

立、臥式雙軸研磨機專業製造

PROFESSIONAL MANU.OF VERTICAL/HORIZONTAL
DOUBLE SPINDLE DISC GRINDERS



立式CNC-2雙軸研磨機

VERTICAL CNC-2 DOUBLE SPINDLED DISC GRINDERS

- 採用日本FANUC CNC控制，配合專用治具特殊機構，可做有角度、雙平面研磨加工，如汽車冷氣壓縮機斜盤。
- 多樣化產品中，除了雙平面加工之外，同時存在，只需做單面研磨的工件，從粗磨到精磨，一次加工完成。
- 成達公司成功開發立式雙軸單面研磨機CNC-2，特殊圓盤設計配合履帶式供料，振動送料系統，經粗磨、精磨，自動量測，自動下料，全自動生產。
- 本機械成功應用在汽車十字節軸承套筒端面研磨。前接內孔研磨機，後接清洗機是典型高生產效率設備。

- The machine is installed with FANUC computer numerical controller, and can make oblique and double-faced grinding, such as grinding the car on its slant disc of air conditioning compressor if a special designed tooling is aided.
- Except double-sided machining methods, there also exist workpieces needed one-side grinding among those diverse products One-side grinding can be completed once from rough grinding to accuracy grinding.
- Cherg Dar company has successfully developed vertical CNC-2 double spindle disc grinders. Through rough grinding and accuracy grinding, the special design of disc with caterpillar feeding and vibrometer feeding system can auto-measure, automatic feed-out and auto-produce.
- This machine applies to automobile cardan joint bearing cap grinding successfully. Moreover, it is a typical high efficient productivity equipment with frontal inside diameter grinder and purification plant in the back.



成品樣式 END PRODUCT STYLE

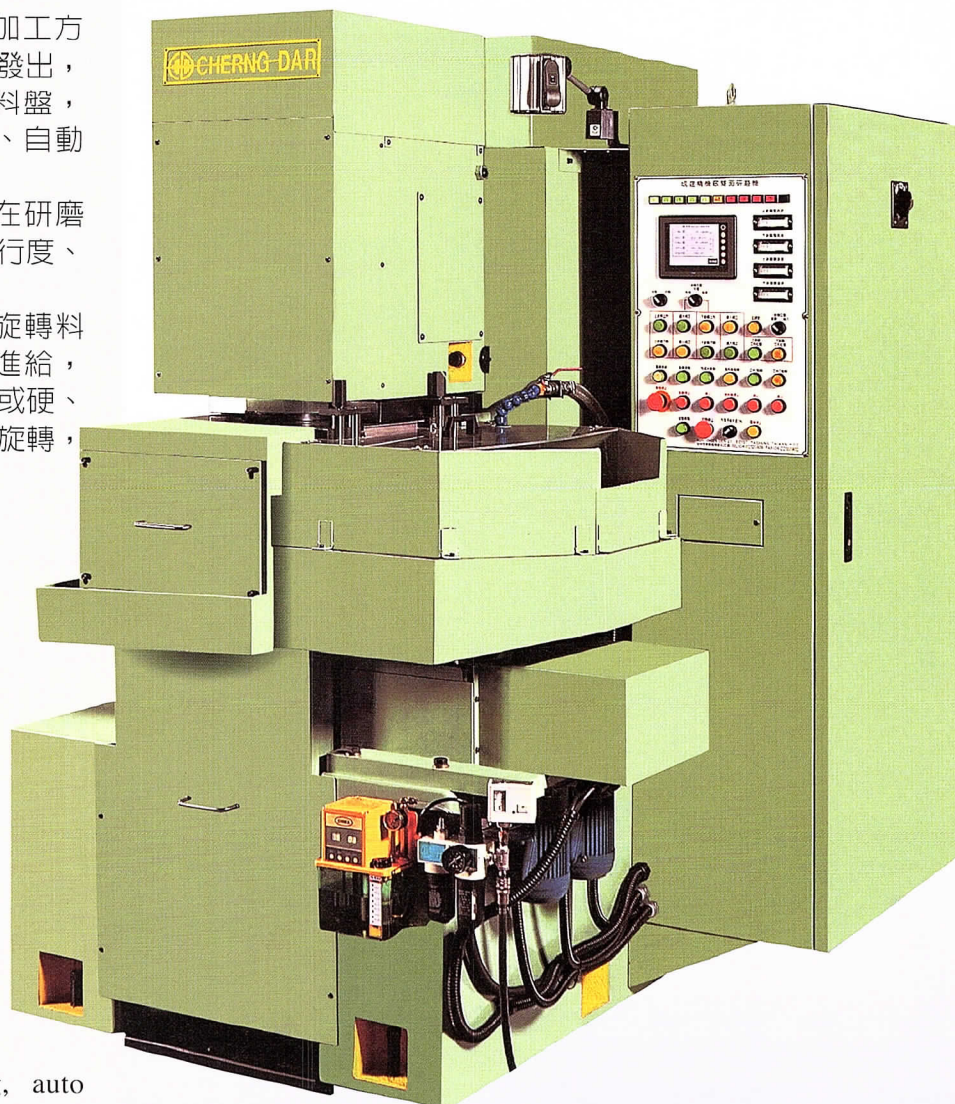


立式NC 雙軸研磨機

VERTICAL NC DOUBLE SPINDLED DISC GRINDERS

- 為應付多樣化需求，跳脫現有加工方式，創造更高精度，成達公司開發出，工件強制驅動方式，配合旋轉料盤，分站加工，可做自動送、收料、自動化生產。
- 工件強制驅動方式，是加工物在研磨過程，強制迴轉，可提高工件平行度、平面度。
- 因研磨進給方式，和直通式，旋轉料盤式不同。研磨同時，砂輪可進給，故可做預留切削量大的加工件，或硬、脆、難切削的材料。因工件強制旋轉，同一機型可研磨較大的工件。

