

簡化加工製程、工作事半功倍
**SIMPLIFY THE MACHINING PROCESS
 AND GET THE RESULT
 WITH HALF THE EFFORT**



TAIWAN R&D MANUFACTURE BRAND - CGM CHUCK

保固：CGM 公司生產之產品自交貨開始，在正常使用及保養下均提供一年保固，品質異常請在保固期間內提出。

本產品並不支援或相容於其也廠牌的系統，如有不當之修改之使用將無法提供保固與服務。

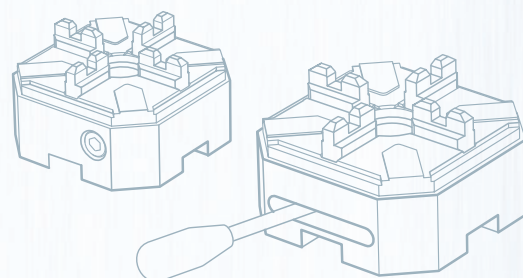
創新技術：本產品已榮獲多項國內外專利，仿冒必究。以卓越產品為目標及精益求精之精神仍不斷改進研發，我們保留技術修改之權利，若有變更恕不另行通知。

Any improper modification will be excluded from the service and warranty.

Innovative technology-CGM tooling system products are with patent.

Any pirations will be pursuit to the fullest extent of the law.

We reserve the right for spec. modification without notice or obligation.



CJC

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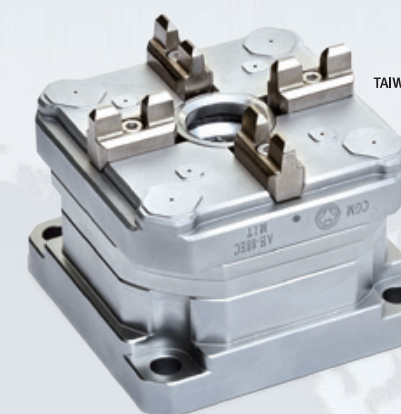
www.cgmchuck.com



**CJC
 CGM**



台灣精品
 TAIWAN EXCELLENCE
 2013



2μm Repeating Position Precision



公司簡介

晟進成立初期是以製造 3C 模具為主，運用瑞士、瑞典、德國等國之高精度放電機夾治具輔助生產模具，亦超過 25 年的時間，對於各廠牌的性能早有相當的經驗與心得，但還不能滿足本廠在模具製作上的需求，為尋求其解決方案，本公司的研發團隊成員經過不斷的測試與修改下，已成功的超越多項突破，並獲得三十項以上之國內外(含美國)專利認證。



經營理念

高品質、高效率、高價值

服務客戶準則

- 提供優質經濟的產品，創造利潤。
- 對於客戶的一切資訊，絕對保密。
- 積極專業的技術支援與溝通，並提供有效解決方案。
- 根據客戶的需求，進行整體規劃，絕無額外成本的支出。
- 與時代俱進，不斷研發新產品，提升產品性能，永續經營與服務。



沿革與展望

- 1998年 成立晟進工業社 3C 模具、測試機具、專用機等設計製造。
- 2001年 新增 NC 銑床部門 3D 模具加工、零件加工。
- 2002年 公司更名為晟進科技股份有限公司，及新增機械部門 CNC 機械整修及電控改裝。
- 2003年 購入 AGIE 線切割機、新增線切割部門。
- 2004年 擬定公司發展目標，成立治夾具研發部創新研發，至目前累計兩項發明專利、及 21 項國內外專利。
- 2006年 自創品牌 CGM 夾具，並取得  註冊商標，且參加國家協助傳統業技術開發計劃，成功開發出 QM 手動快速夾具系列產品。
- 2008年 新建廠房三月完成，遷入營運並成立外貿部門，擴展國際業務。
- 2009年 以全新 LOGO  為 CGM 的夾具品牌標誌，進軍海內外市場，並成功開發出放電機用圓盤式 12T、16T、20T 電極庫及取得二項專利。
- 2010年 研發新型整合性氣動夾頭，並取得國內外四項專利。
- 2011年 進駐知名科技大學育成中心暨產學合作，藉助專業學術團隊，以提升研發與創新的能量。
- 2012年 3月 參加俄羅斯阿基米德國際發明展榮獲一面金牌。
- 5月 通過 ISO9001 2008 品質認證。
- 購入美國 Brown & Sharpe 三次元量床(美國製作)設備，以確保產品品質。
- 6月 參加義大利 Inventeco 國際發明展榮獲二面金牌。
- 9月 參加烏克蘭國際發明展榮獲一面金牌一面銀牌。
- 10月 參加波蘭華沙國際發明展榮獲一面金牌一面銀牌。
- 參加日本東京天才會議暨國際發明展榮獲一面金牌一面銀牌。
- 12月 AE-88EC 氣動夾頭榮獲第21屆臺灣精品獎
- 2013年 榮獲經濟部-SBIR 創新研發專案，開發完成附鎖氣壓夾持機構等三項研究並取得專利。
- 2014年 6月 以雙品牌 CGM、CJC 行銷國際。



Introduction

At the early stage, Chen Jin Techno-logy Co., Ltd. focused on 3C mould manufacturing by using EDM fixtures of high accuracy from Switzerland, Sweden, and Germany over 25 years.

We have gained many experiences and knowledge from it, but it still couldn't satisfy our needs in mould manufacturing. To find a solution, our R&D group has been working through numerous tests and modifications. Finally we have made a great breakthrough with over 30 patents worldwide.



Management Philosophy

High Quality, High Efficiency, High Value

Customer Service Principles

- Offering quality and economical product to customer for making profits.
- Offering integrated plan per customer request w/o extra cost.
- Offering efficient solution by professional technical supporting and communication.
- Ensuring confidentiality of customer information.
- Keeping up with trends, continuing R&D and upgrading products for sustanabe development and services.

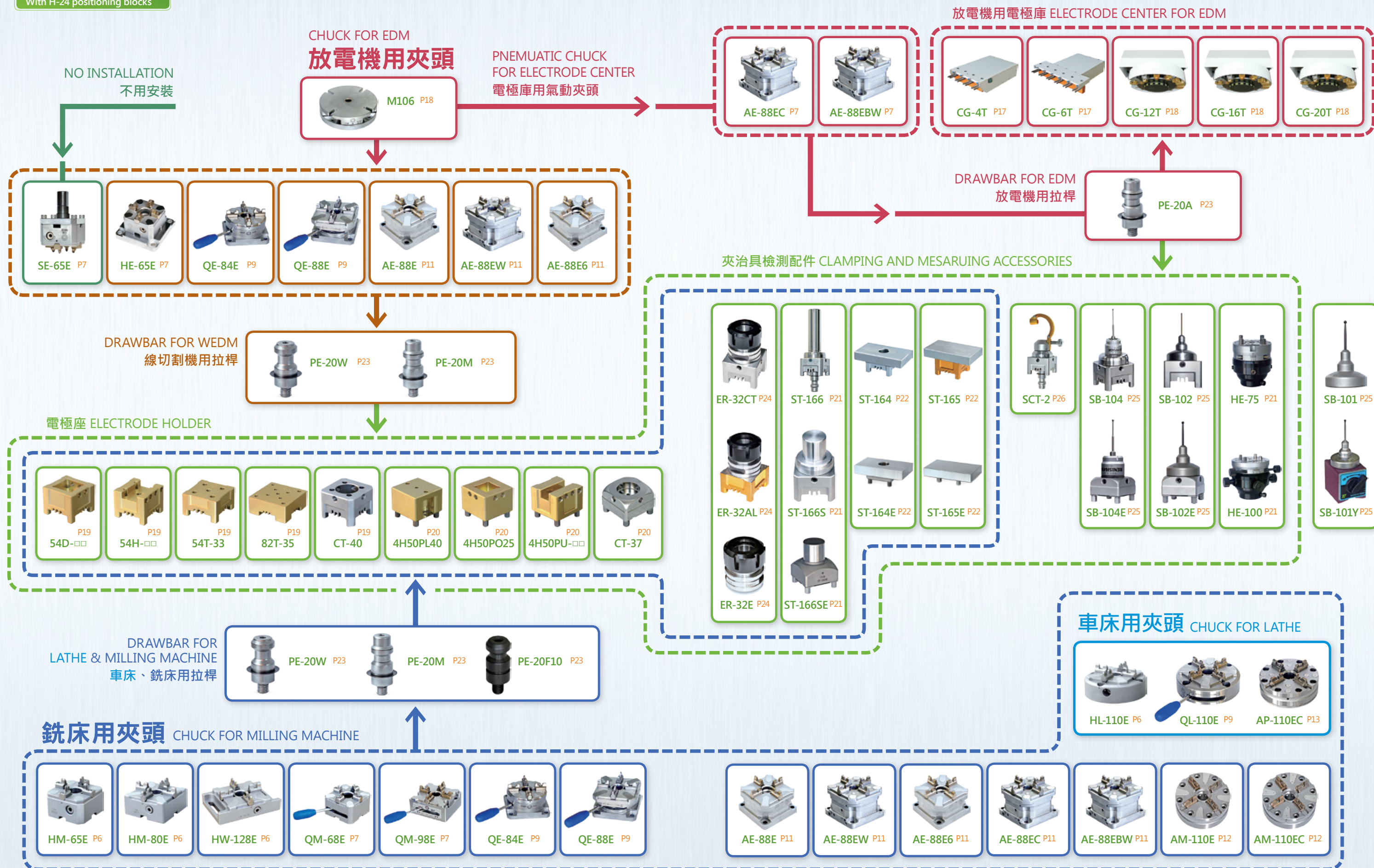
History and Prospects

- 1998 Established Chen Gem Industries which specialized in designing and manufacturing 3D molds, prototype mold and specialty machine.
- 2001 Established NC machining center department for 3D mold making, and standard component machining.
- 2002 Re-named as Cherrng Jin Technology Co., Ltd and set up Mechanical Department for CNC machine and electrical control modification.
- 2003 Imported AGIE Wire Cut EDM and set up Wire Cut EDM department.
- 2004 Set up the R&D department of innovative Chuck. Gained two innovation patents and 21 patents in domestic and abroad.
- 2006 Established CGM brand and registered  trade mark. Developed Quick Manual Chuck-QM series.
- 2008 New plant established in Mar., and set up Overseas Department for international business expansion.
- 2009 Created brand new  logo. Developed the Electrode Center for EDM with Tool Magazine Capacity 12T, 16T as well 20T and gained two patents.
- 2010 Developed the integrated Pneumatic Chuck and gained four patents.
- 2011 Teamed up with reputed technology university for enhancing the developing and creative abilities.
- 2012  **MAR** Gold Medal Award, Moscow International Salon of Industrial Property "Archimedes"
- MAY** ISO9001 2008 certified Imported USA Brown & Sharpe CMM Measurement Equipment
- JUN** Two Gold Medals 2012 INVENTECO International Invention Show
- SEP** Gold Medal and Silver Medal Award, 2012 Ukraine International Invention Show
- OCT** Gold Medal and Silver Medal Award, 6th International Warsaw Invention Show "IWIS" Gold Medal and Silver Medal Award, World Genius Inventions Exposition in Tokyo, Japan
- DEC** Pneumatic Chuck-AE-88EC, 21th Taiwan Excellence Awards
- 2013 Qualified by The Small Business Innovation Research Program(SBIR), MOEA OF R.O.C. Completion of development and granted patent for Pneumatic Clamping Mechanism with locking structure.
- 2014 **JUN** Global marketing by two brands, CGM and CJC.

H-24 定位塊夾具 系列概圖 PRODUCT DIAGRAM



使用 H-24 定位塊
With H-24 positioning blocks



手動夾頭結構圖解

Manual Chuck Diagram

H-24 可更換式定位塊

突破性的專利設計，讓您所購置的夾頭
提昇為資產設備，而不是消耗品。
當定位塊損壞時，您可以在極短的時間內
進行更換，並不影響其生產力。

H-24 Replaceable Positioning Block

A breakthrough patent design, upgrading
your chucks to be part of the asset instead
of consumables.
If it's damaged, you can replace it in a
short time without affecting
the productivity.

Z 軸靠面損傷時，您可以自己用雷射焊補
HRC 60 度鋼材 (SUS440 最佳) 後研磨修復，
亦可寄回由本廠為您服務。
When the surface for Z axis is damaged, you may repair by laser
welding with the steel. (60 HRC, SUS440 best recommended)
Or, you may send it back to us for a repair.

夾鉗式設計

具有專利的夾鉗式設計，
結構簡單，經久耐用堅固，
可承受 4000kgs 以上的夾持拉力，四個連結鎖固面可
承受劇烈的切削振動而不鬆脫，更不會使拉栓凹陷，
降低夾持力，材質 SUS420 硬度 HRC 48~50 度。

Clamping type mechanism

Patented clamping type design,
simple and durable structure which can
sustain the clamping force more than 4000 kgs.
Four locking surfaces can bear dramatic
vibration and won't affect the drawbar.
Material SUS420, 48~50 HRC.

鎖固螺絲

材質採用 SNCM 高張力螺絲，硬度 HRC 36~38 度，
表面披覆含鎢鍍層，內軸外硬及耐磨耗。

注意

含鎢鍍層在含硫的環境中會失去其特性。

Locking screws

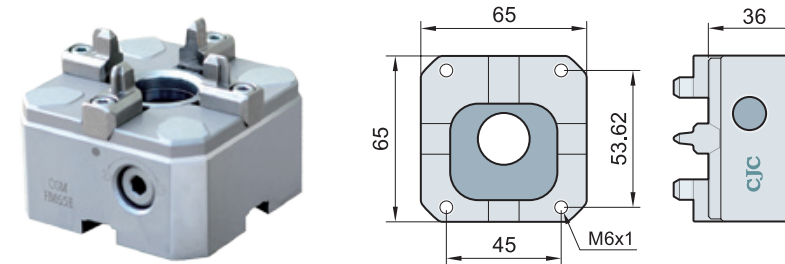
Material SNCM high tension screws, 36~38 HRC.
The surface coated with tungsten with more mechanical flexibility.

Attention

The feature of tungsten coated surface can not work
under sulfur environment.

