO 車刀  
CAPTO Turning Tool



HSK 車刀  
HSK Turning Tool

## 其他 Others



素材  
Blank



轉換套筒  
Adapter



探針刀把  
Touch Probe Holder



側固式立銑刀柄  
Side Lock End Mill Holder



鑽夾頭系列  
Drill Chucks



斜柄鑽頭套筒  
Morse Taper Adapter



油路刀把  
Oil Hole Holder



聯結式銑刀柄  
Combi Shell End Mill  
Arbor



側銑刀柄  
Side Cutter Adapter



螺紋鎖固式刀桿  
Screwed End Mill Holder

## 零配件 Accessories



陶瓷纖維研磨刷  
Ceramic Fiber Brush



鑽石研磨刷  
Diamond Brush



鎖刀座  
Assembly Device



屑片清理器  
Chip Remove



筒夾系列  
Collet Series



拉頭  
Pull Stud



尋邊器  
Edge Finder



Z 軸設定器  
Z Axial Preset Gauge



迴轉式頂針  
Rotary Center

## 維修服務 Maintenance Service

台灣售服中心 · 刀座維修服務

Taiwan service center, Tooling repair service



業界唯一引進德國原廠維修手法，不限品牌在地維修  
針對軸承與斜傘齒經過數年的磨耗，必須做換新的動作來保持最佳精度  
German original maintenance methods, for all brands



使用進口原裝軸承

維修服務含清潔更換軸承、油封、ORING、上油、組裝、校正精度

各式刀座品牌維修：Algra, WTO, heimatec, Eppinger, MT, Evermore, Holdwell  
ALPS, OMAP, Mimatic, EWS, Sauter..... 皆可服務！

Maintenance service includes cleaning replacement of bearings, oil seals, oring, oiling, assembly, and accuracy calibration

Algra, WTO, heimatec, Eppinger, MT, Evermore, Holdwell ALPS, OMAP, Mimatic, EWS, Sauter.....all available!



# INDUSTRY 5.0





MONGTECならではの生き甲斐



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