HM-65E 手動夾頭 Manual Chuck

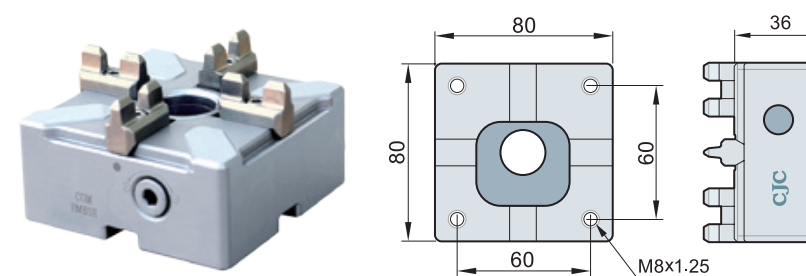
銑床專用 Chuck for Milling machine



▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 0.9 kg

HM-80E 手動夾頭 Manual Chuck

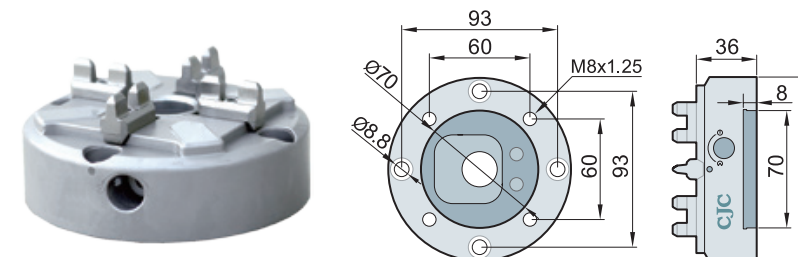
銑床專用 Chuck for Milling machine



▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 1.55 kgs

HL-110E 手動夾頭 Manual Chuck

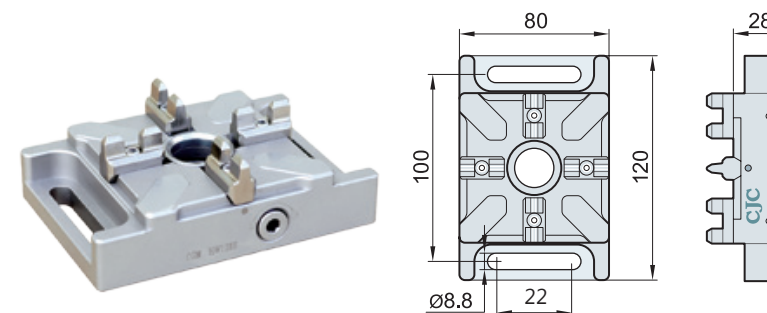
車床、銑床專用 Chuck for Lathe & Milling machines



▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 2.1 kgs

HW-128E 手動夾頭 Manual Chuck

線切割機、銑床兩用 Chuck for Wire Cut EDM & Milling machines



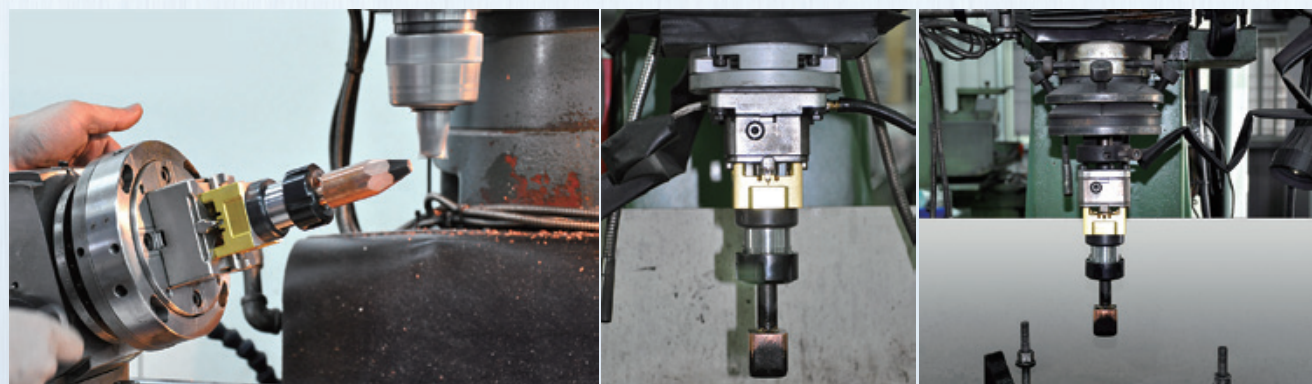
▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 1.6 kgs

- 夾鉗式鎖緊機構。
- 底部四支 6M 螺絲固定孔。
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- Clamping type mechanism
- With 4pcs 6M screws for bottom fixing holes
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm

- 夾鉗式鎖緊機構。
- 兩面研磨可供虎鉗夾持及校正平行度。
- 底部四支 8M 螺絲固定孔。
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- Clamping type mechanism
- Two ground surfaces are available for milling vise and flatness correction.
- With 4pcs 8M screws for bottom fixing holes
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm

- 夾鉗式鎖緊機構。
- 最高轉速 1800rpm
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- Clamping type mechanism
- Maximum speed : 1800rpm
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm

- 夾鉗式鎖緊機構。
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- Clamping type mechanism
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm



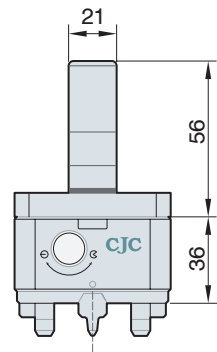
銑床加工
Milling machining

HE-65 放電機加工
EDM machining

SE-65 放電機加工
EDM machining

SE-65E 手動夾頭 Manual Chuck

放電機暫用機頭 Supporting Chuck for EDM

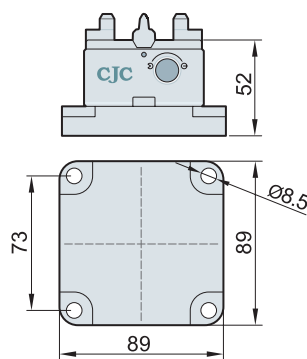


▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 1.2 kgs

- 增加 Ø21 夾持柄，直接固鎖於放電機調整頭下方，作為快速暫用型夾頭。
- 使用時請務必鎖緊調整螺絲，以防鬆脫。
- 無中心出水功能。
- Direct clamp by the EDM spindle with Ø21mm simple clamping holder for rapid EDM application
- Make sure tighten the screw while using for anti-loose purpose
- Without center oiling function

HE-65E 手動夾頭 Manual Chuck

放電機用 Chuck for EDM machine

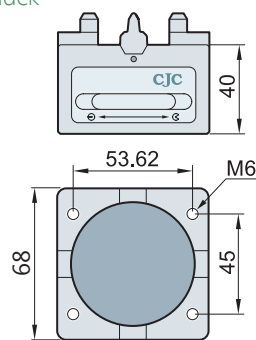
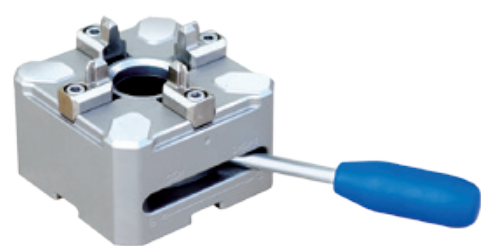


▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 1.5 kgs

- 夾鉗式鎖緊機構。
- 具有中心沖油功能。
- 最大容許加工電流：120A
- 夾持後電極吊重 1000kgs
- 重複定位精度 2µm
- Clamping type mechanism
- Center oiling function
- Maximum current : 120A
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2µm

QM-68E 手動快速夾頭 Quick manual Chuck

銑床專用 Quick Chuck for Milling machine

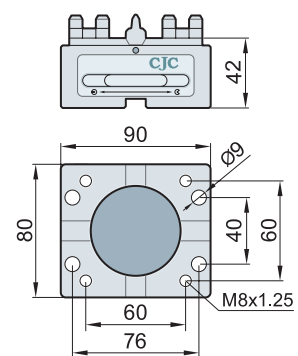
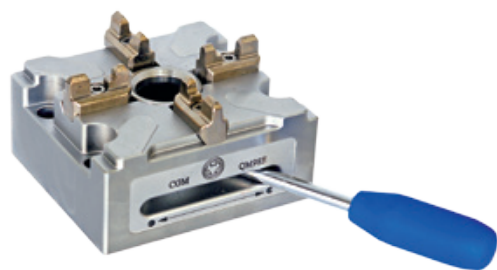


▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 1.2 kgs

- 三爪式鎖緊機構
- 夾持後電極吊重 1000kgs
- 不可使用於放電機加工槽中。
- 兩面研磨可用虎鉗正面或側面夾持。
- 重複定位精度 2µm
- 3-jaws type Mechanism
- Clamping force : 1000kgs
- Not suitable for EDM
- Two ground surfaces are available for clamping by milling vise.
- Repeat positioning accuracy : 2µm

QM-98E 手動快速夾頭 Quick manual Chuck

銑床專用 Quick Chuck for Milling machine



▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 1.9 kgs

- 三爪式鎖緊機構
- 夾持後電極吊重 1000kgs
- 不可使用於放電機加工槽中。
- 六面研磨可用虎鉗正面或側面夾持。
- 重複定位精度 2µm
- 3-jaws type Mechanism
- Clamping force : 1000kgs
- Not suitable for EDM
- Six ground surfaces are available for clamping by milling vise.
- Repeat positioning accuracy : 2µm

手動快速夾頭結構圖解

Quick Manual Chuck Diagram

H-24 定位塊

材質 SUS440 硬度 HRC 56~58 度表面特殊塗層 HRC 70 度以上
硬度高耐磨耗，表面低磨擦，滑動性優良，側撞力超過 600kgs
時將自保性損壞。

標準化零件：無方向性、可自行更換備品，固定螺絲 M4 x 12。

H-24 Positioning Blocks

Material SUS440, 56~58 HRC.

After special coating, the surface can reach 70 HRC for better wear-resistant. When the side collision exceeds 600 kgs, it will be damaged out of self-protection.

Standard parts are available for replacing easily.
Fixing screws : M4 x 12.

本體材質 SUS420 硬度 HRC 52 度不銹鋼材質，
提高實用性，熱處理後三次的回火應力消除
與深冷處理，常保精度穩定。

Main structure

Material SUS420, 52 HRC.
Eliminating the structure stress by three times
of tempering for keeping same accuracy.

鎖盤

材質 SUS420 硬度 HRC 48~50 度特殊
的擺線設計鎖固時，快速省力。
強力結構設計可承受 5000kgs 以上夾持拉力。

Locking plate

Material SUS420, 48~50 HRC.

With special locking design for labor saving.
The strong structure can withstand
clamping force more than 5000 kgs.

推桿

適當的強度設計，當外力
超過 65kgs 時，將自保性損壞。
鎖緊後請將推桿取出才具有防震鬆脫作用

Handle

Design with proper strength.
It'll be damaged out of self-protection
when the external force exceeds 65 kgs.
Please remove the Handle after lock tight
for anti-vibration.

防鬆止逆轉機構

當推桿取出之後，可自動將鎖盤
煞住，無論在重切削或劇烈震動
情況下，均能確保穩固夾持。

Anti-loose and Anti-clockwise structure

After removing the handle,
the lock plate will ensure the stability
under heavy cutting or dramatic
vibration.

夾爪

材質 SUS420 硬度 HRC 52 度，
大面積鎖固，可發揮 4000kgs 以上的
夾持力，有效抵抗重切削時，所產生的
震動，即使拉桿斷裂仍無損傷。

3-jaws type Blocks

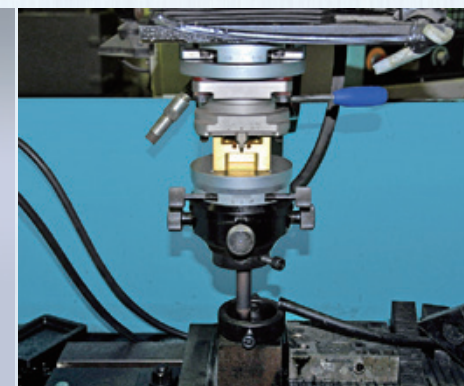
Material SUS420, 52 HRC.
Large locking area which can withstand 4000 kgs
clamping force. Resisting heavy cutting
efficiently and no damage even the Handle is
broken.



五軸加工
5 Axis Machining



銑床加工
Milling Machining

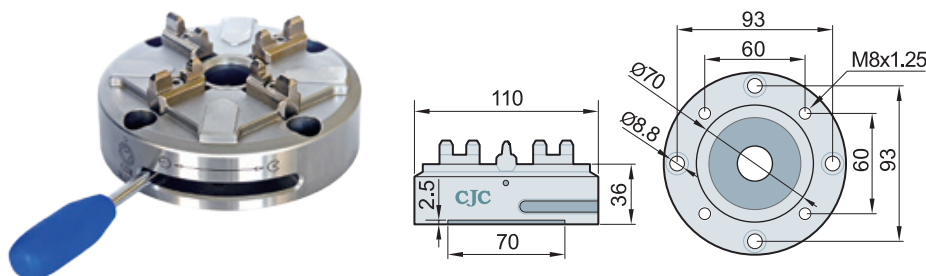


放電加工
EDM machining



QL-110E 手動快速夾頭 Quick manual Chuck

車床、銑床兩用 Chuck for Lathe & Milling machines

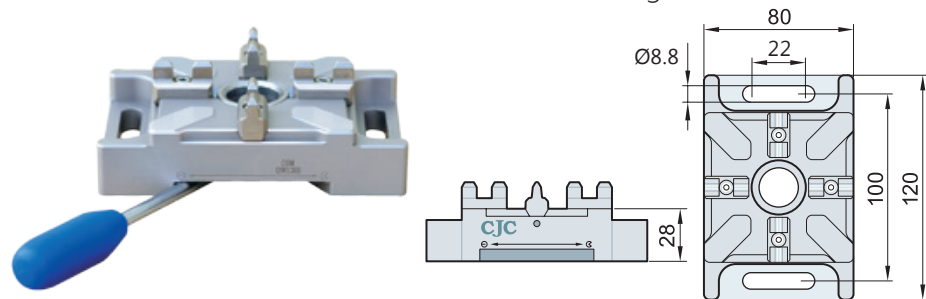


▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 2.2 kgs

- 三爪式鎖緊機構。
- 最高轉速 1800rpm
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- 3-jaws type Mechanism
- Maximum speed : 1800rpm
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm

QW-128E 手動快速夾頭 Quick manual Chuck

線切割機、銑床兩用 Chuck for Wire Cut & Milling machines

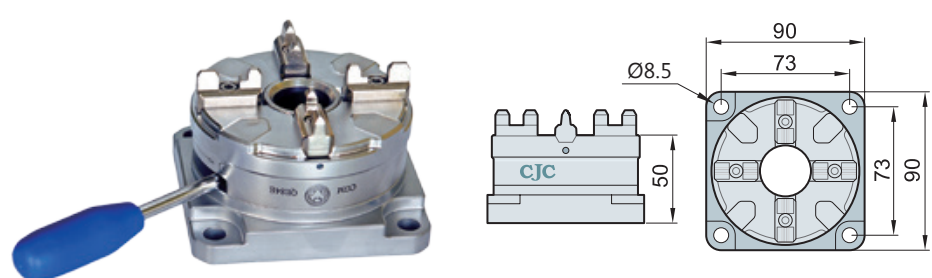


▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 1.6 kgs

- 三爪式鎖緊機構。
- 最大容許加工電流 : 120A
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- 3-jaws type Mechanism
- Maximum current : 120A
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm

QE-84E 手動快速夾頭 Quick manual Chuck

放電機、銑床兩用 Chuck for EDM & Milling machines

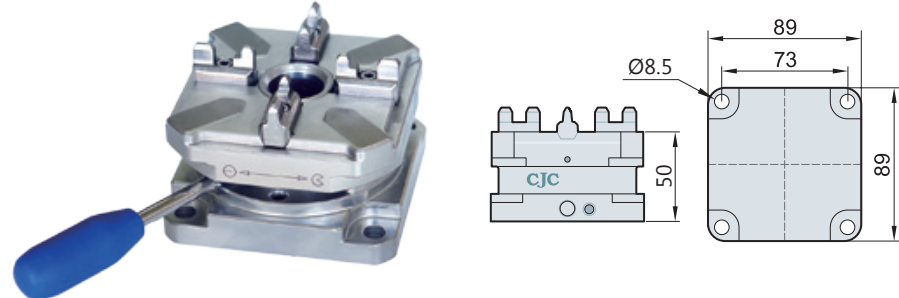


▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 2.2 kgs

- 三爪式鎖緊機構。
- 具有中心沖油功能。
- 最大容許加工電流 : 120A
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- 3-jaws type Mechanism
- With Center oiling function
- Maximum current : 120A
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm

QE-88E 手動快速夾頭 Quick manual Chuck

放電機、銑床兩用 Chuck for EDM & Milling machines

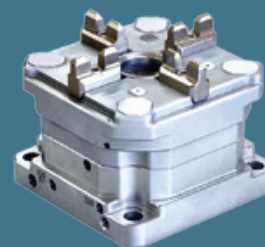


▲ 材質 Material : SUS420J2, 52 HRC 重量 Weight : 2.45 kgs

- 三爪式鎖緊機構。
- 具有中心沖油功能。
- 最大容許加工電流 : 120A
- 夾持後電極吊重 1000kgs
- 重複定位精度 2μm
- 3-jaws type Mechanism
- With Center oiling function
- Maximum current : 120A
- Clamping force : 1000kgs
- Repeat positioning accuracy : 2μm

整合性氣動夾頭結構圖解

Pneumatic Chuck Diagram



- 氣動夾頭全機種均有增壓功能，可高達 280kgs 以上之夾持拉力。
- 連結機構已塗佈特殊潤滑油脂，一次性潤滑，油脂不受水氣而變質。
- All pneumatic chucks are with boost pressure function and can withstand the clamping force up to 280kgs.
- Link mechanism coated with special lubrication which won't be deteriorated by moisture.

夾持面

不銹鋼夾持面常保精度，保養容易，並且有清潔吹氣之功能。

Surface

Stainless steel surface keeps its high accuracy, easy to maintain and has clean blowing function.

可更換定位塊設計

可依加工需求更換自製定位塊，克服特殊工件的加工。

Positioning blocks

Positioning blocks are replaceable and custom made are available for various of special workpieces machining.

活塞及缸體

全由不銹鋼製成，不會因水氣而使機構生銹卡死。

Piston & Cylinder

All piston and cylinder are made of stainless steel. It won't get rusted by moisture.

密封圈

採用高品質密封圈，正常使用壽命高達五年以上。

O-ring

High-quality seals, normal life expectancy is up to 5 years.

彈簧

採用高品質進口彈簧，壽命120萬次以上。(200次/天=16年)

Spring

High-quality imported spring. Life expectancy is more than 1.2 million times. 200 times / day = 16 years.

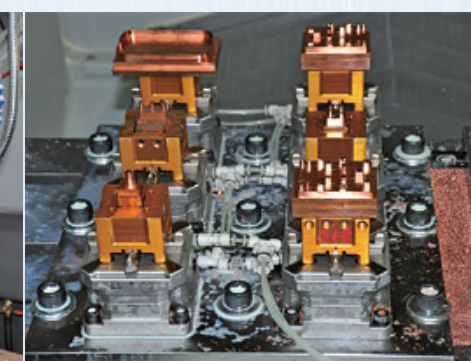
專利活塞式連接機構，可容許較大的連接誤差。

Connecting structure

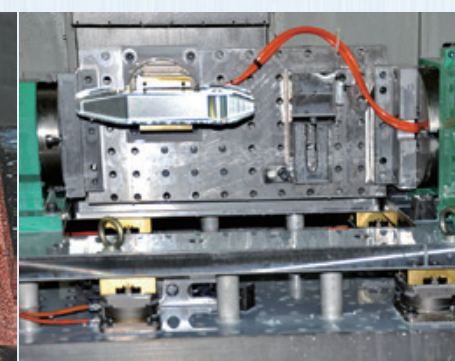
Patented piston connecting structure allows bigger deviation.



放電機加工
EDM machining



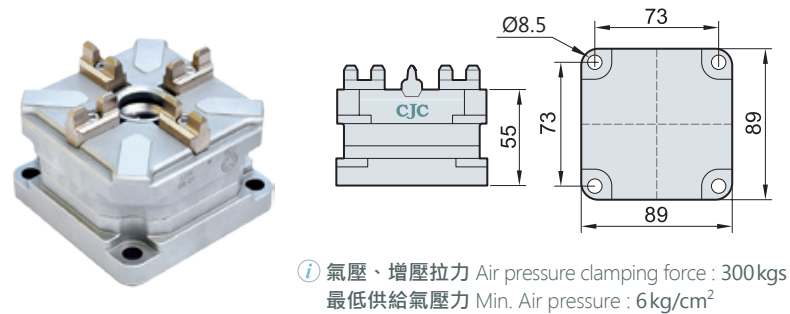
銑床加工
Milling Machining



零件加工
Parts machining

AE-88E 氣動夾頭 Pneumatic Chuck

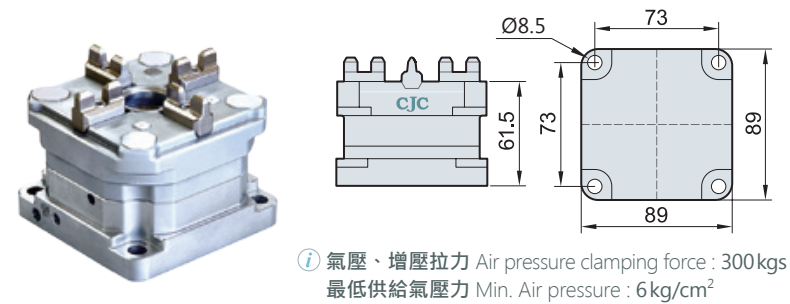
放電機、銑床兩用 Chuck for EDM & Milling machines



▲ 材質 Material: SUS420J2, 52 HRC 重量 Weight: 3.0 kgs

AE-88EW 氣動夾頭 Pneumatic Chuck

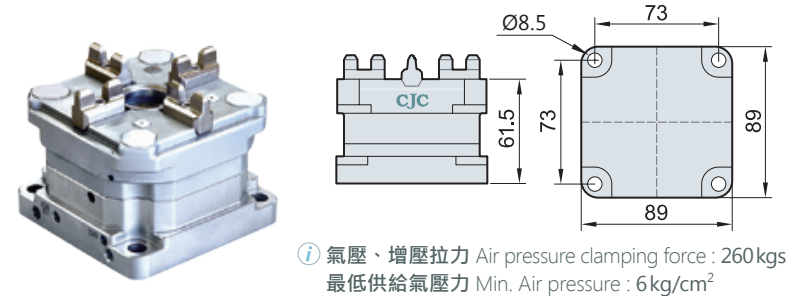
放電機、銑床兩用 Chuck for EDM & Milling machines



▲ 材質 Material: SUS420J2, 52 HRC 重量 Weight: 3.0 kgs

AE-88EBW 氣動夾頭 Pneumatic Chuck

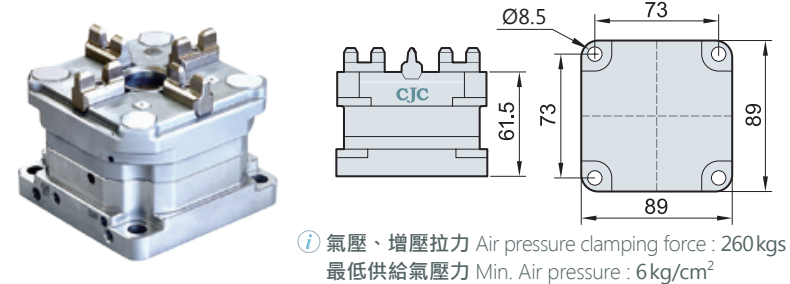
放電機、銑床兩用 Chuck for EDM & Milling machines



▲ 材質 Material: SUS420J2, 52 HRC 重量 Weight: 3.0 kgs

AE-88EC 氣動夾頭 Pneumatic Chuck

放電機、銑床兩用 Chuck for EDM & Milling machines



▲ 材質 Material: SUS420J2, 52 HRC 重量 Weight: 3.0 kgs

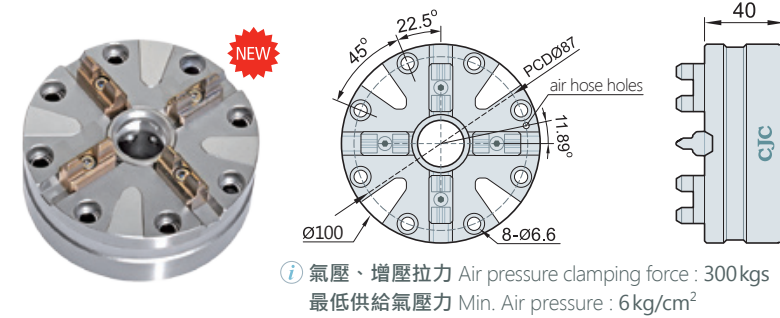
NEW AE-88E6

- 材質 Material: SUS440, 60 HRC
- 夾持力、彈簧常態拉力: 100kgs
- 最大容許加工電流: 120A
- 無定位面除汙吹氣。
- 無中心沖油功能。
- 重複定位精度 2μm
- Clamping and Std. spring pull force: 100kgs
- Maximum allowable current: 120A
- W/O blowing holes for surface cleaning
- W/O center oiling function
- Repeat positioning accuracy: 2μm



AM-100E 氣動夾頭 Pneumatic Chuck

銑床用氣動夾頭 Chuck for Milling Machine



▲ 材質 Material: SUS420J2, 52 HRC 重量 Weight: 2.0 kgs

AM-100EC 氣動夾頭 Pneumatic Chuck

銑床用氣動夾頭 Chuck for Milling Machine



▲ 材質 Material: SUS420J2, 52 HRC 重量 Weight: 2.0 kgs

- 夾持力、彈簧常態拉力: 100kgs
- 無定位面除汙吹氣與中心出水功能
- 重複定位精度 2μm
- Clamping and Std. spring pull force: 100kgs
- Without blowing holes for surface cleaning and center oiling function.
- Repeat positioning accuracy: 2μm

購買此夾頭須自行加工打開與增壓的夾頭氣孔
Need to DIY the opening and air pressure holes.

- 夾持力、彈簧常態拉力: 100kgs
- 具有定位面除汙吹氣功能 (需購買 AM-100-04 才能使用)
- 重複定位精度 2μm
- Clamping and Std. spring pull force: 100kgs
- With blowing holes for surface cleaning (only workable with AM-100-04)
- Repeat positioning accuracy: 2μm

購買此夾頭須自行加工打開與增壓的夾頭氣孔
Need to DIY the opening and air pressure holes.

自動更換電極用氣動夾頭 Pneumatic Chuck for auto changing electrode holder

- 夾持力、彈簧常態拉力: 100kgs
- 最大容許加工電流: 70A
- 內四孔定位面除汙吹氣功能。
- 具中心沖油功能。
- 重複定位精度 2μm
- Clamping and Std. spring pull force: 100kgs
- Maximum allowable current: 70A
- 4 blowing holes for surface cleaning
- With center oiling function
- Repeat positioning accuracy: 2μm

自動更換電極用全功能氣動夾頭 Pneumatic Chuck for auto changing electrode holder

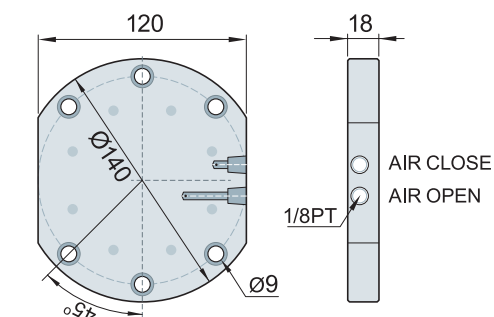
- 夾持力、彈簧常態拉力: 70kgs
- 最大容許加工電流: 120A
- 具八孔定位面除汙吹氣功能。
- 具中心沖油功能。
- 重複定位精度 2μm
- Clamping and Std. spring pull force: 70kgs
- Maximum allowable current: 120A
- 8 blowing holes for surface cleaning
- With center oiling function
- Repeat positioning accuracy: 2μm

銑床用氣動夾頭、固定座及擋屑環

AM-100E-03



AM-100-03 固定座 Fixing Plate



AM-100EC-03



- 材質 Material: SUS420, 52 HRC
- 重量 Weight: 2.0kgs
- ① AM-100E/AM-100EC 專用固定座
Fixing plate only for AM-100E/AM-100EC

AM-100EC-0304



AM-100-04 擋屑環 Chip Cover Ring



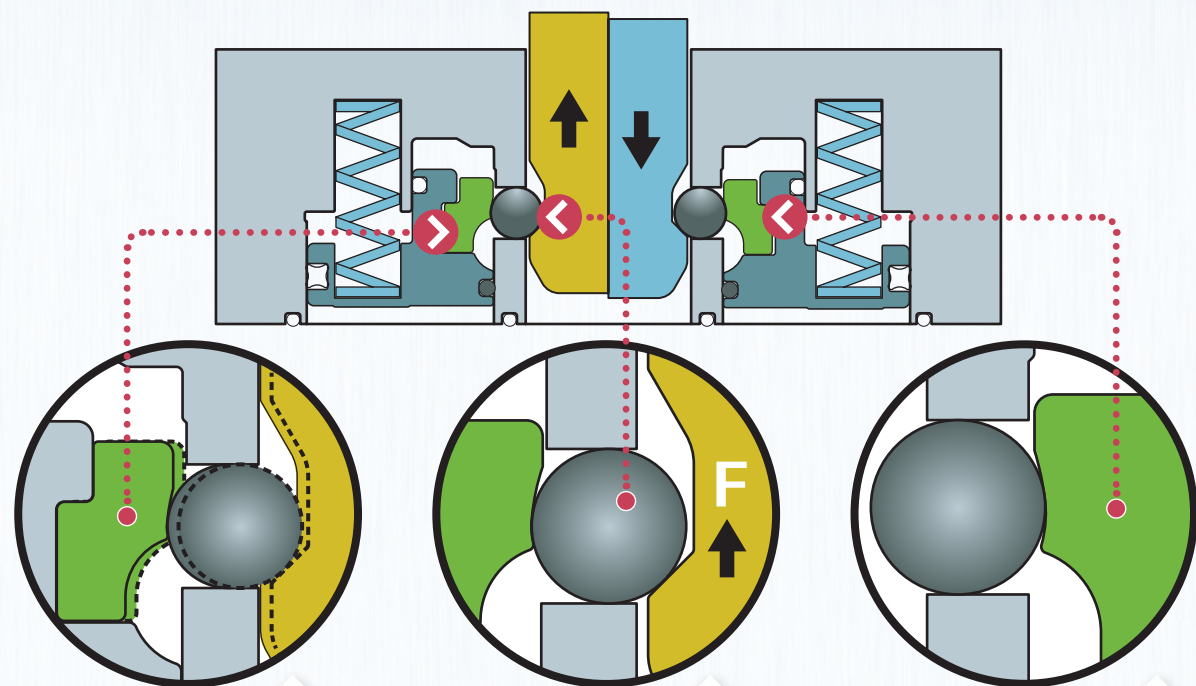
① AM-100EC 使用此配件才具有定位面除汙吹氣功能
AM-100EC has blowing function for surface cleaning and only if works with AM-100-04

重切型氣動夾頭結構圖解

Pneumatic Chuck-Heaving Cutting Type Diagram

特點夾持力高達 2500kg 高度只有 30mm。
Clamping force up to 2,500kgs, thickness only 30mm.

Taiwan Invention and Patent registered in many countries
本產品台灣發明及多國專利申請中



Floating Clamping Mechanism

浮動夾持機構

浮動夾持機構會自動調整
拉桿接合誤差。

Floating mechanism will adjust the
variation of drawbar automatically.

Max. Clamping Force

極限夾持力

當外力大於夾緊機構時鋼珠會被卡住
被加工物只會產生振動但不會鬆脫。

極限夾持力高達 8000kgs

When the external force is bigger than of
the clamping mechanism, the steel ball
will be stuck so the workpiece won't drop but
vibrate instead.
Max. clamping force is up to 8000kgs.

Curve Shape Clamping

弧形夾持面

夾緊機構與鋼珠接觸面為弧形加大
鋼珠接觸面積提高夾持力與壽命。

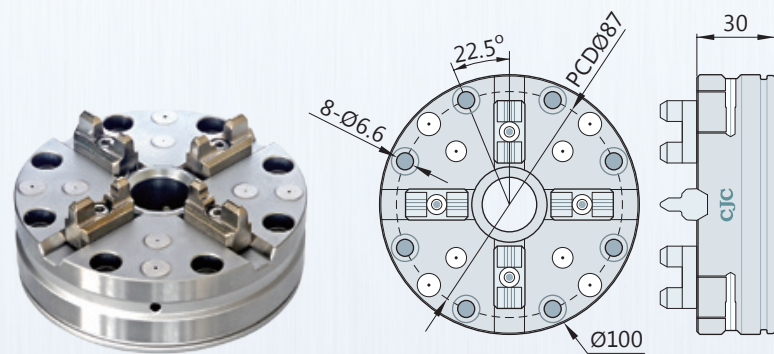
採用不銹鋼珠可在純水環境工作。

常態彈簧夾持力高達 1500kgs

The curve shape between the clamping mechanism and
steel ball, which enlarges the clamping force and life span.
With stainless steel ball and can work under pure water.
Spring pull force is up to 1500kgs

AP-100EC

重切型氣動夾頭 Pneumatic Chuck-Heaving Cutting Type
銑床用氣動夾頭 Chuck for Milling Machine



重量 Weight: 1.6 kgs

最低供給氣壓力 Min. Air pressure: 6 kg/cm²
材質 Material: SUS420J2, 52 HRC

- 最高轉速 2000rpm
- 夾具定位面除污吹氣功能。
(需搭配 AM-100-04 才能使用)
- 彈簧夾持拉力 1500kgs, 極限夾持力 7500kgs
氣壓增壓拉力 2500kgs, 極限夾持力 12000kgs
- 重複定位精度 2µm
- Max. 2000rpm
- 8 Blowing holes for surface cleaning
(will function only with #AM-100-04)
- Spring force 1500kgs, Max. 7500kgs
Air pressure clamping force 2500kgs, Max. 12000kgs
- Repeat positioning accuracy: 2µm

購買此夾頭須自行加工打開與增壓的夾頭氣孔
Need to DIY the opening and air pressure holes.

P-24 強力型夾具 系列概圖 POWERFUL CHUCK SEREIS DIAGRAM

使用 P-24 定位塊
With P-24 positioning blocks

特別為零件加工而誕生

- 鋼製工件座耐重切削及高使用壽命。
- 夾頭換裝 P-24 定位塊提高了一倍以上的扭距。
- 氣動夾頭可搭配機械手臂作自動化生產。
- P-24 定位塊與 H-24 定位塊可依需求隨時更換
不會造成成本上的增加。
- Workpiece holder in Steel available for heavy cutting and with long lifespan.
- Chuck with P-24 positioning blocks can double the torque values.
- Pneumatic chuck can operate with robot arm for automated production.
- Positioning blocks of P-24 and H-24 can be replaced per request
W/O additional cost.

銑床用夾頭

- AM-100P For Milling
- AM-100PC 04 For Milling
- AM-100P 03 For Milling
- AM-100PC 0304 For Milling
- HM-80P For Milling
- HL-110P For Milling
- QM-98P For Milling
- QL-110P For Milling
- QE-88P For Milling
- AE-88P For Milling
- AE-88P6 For Milling
- AE-88PW For Milling
- AE-88PBW For Milling
- AE-88PC For Milling

54T-33

鋁製電極座
Aluminum Electrode

P2510

強力型拉桿
Drawbar

82T-35

鋁製電極座
Aluminum Electrode

PE-20M Drawbar
車床、銑床兩用拉桿
for Milling, Lathe

PE-20W Drawbar
線切割機用拉桿
for Wire Cut EDM

PW-108
工作座
Workpiece holder

ST-108
校正方規
Correction
Measurement

AM-138EP

銑床用氣動夾頭
For Milling

AM-138EPC 07

安裝擋屑環
with Chip Cover Ring

AM-138EP 08

安裝固定座
with Fixing plate

AM-138EPC 0708

安裝固定座及擋屑環
with Fixing plate and
Chip Cover Ring

AM-138P OUT

銑床用氣動夾頭
For Milling

AM-138PC 07 OUT

安裝擋屑環
with Chip Cover Ring

AM-138PC 08 OUT

安裝固定座
with Fixing plate

AM-138PC 0708 OUT

安裝固定座及擋屑環
with Fixing plate and
Chip Cover Ring

AM-138P 08 IN

安裝固定座
with Fixing plate

AM-138PC 0708 IN

安裝固定座及擋屑環
with Fixing plate
and Chip Cover Ring

PW-148

固定座
Workpiece holder

P2512

拉桿
Drawbar

PW-108

工作座
Workpiece holder

P2510

拉桿
Drawbar

AM-138 強力型氣動夾頭 Pneumatic Chuck 銑床用氣動夾頭 Chuck for Milling Machine



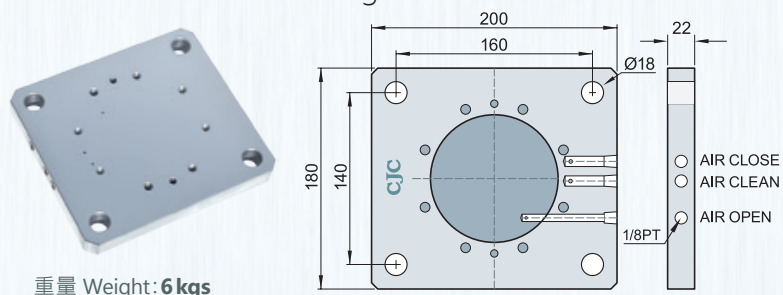
- 夾持力、彈簧常態拉力：180kgs
- 無定位面除污吹氣與中心出水功能
- 無鎖固任何定位塊。
- 靜態重覆定位精度 2μm
- Clamping and Std. spring pull force : 180kgs
- W/O blowing holes for surface cleaning and center oiling function
- W/O any positioning blocks
- Positioning repetition accuracy of static state : 2μm
- 材質 Material : SUS420, 52 HRC

AM-138C 強力型氣動夾頭 Pneumatic Chuck 銑床用氣動夾頭 Chuck for Milling Machine



- 夾持力、彈簧常態拉力：180kgs
- 具有定位面除污吹氣功能 (需配合AL-138-07才能使用)
- 無鎖固任何定位塊。
- 靜態重覆定位精度 2μm
- Clamping and Std. spring pull force : 180kgs
- With blowing holes for surface cleaning (only workable with AL-138-07)
- W/O any positioning blocks
- Positioning repetition accuracy of static state : 2μm
- 材質 Material : SUS420, 52 HRC

AL-138-08 固定座 Fixing Plate



- AM-138/AM-138C 專用固定座
- Fixing plate only for AM-138/AM-138C
- 材質 Material : PDS-5, 36 HRC

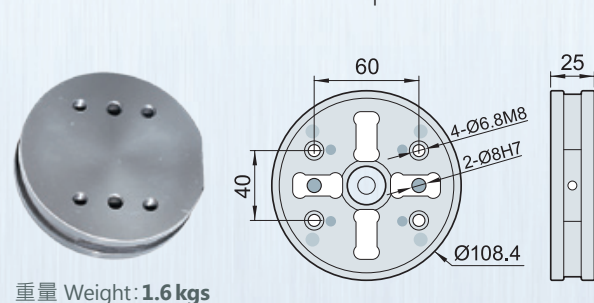
AL-138-07 AL-138EPC-0708

擋屑環 Chip Cover Ring



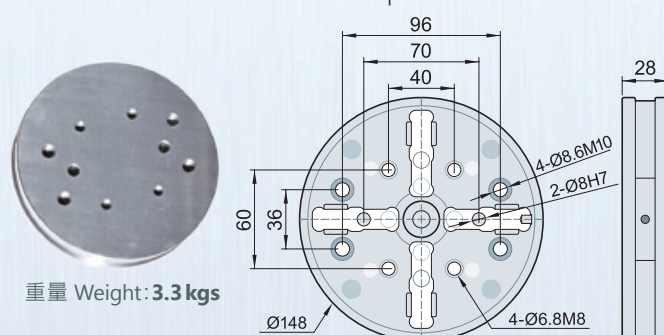
- AM-138C 使用此配件才具有定位面除污吹氣功能
AM-138C has blowing function for surface cleaning and only if works with AM-138-07

PW-108 工件座 Workpiece holder



- 5μ 靜態重覆定位精度
- 材質：工具鋼 表面硬化處理
- Positioning repetition accuracy of static state 0.005mm
- Material : Surface Hardening of Tool Steel

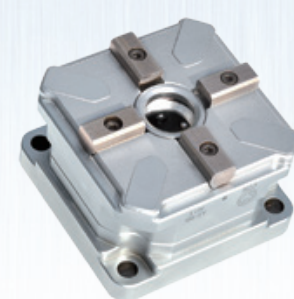
PW-148 工件座 Workpiece holder



- 5μ 靜態重覆定位精度
- 材質：工具鋼 表面硬化處理
- Positioning repetition accuracy of static state 0.005mm
- Material : Surface Hardening of Tool Steel

強力型夾具用配件 Accessories for Powerful Chuck

強力型定位塊 Powerful positioning block



P-24



P-24C



- 附有清潔吹氣孔
With clean blowing hole

拉桿 Drawbar

P2510

- AM-138 夾頭與 PW-108 工件座連結用
For connecting with AM-138 chuck & PW-108 workpiece holder



P2512

- AM-138 夾頭與 PW-148 工件座連結用
For connecting with AM-138 chuck & PW-148 workpiece holder

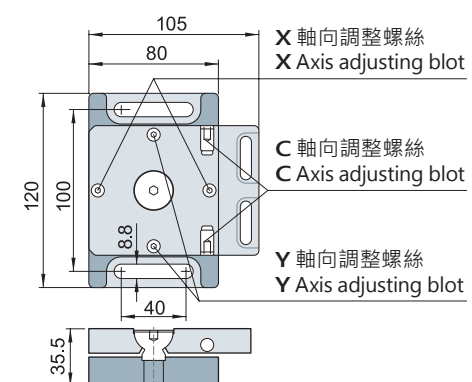


線切割機用配件 Accessories for Wire Cut EDM

WS-80 工件調整座 Workpiece Adjusting Plate

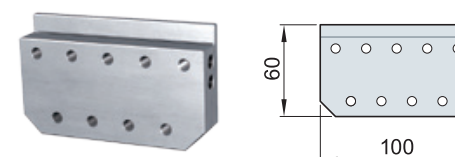


- 材質 Material : SUS420, 52 HRC
- 重量 Weight : 2.0kgs
- 需要與配件 WC-100 或 WC-160 才能使用
Workable only with WC-100 or WC-160



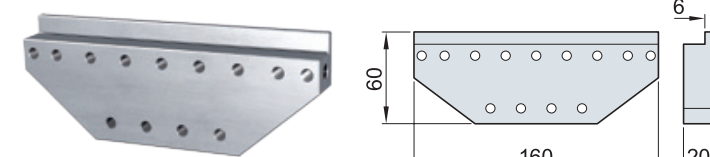
- 調整範圍
X 軸俯仰 ± 3°
Y 軸俯仰 ± 3°
C 軸俯仰 ± 3°
- Adjusting range
X Axis Pitch Angle ± 3°
Y Axis Pitch Angle ± 3°
C Axis Pitch Angle ± 3°

WC-100 工件固定座 Workpiece fixing plate



- 材質 Material : SUS420, 52 HRC
- 重量 Weight : 1.0 kgs

WC-160 工件固定座 Workpiece fixing plate

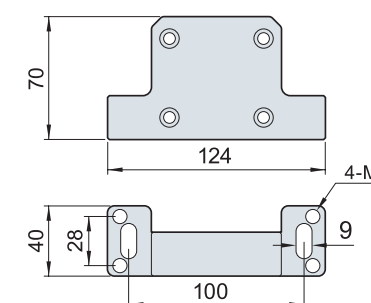


- 材質 Material : SUS420, 52 HRC
- 重量 Weight : 1.3 kgs



WB-124 90度固定座 90° Fixing Plate

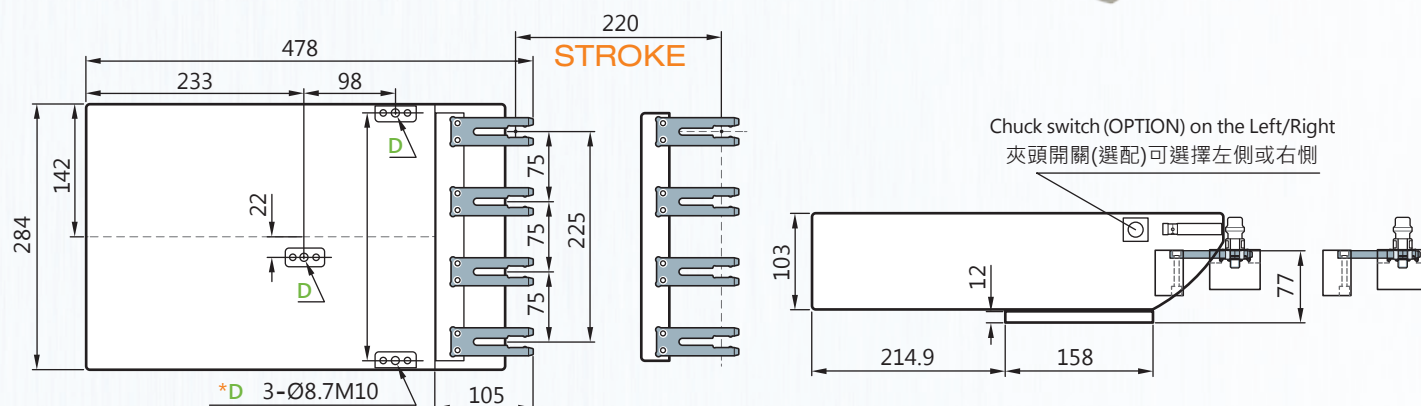
- 材質 Material : SUS420, 52 HRC
- 重量 Weight : 1.3kgs
- QM-68E/HM65E 專用配件
Accessory only for QM-68E/HM65E





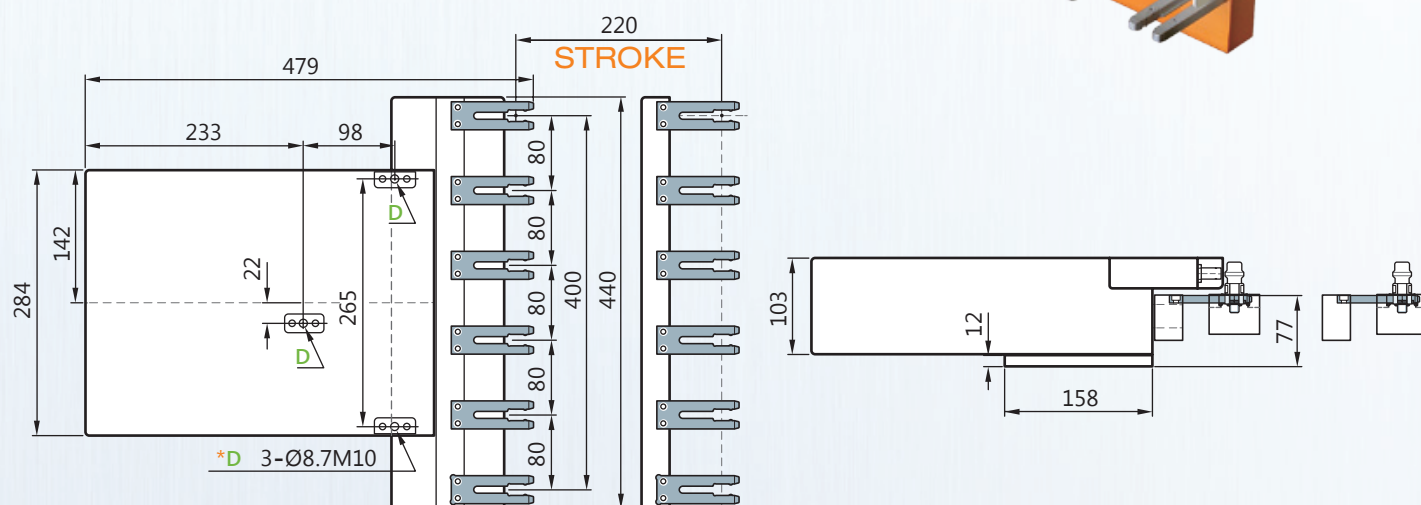
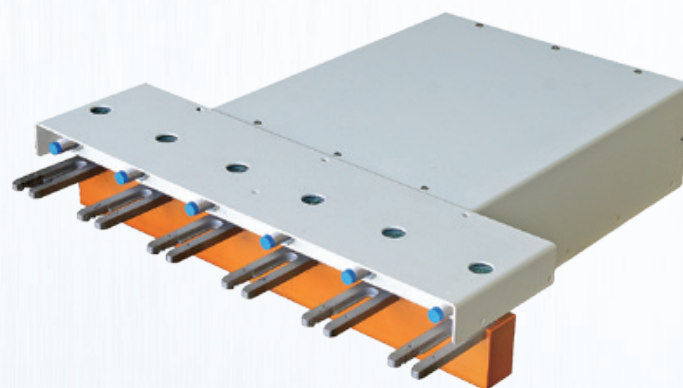
4T 直推式放電機用電極庫 Electrode Center for EDM

MODEL NO	CG 4T
Tool Magazine Capacity	4 tools
Max. Total Length	220mm
Max. Total Diameter	Ø74mm (All pockets full) □ 74x74mm
Max. Total Weight	5kgs
Tool Total Weight	20kgs
Control Elements	PNP-NO
Drive Voltage	DC24V



6T 直推式放電機用電極庫 Electrode Center for EDM

MODEL NO	CG 6T
Tool Magazine Capacity	6 tools
Max. Total Length	220mm
Max. Total Diameter	Ø79mm (All pockets full) □ 79x79mm
Max. Total Weight	4kgs
Tool Total Weight	24kgs
Control Elements	PNP-NO
Drive Voltage	DC24V



圓盤式放電機用電極庫

Electrode Center for EDM

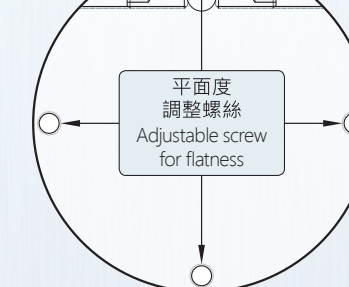
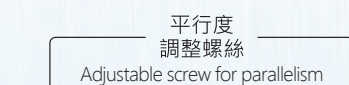
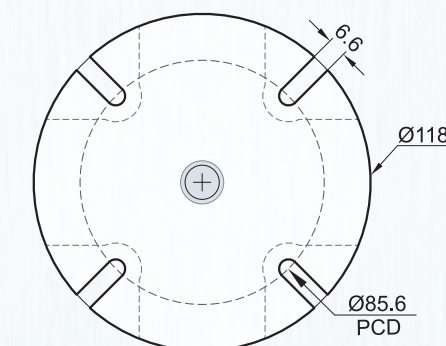
20T/16T/12T



MODEL NO	EDM 70020	EDM 70016	EDM 50012
Tool Magazine Capacity	20 tools	16 tools	12 tools
Max. Electrode Holder Set Diameter	Ø70mm (all pockets full) Ø120mm / □ 64x64mm	Ø100mm (all pockets full) Ø130mm / □ 82x82mm	Ø70mm (all pockets full) Ø120mm / □ 64x64mm
Max. Electrode Holder Set Weight	4kgs	4kgs	4kgs
Tool Total Weight	80kgs	64kgs	48kgs
Tool Chain Divisional Time	0.5sec (60Hz): option	0.5sec (60Hz): option	0.5sec (60Hz): option
Control Elements	PNP-NO	PNP-NO	PNP-NO
Drive Voltage	DC24V	DC24V	DC24V

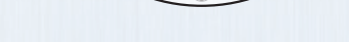
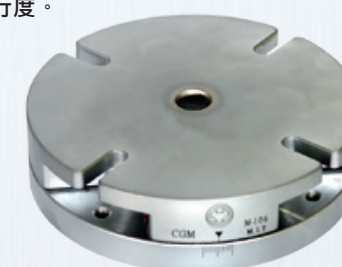
夾頭安裝步驟說明 Installation instructions

- 鬆下舊有調整頭。
- 安裝 M106 調整頭並鎖緊，若機台孔位不符，請依照 M106 尺寸重新加工固定孔。
- 安裝夾頭並鎖緊(絕緣墊片在 M106 與夾頭中間)。
- 用放電機負極線確認夾頭與機床不可短路。
- 用 ST-164 或 ST-165 校正 X, Y 軸平面度與平行度。
- Loose the old adjustment head.
- Set up M106 adjustment head and fasten tightly. If it doesn't fit, please process the holes according to M106 dimension.
- Set up the chuck and lock tight.
(The insulation plate should be in between of M106 and the chuck)
- Make sure no short circuit between the chuck and machine by EDM negative terminal.
- Use ST-164 and ST-165 to adjust X and Y axis's flatness and parallelism.



M106 放電機快速安裝盤 Rotating Plate

- 放電機必須用配件，可快速調整 X, Y 平面度、平行度。
- Must accessory for EDM in order to adjust the flatness and parallelism of X, Y axis.



鋁製電極座優點 Features of Electrode Holder

具保護性 當加工程序異常，刀具與工件碰撞時，將自保性損壞，大幅降低或避免精密機械與夾頭的損害。

高耐用性 在正常使用下可高達五萬次以上之使用壽命，而且不易損傷夾頭定位面。

抑震 可吸收精切削所產生的高頻振動，及減輕重切削時所產生的劇烈振動。

導電性佳 在放電加工時，可有較高之效率。

重量輕 在深孔放電加工時，可有較高之速率。

經濟價值 可快速回收導入成本，規格齊全，可滿足多樣化的加工需求。

Anti-vibration High-frequency vibration absorbing and reducing dramatic vibration.

Good electrical conductivity Efficient operation during discharge processing.

Lightweight High efficiency during deep hole EDM.

Economic Value Comprehensive specification with competitive cost for various machining needs.

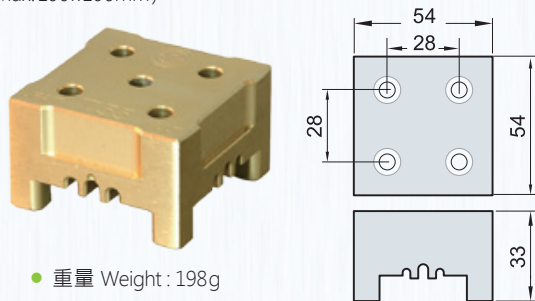
High durability It's life expectancy is up to 50,000 times under normal usage and the positioning surface won't be damaged easily.

Self-protection During improper operation or the cutter collision, it'll be damaged out of self-protection for protecting the machine spindle and chuck.



54T33 電極座 Electrode Holder

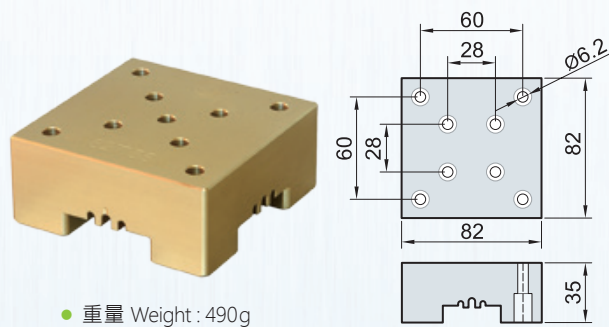
底部固定板狀電極、最大電極尺寸 100x100mm
Suitable for bottom lock the plate copper electrode
(Max. 100x100mm)



● 重量 Weight : 198g

82T35 電極座 Electrode Holder

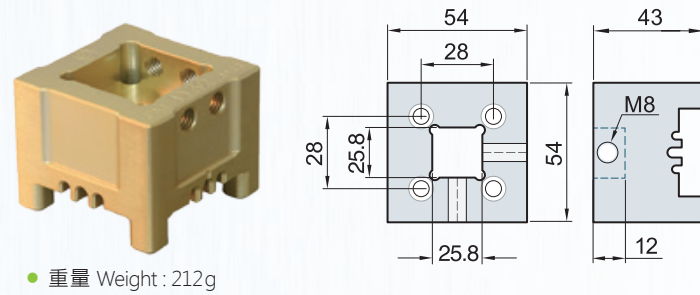
底部固定板狀電極、最大電極尺寸 200x200mm
Suitable for bottom lock the plate copper electrode
(Max. 200x200mm)



● 重量 Weight : 490g

54D25 電極座 Electrode Holder

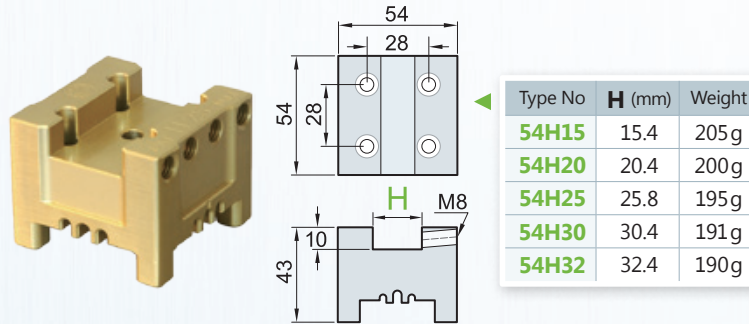
方形電極、底部固定板狀電極。
Suitable for square copper electrode, and bottom lock the plate copper.



● 重量 Weight : 212g

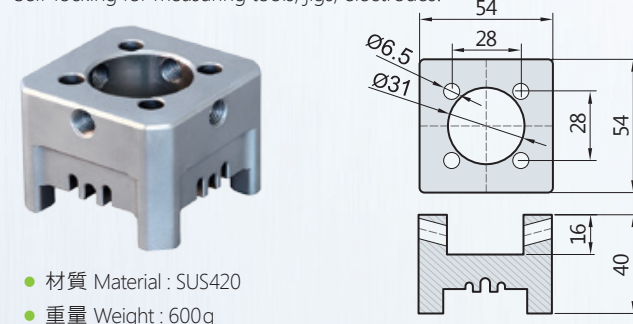
54H 電極座 Electrode Holder

側固矩形電極、底部固定板狀電極。
Suitable for side lock the square copper electrode,
bottom lock the plate copper electrode.



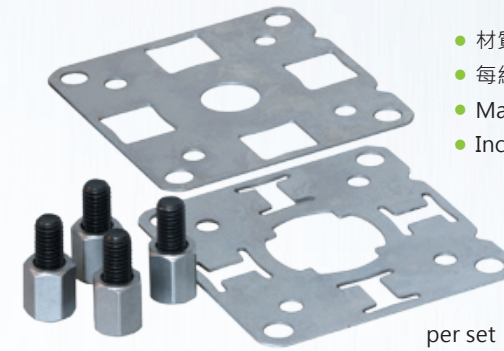
CT-40 鋼性電極座 Stainless Electrode Holder

自行鎖固各種量具、治具、電極。
Self-locking for measuring tools, jigs, electrodes.



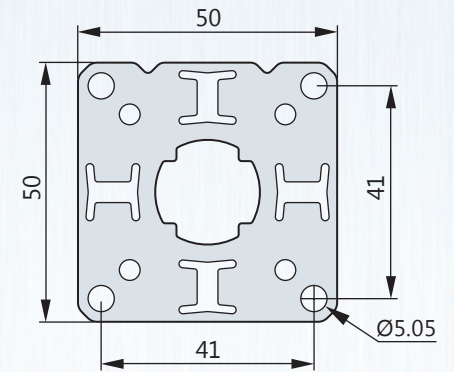
● 材質 Material : SUS420
● 重量 Weight : 600g

4H50 定位片 Centering Plate



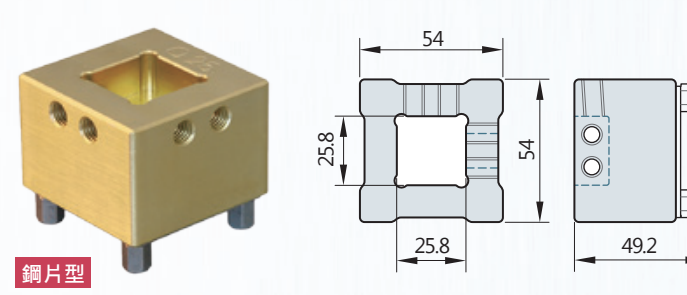
- 材質:不鏽鋼 硬度:HV420以上
- 每組含4只定位腳及螺絲
- Material: Stainless Steel, HV420~
- Incl. 4 supporting feet each

Patent Registered in Taiwan, China, USA, and EU
本產品臺灣、大陸、美國、歐盟發明專利申請中



4H50PO 鋼片式鋁製電極座

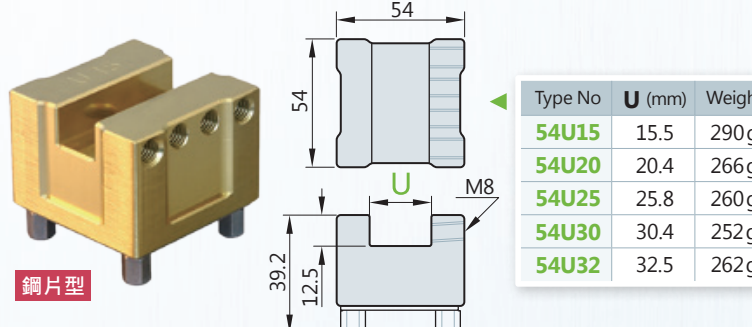
方形電極、底部固定板狀電極。
Suitable for square copper electrode, and bottom lock the plate copper.



鋼片型

4H50PU 鋼片式鋁製電極座

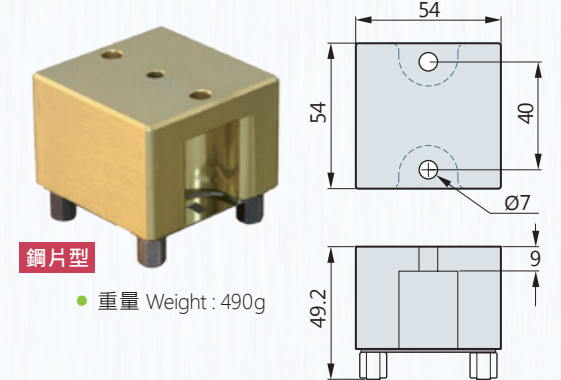
側固矩形電極、底部固定板狀電極。
Suitable for side lock the square copper electrode,
bottom lock the plate copper electrode.



鋼片型

4H50PL-40 鋼片式鋁製電極座

固定座:材質鋁 6061表面陽極處理
Material: ALU. 6061, Surface Anodizing



● 重量 Weight : 490g

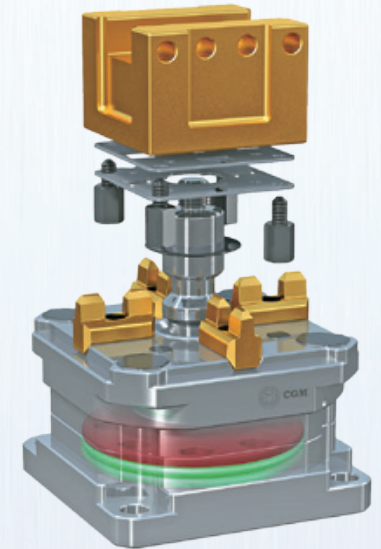
CP-37 鋼片式鋼性電極座 Stainless Electrode Holder

自行鎖固各種量具、治具、電極。
Self-locking for measuring tools, jigs, electrodes.



鋼片型

● 材質 Material : SUS420
● 重量 Weight : 600g





放電機用電極校正頭 Electrode Adjusting Head

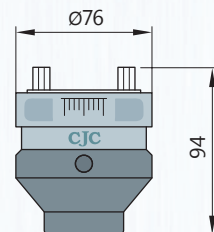
電極校正頭應用 APPLICATION

當放電機已安裝本公司夾頭，轉接電極校正頭，可校正未固定於電極座上之電極，可機外預校電極，減少機械停機時間。

When EDM is installed with CJC chuck and transferred to electrode adjusting head, it can correct the electrode which is not fastened on the electrode holder. It can pre-correct the electrode outside of the machine and reduces downtime.

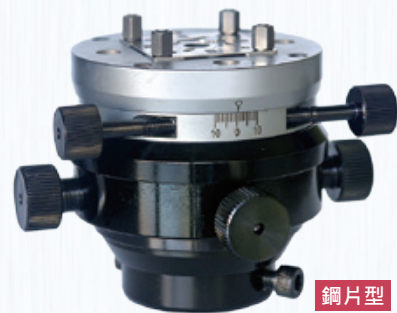


鋼片型

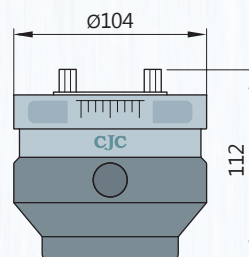


HE-75E 電極校正頭

- 使用沉頭螺絲調校，迷你電極與輕量化的設計。
- 主要用於電極庫及小型電極。
- 夾持外徑最大 Ø15mm.
- Use countersunk head screws to adjust the mini electrode with lightweight design.
- It's mainly used in electrode center and small electrodes.
- Max. Clamping dia Ø15mm.



鋼片型



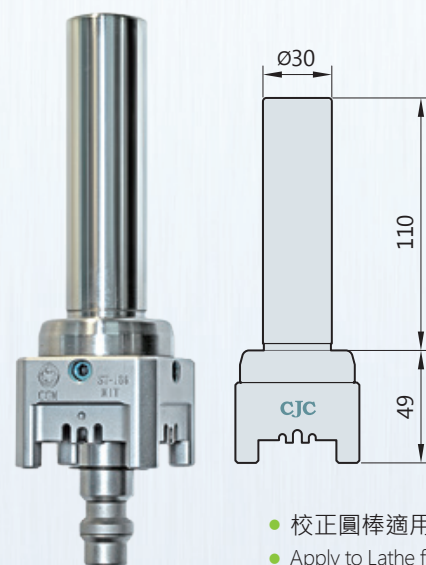
HE-100E 電極校正頭

- 有較大的調校範圍。
- 適用中大型電極。
- 夾持外徑最大 Ø22mm.
- Offering wider adjustment range
- It's suitable for medium and large electrodes.
- Max. Clamping dia Ø22mm.

校正圓棒 Calibrating Cylinder

ST-166

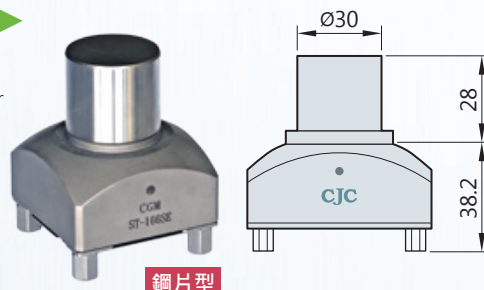
長圓棒型 Long type Calibrating Cylinder



- 校正圓棒適用於車床校驗同心度、平行度。
- Apply to Lathe for checking centricity and flatness.

ST-166SE ▶

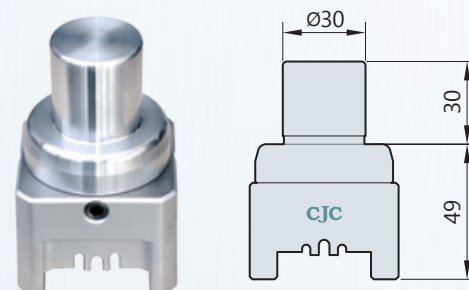
鋼片型短圓棒
Short type Calibrating Cylinder



鋼片型

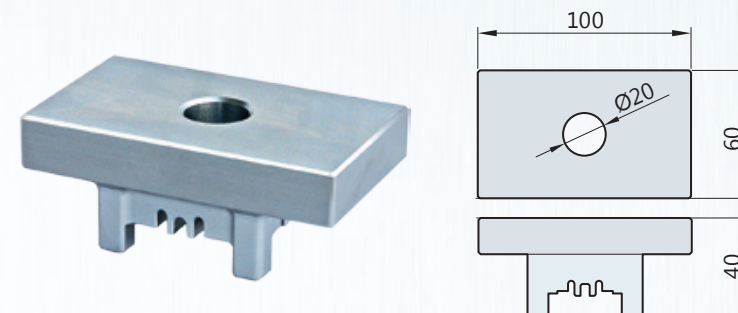
ST-166S ▶

短圓棒型
Short type Calibrating Cylinder



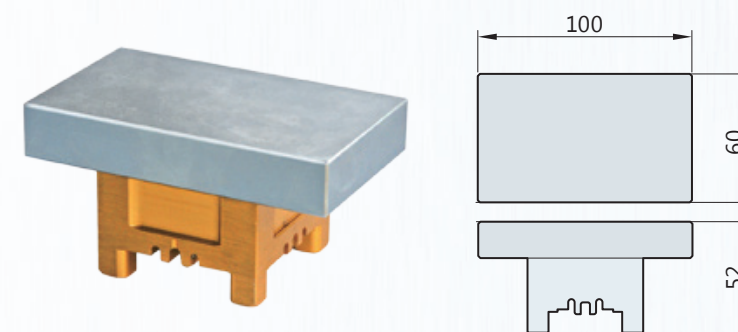
校正方規 Correction Measurement

ST-164 精密型校正方規 Precision Correction Measurement



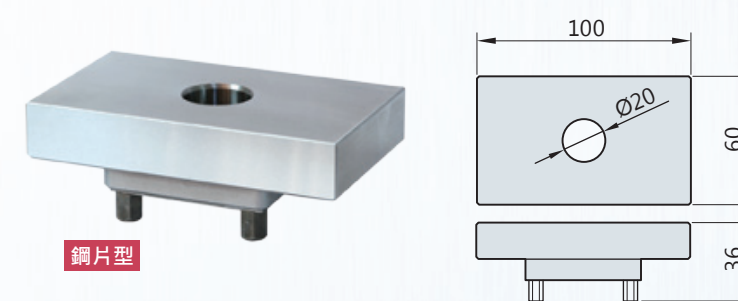
- 五軸 CNC 銑床必備量規。
- 用以校正中心 Ø20 孔校測夾具中心度。
- 用以檢查校正 X, Y 平面度。
- 一體成型材質 SUS420 HRC52 度。
- 5 axis CNC milling machine measurement
- Dia. 20 for centricity correction
- Check the flatness of X, Y axis
- All in one material SUS420, 52 HRC
- 重量 Weight : 1.05kgs

ST-165 經濟型校正方規 Standard Correction Measurement



- 用以檢查校正 X, Y 平面度。
- 側邊四面研磨可尋邊中心，及校正平行度。
- 接合座材質鋁，不附拉栓。
- 檢測面材質 SUS420 HRC52 度。
- Check the flatness of X, Y axis
- 4 ground surfaces for centering and flatness correction
- Electrode holder in Aluminum, W/O drawbar
- Checking surface material in SUS420, 52 HRC
- 重量 Weight : 0.5kg

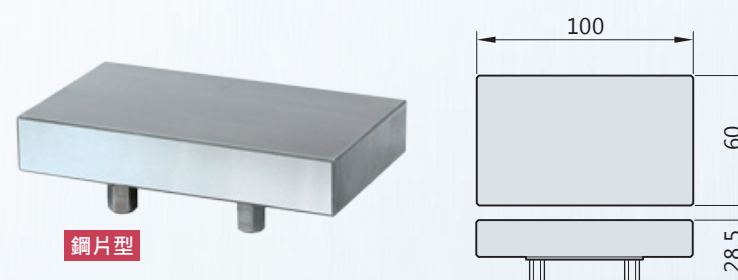
ST-164E 精密型校正方規 Precision Correction Measurement



鋼片型

- 五軸 CNC 銑床必備量規。
- 用以校正中心 Ø20 孔校測夾具中心度。
- 用以檢查校正 X, Y 平面度。
- 不附拉栓。
- 一體成型材質 SUS420 HRC52 度。
- 5 axis CNC milling machine measurement
- Dia. 20 for centricity correction
- Check the flatness of X, Y axis
- W/O drawbar
- All in one material SUS420, 52 HRC
- 重量 Weight : 1.0kgs

ST-165E 經濟型校正方規 Standard Correction Measurement



鋼片型

- 用以檢查校正 X, Y 平面度。
- 側邊四面研磨可尋邊中心，及校正平行度。
- 不附拉栓。
- 檢測面材質 SUS420 HRC52 度。
- Check the flatness of X, Y axis
- 4 ground surfaces for centering and flatness correction
- Electrode holder in Aluminum, W/O drawbar
- Checking surface material in SUS420, 52 HRC
- 重量 Weight : 0.8kg

CGM 拉桿 Drawbar

- 由合金鋼製成，抗拉強度 2500kgs 以上。
- 使用西德盤型彈簧，使用壽命 10 萬次以上。
- 專利的盤型彈簧設計，具有防塵和分離電極座功能。
- 使用時，注意盤型彈簧勿偏斜。
- Made of alloy steel with tensile strength more than 2500 kgs
- Using Germany spring and life expectancy is more than 100,000 times
- Patented disc-type spring design, with dustproof and electrode block separation function.
- Do not tilt the disc-type spring during usage.



PE-20A 放電機用拉桿 Drawbar for EDM

- 具中心出油功能及具有定位槽。
- 主要用於裝置有自動更換電極的放電機或機械。使用時注意定位槽方向，須嵌入電極座才有定位功能
- With center oiling function and positioning slot
- Make sure the direction of positioning slot and it'll works only when operate with electrode holder



PE-20M 車床、銑床兩用拉桿 Drawbar for Lathe & Milling Machines

- 手動拉桿。
- 具中心出油功能。在手動方式之操作下，適用於 CGM 各型夾頭。
- 拉桿長度較長，使用在線切割夾頭時，會突出底部。
- Manual drawbar
- With center oiling function. Under manual operation, all CGM chucks are applicable
- Attention: When apply to wire cut EDM, the drawbar will be over length.

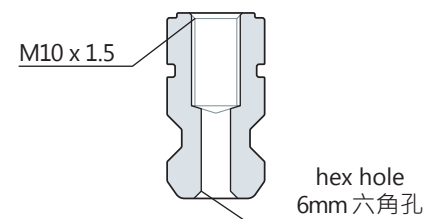


PE-20W 線切割機用拉桿 Drawbar for Wire cut EDM

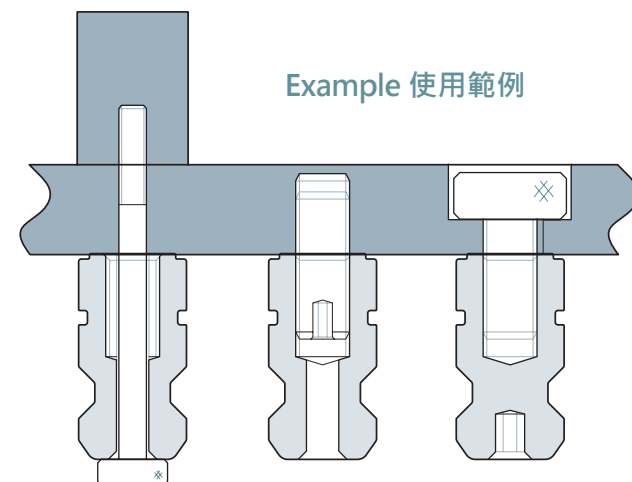
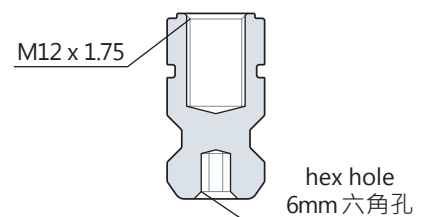
- 無中心出油功能。
- 線切割用拉桿。
- 拉桿長度較短，主要使用於線切割之夾頭，也適用於 CGM 各型夾頭。
- W/O center oiling function
- Drawbar for wire cut EDM
- Drawbar with shorter length and workable for all CGM chucks



PE20F10 治具板用拉桿 Drawbar for pallet application



PE20F12 治具板用拉桿 Drawbar for pallet application

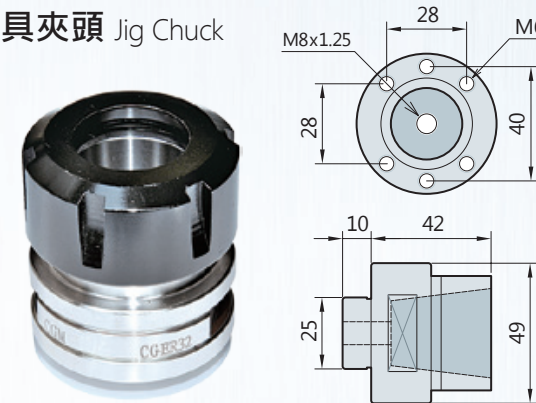


Example 使用範例

治具夾頭 Jig Chuck

CG-ER32

治具夾頭 Jig Chuck

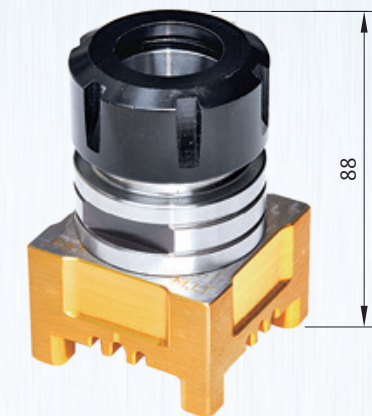


材質 Material: SUS420J2, 50HRC

治具夾頭之筒夾及扳手為選購配件
Collet and Wrench are optional.

CG-ER32AL

鋁座治具夾頭 Aluminum Jig Chuck



底座材質 Material: ALUMINUM

CG-ER32PE

鋼座治具夾頭 Steel Jig Chuck



底座材質 Material: SUS420J2, 50HRC

CG-ER32CT

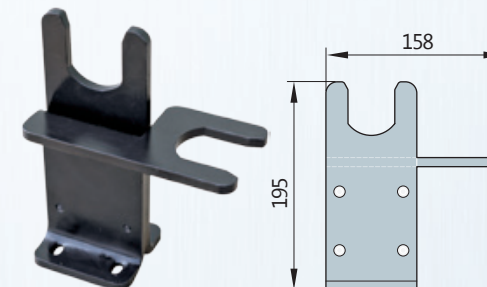
鋼座治具夾頭 Steel Jig Chuck



底座材質 Material: SUS420J2, 50HRC

ER-H41 夾頭鎖刀座

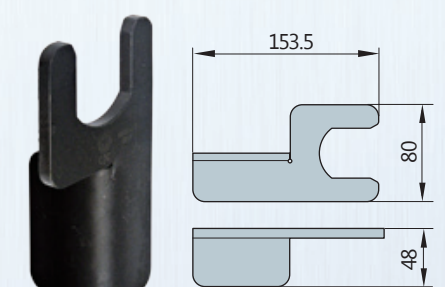
Jig Chuck Tool Holder



- 適用於 CG-ER32 治具夾頭使用螺絲固定。
- for CG-ER32 Tool Holder Locking Device.

ER-H41S 簡易型夾頭鎖刀座

Simple Type-Jig Chuck Tool Holder



- 適用於 CG-ER32 治具夾頭使用虎鉗固定。
- for CG-ER32 Tool Holder Locking Device.

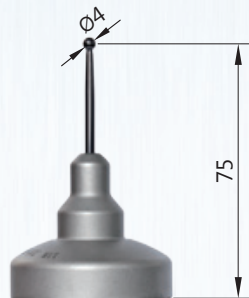


尋邊器 Edge Finder

- 置放於放電機槽內工件旁，輔助檢測電極尺寸與位置。
- 適用於放電機量測尺寸與座標。
- Locate next to EDM tank for assisting the dimension and coordinate measuring.
- Apply to EDM for dimension and coordinate measuring.

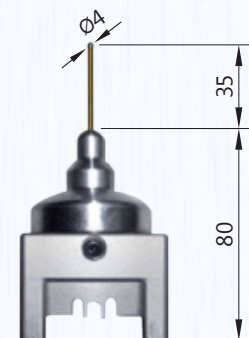
SB-101 ▶

基準球座標
Standard Ball Coordinate



SB-102 ▶

固定式尋邊器
Fix Edge Finder for EDM



SB-104 ▶

活動式尋邊器
Activity type Edge Finder

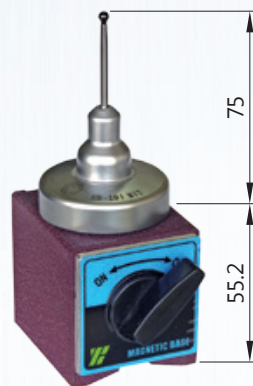
RENISHAW

英國製
3D測頭



SB-101Y ▶

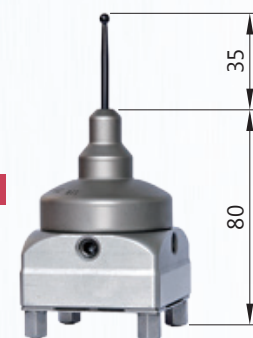
帶磁性座基準球座標
Magnetic Ball Coordinate



SB-102E ▶

固定式尋邊器
Fix Edge Finder for EDM

銅片型



SB-104E ▶

活動式尋邊器
Activity type Edge Finder

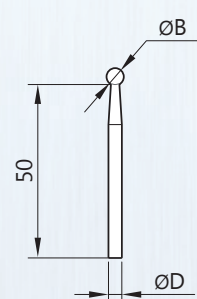
銅片型

RENISHAW

英國製
3D測頭

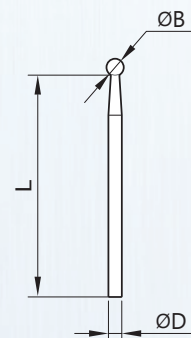


探針 Probe



Type No	ØD	ØB
SB50304	3mm	4mm
SB50305	3mm	5mm
SB50404	4mm	4mm
SB50405	4mm	5mm
SB50406	4mm	6mm

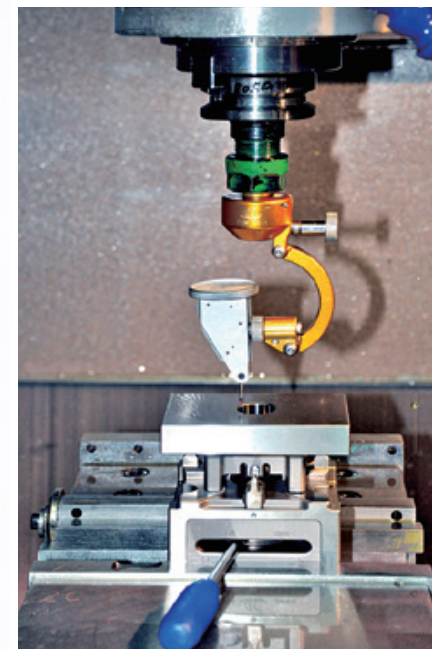
- 表面鍍層：高鉛鈦
- Surface coated : AlTiN
- 材質 Material : SUJ2, 60 HRC



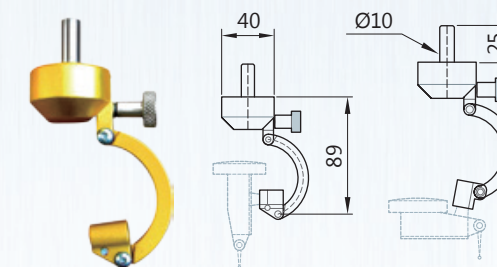
Type No	ØD	ØB	L
WSB70303	3mm	3mm	70mm
WSB70304	3mm	4mm	70mm
WSB80404	4mm	4mm	80mm
WSB80405	4mm	5mm	80mm

- 鎢鋼球探針
- Probe with Tungsten Carbide
- 柄材質 HSS
- Ball Tip and HSS Shank

弓型尋邊器 Edge Finder



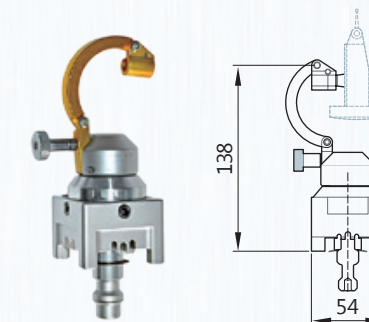
STC-1 弓型尋邊器 Edge Finder



量表為選購配件
Dial indicator is optional.

裝置於主軸上校正工件平行度、平面度、量測孔座標。
Install on spindle for correcting workpiece flatness, parallelism and coordinate measuring.

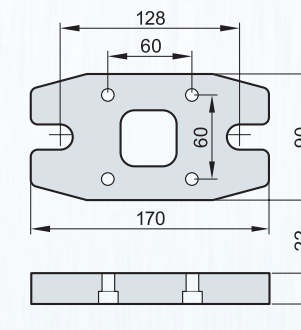
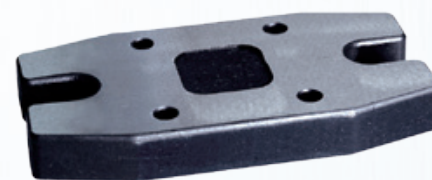
STC-2 旋轉弓型尋邊器 Rotary Edge Finder



量表為選購配件
Dial indicator is optional.

裝置於 CGM 各式夾頭可 360 度旋轉量測孔座標。
Suitable for all CGM chucks and with 360 degree coordinate measuring.

B98 夾頭固定座 Fixing Plate



- 適用於 HM-80E、QM-98E 銑床專用夾頭。
- Fixing Plate for QM-98E, HM-80E.
- 重量 Weight : 2.0kgs



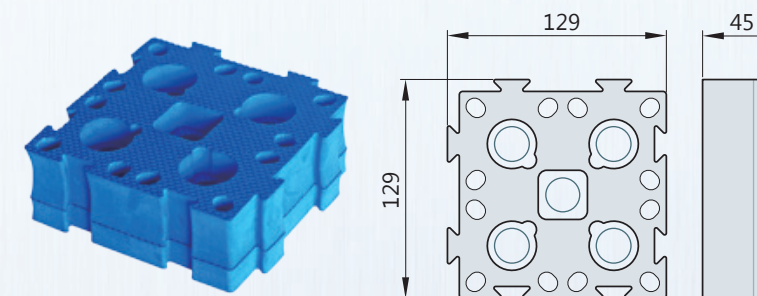
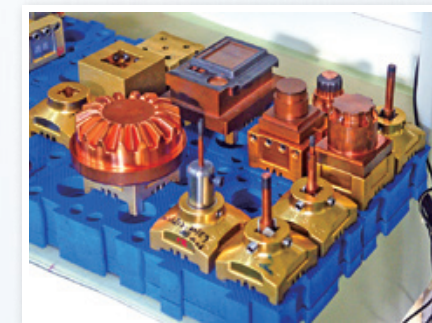
HM-80E



QM-98E

EH-129 電極保護墊

Electrode Holder Stand



- 材質 Material : EVA
- 可放 4 只 54 型電極座或放 1 只 82 型電極座 10 入/組。
- As a rack for 4 electrode holders of #54 type, or 1 electrode holder of #82 type.
- 10 PCS/SET

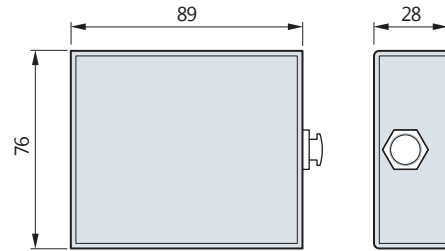
BMSV-01PB

按壓式機械閥盒組 Button Switch Box

- 氣壓用五口二位機械閥。
- 配管尺寸 PT1/8
- 5/2 Way Mechanical Valve
- Port Size: 1/8"



最大耐壓 Proof Pressure: 10 kgf/cm²



BMSV-01P

按壓式機械閥 Button Switch

- 氣壓用五口二位機械閥。
- 配管尺寸 PT1/8
- 5/2 Way Mechanical Valve
- Port Size: 1/8"



最大耐壓 Proof Pressure: 10 kgf/cm²

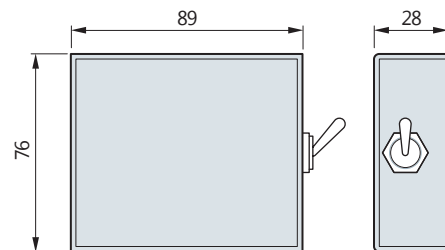
BMSV-01VB

開關式閥盒組 Toggle Switch Box

- 氣壓用五口二位機械閥。
- 配管尺寸 PT1/8
- 5/2 Way Mechanical Valve
- Port Size: 1/8"



最大耐壓 Proof Pressure: 10 kgf/cm²



BMSV-01V

開關式機械閥 Toggle Switch

- 氣壓用五口二位機械閥。
- 配管尺寸 PT1/8
- 5/2 Way Mechanical Valve
- Port Size: 1/8"



最大耐壓 Proof Pressure: 10 kgf/cm²

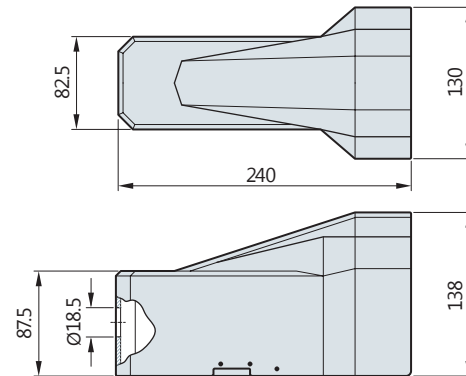
PU管及快速接頭為選購配件 PU Tube & Quick Connector (Option)

FSV8632-02SF

腳踏閥 Foot Switch

- 氣壓用五口二位機械閥。
- 配管尺寸 PT1/4
- 彈簧回拉、附保護蓋
- 5/2 Way Mechanical Valve
- Port Size: 1/4"
- Spring return operation, with foot guard.

最大耐壓 Proof Pressure: 10 kgf/cm²



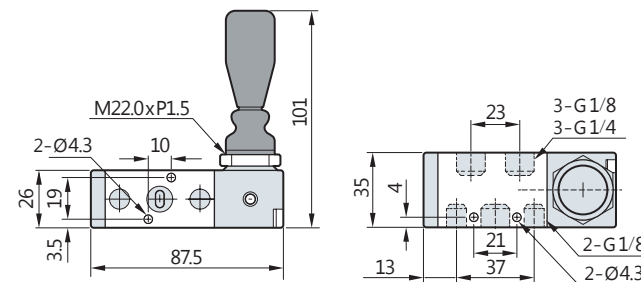
TSV8652-01M

手動閥 Hand Control Valve

- 氣壓用五口二位機械閥。
- 配管尺寸 PT1/8
- 5/2 Way Mechanical Valve
- Port Size: 1/8"



最大耐壓 Proof Pressure: 10 kgf/cm²



UFR/L-02

二點式三點組合 Filter Regulator + Lubricator

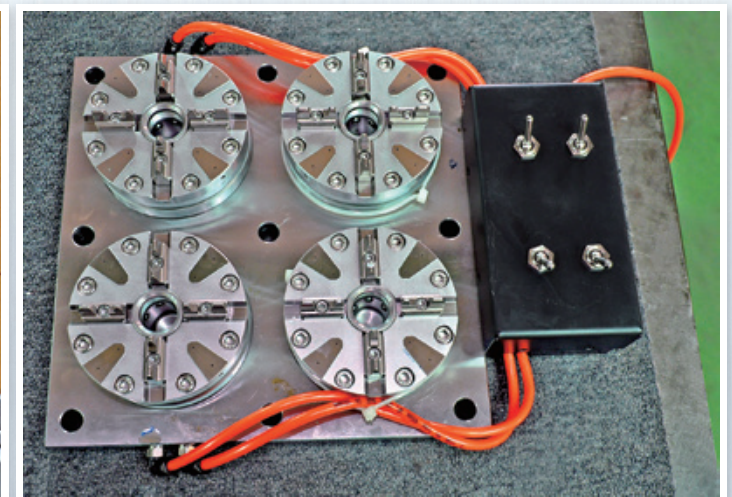
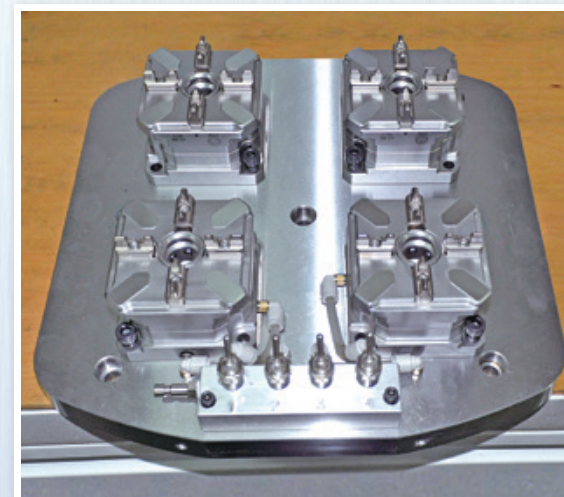
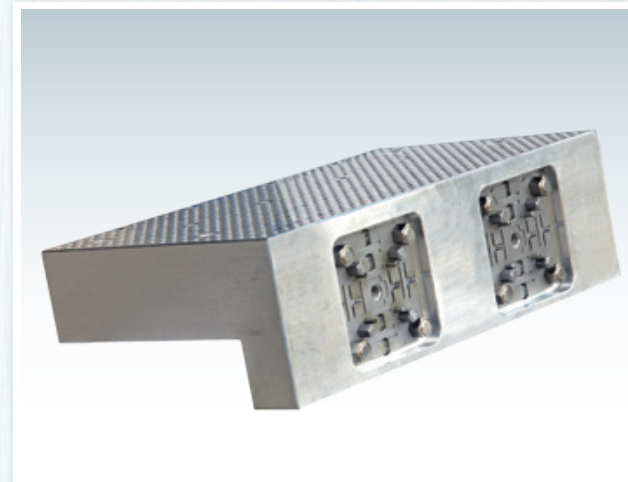
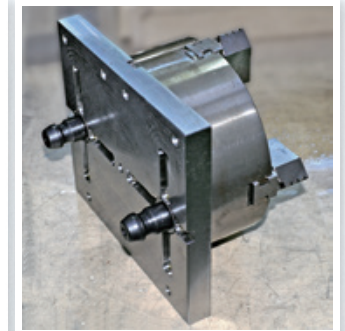
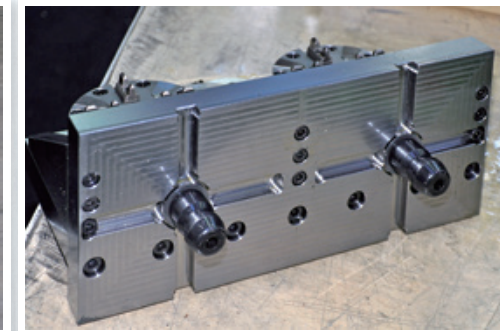
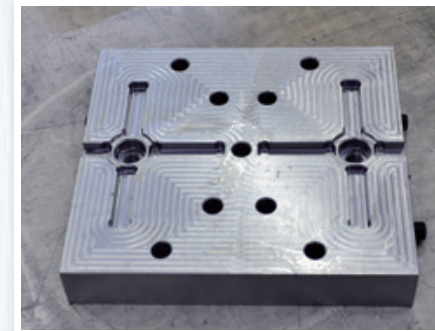
- 最大流量 2080 liter/min (ANR)
- 配管尺寸 PT1/4
- 最大耐壓 9.9 kgf/cm²
- 環境溫度 -10°C ~ 60°C



客製治具盤

Custom Fixture Pallet

- 提供優質經濟的產品，創造利潤。
- 根據客戶的需求，進行整體規劃，提升產能。
- 積極專業的技術支援與溝通，並提供有效解決方案。
- Offering quality and economical product to customer for making profits.
- For enhancing productivity, the custom fixture and total solutions are available.
- Offering efficient solution by professional technical supporting and communication.





影像量測系統

CCD Vision Image Hunter System

適用系統：本軟體適用於 2000、XP、Win7(32bit) 各系統均可正常使用。

版本區分：OFF LINE & ON LINE 幾何量測系統。

適用機型：所有工具機用皆可安裝或外掛。

量測原理

OFF LINE 版以標準尺記憶比對的方式，在沒有光學尺顯示數值的環境中，繪製出虛擬的座標系統，使用者再以滑鼠取點的方式來進行尺寸的量測；系統須搭配外接 CCD，才可將影像畫面擷取至電腦程式中，當然影像畫面愈清晰，所量測出的數據也就愈正確；本系統僅提供簡易的操作功能，故被測物件的形狀外觀以簡單的為佳，請參考以下的簡易功能說明，以瞭解其適用性。

連線工具機之光學尺輸出訊號源進行同步傳輸，並將所取得座標點進行演算，進而將工具機升級為類工具顯微鏡之機台。

基本功能

影像擷取 藉由 CCD 設備，將影像畫面直接傳輸到軟體視窗進行檢視。

照片擷取 除影像撥放的功能之外，系統並提供照片擷取功能，即可將顯示的畫面儲存為 bmp 或 jpg 的檔案格式，以利儲存、傳送、列印等需求，已儲存的照片檔案並可在系統中直接讀取，便於觀察比較時無需另行啟動專用的看圖軟體。

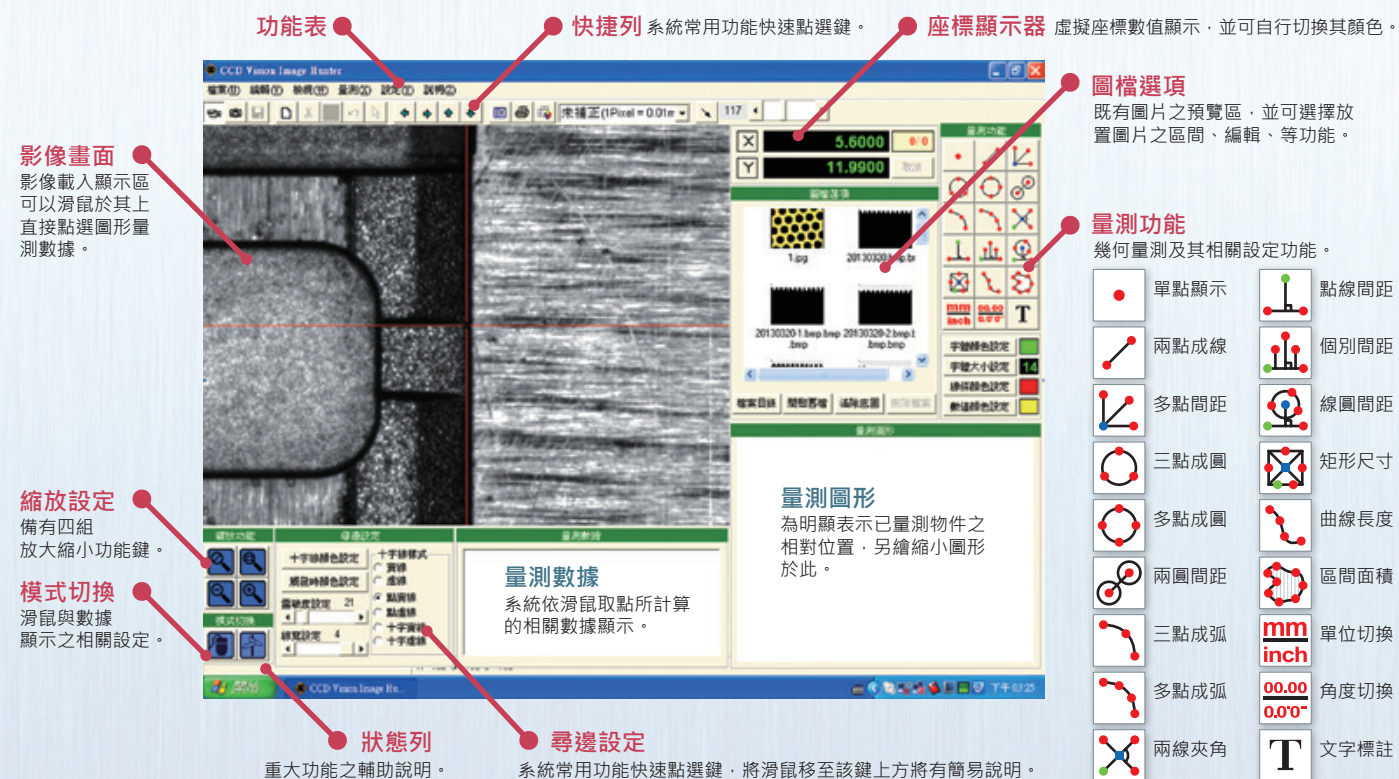
補正功能 因為本系統所搭配的模式是不接光學尺的操作邏輯，所以要能夠量測出數據值需先經過補正的動作，故系統內建補正功能並高達 20 組記憶值，且可將既有之記憶值呼出應用；進行補正功能之後，亦可於系統畫面上顯示其比例尺與補正值。(OFF LINE 版)

量測功能 包含【兩點線】、【三點圓】、【三點弧】、【兩線交點】...等幾何運算功能，以十字線中心取點的方式來進行簡易的計算工作，每項量測功能均包含不同的參數表現。

自動尋邊 影像畫面除顯示的功能之外，系統並增加自動尋邊之多項設定，其功能可代替原有之十字線產生器與十字尋邊功能，而且十字線的粗細可自行設定調整，最細可調至螢幕的一條畫素，增加量測工作的準確性。

軟體操作畫面

針對軟體幾個比較重要的功能區進行簡易說明



國外參展得獎證書及發明專利證書

Awards In International Competitions & Patent Certificates



品質管制 Quality Control

- 美國原裝 Brown & Sharpe 三次元量床(美國製作)設備。
- Imported USA Brown & Sharpe CMM Measurement Equipment.