- In order to meet a variety of demands and jump out from the binding of conventional machining method, Cherg Dar Company develops a highly accurate auto-driving gadget. Such design coordinates with rotary tray and multi-stage machining at different stations can be used for auto feeding, auto collection and auto production.
- The so-called auto-driving refers to a grinding process in which a workpiece is forced to rotate. This function enhances the parallelism and the planeness of the workpiece.
- Grinding feeding and straight-through feeding are different on the rotary tray. During the grinding, the sanding wheels can feed the material. Therefore the machine can process the workpiece which needs a large grinding allowance, or is hard, fragile or difficult to grinding.



成品樣式 END PRODUCT STYLE



臥式CNC-2雙軸研磨機

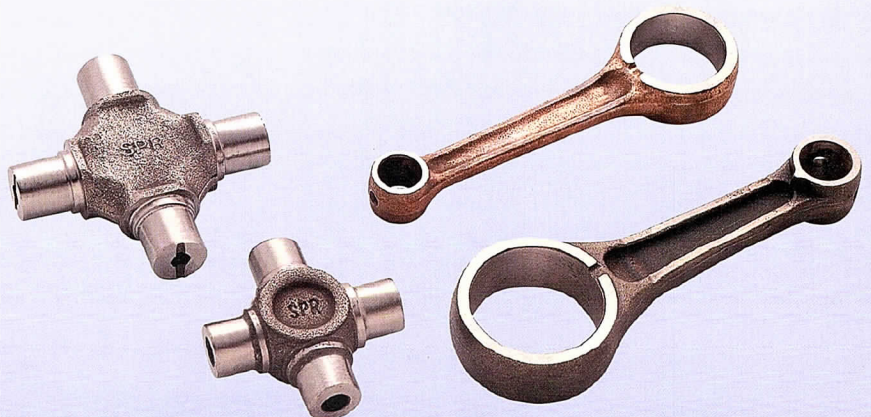
HORIZONTAL CNC-2, DOUBLE-SHAFT GRINDER

- 以立式研磨為主流今天，依然存在許多只有臥式磨床才能加工的工件。
- 成達臥式系列，NC、CNC，進料方式不同，可有多種研磨方式。
- 臥式雙軸研磨機經本公司開發完成有CNC控制二軸、三軸機種並可與其它機械連線作業，如CNC無心磨床、CNC車床等作彈性加工作業，減少人員配置，提昇產能。
- 本機研磨頭部滑軌採用瑞士進口高精度線性滑軌具低磨耗，重負荷等特性並配合高精度滾珠螺桿可微量進給，重複精度高，更可配合旋轉分割裝置做多面加工使用。



- Today vertical grinding is the main stream, but there exists many workpieces which only horizontal grinding machine can process.
- Cherg Dar Horizontal Series NC and CNC are different from feeding methods; therefore, there are many kinds of grinding modes.
- Our company has developed CNC controlled 2 axis, 3axis Horizontal Double Spindle Disc Grinders which can be processed in line with other machines such as, CNC centerless grinders, CNC lathes etc., for making flexible processing and reducing labour distributing & advance production rate.
- The sliding rail of main spindle is adopted hi-precision Swiss linear motion rail from imported which is low wastage, heavy loading etc. Combined those features with micro-feeding of hi-precision ballscrews, the machine can stay in high accuracy repetitiously. Furthermore, it is able to make multi-face processing with rotary indexing table.

成品樣式 END PRODUCT STYLE



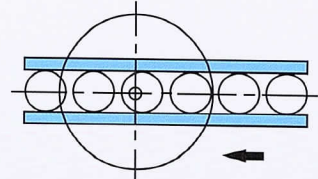
立式雙軸研磨機

VERTICAL DOUBLE SPINDLE DISC GRINDERS

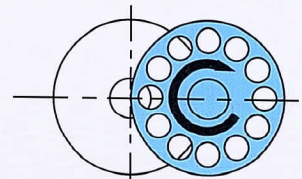
- 機械結構採三箱式結構設計，其分別為床台底座，立柱及研磨頭部，且採加強肋箱體鑄造並經回火消除內應力，結構剛強穩固，研磨作業時，可吸震動，並可抵抗強度扭曲，不變形。
- 立柱滑道均經精密研磨可保持研磨頭部上下運轉滑順，確保研磨精度。
- 雙軸研磨機之工件研磨乃為浮動式，無夾持變形之煩惱，且工件為水平進入加工，連續式送料，可提升工作效率，本機尤其適合薄形工件做雙面研磨加工使用。
- 雙軸研磨機備有多種型式供客戶選擇客戶可依工件形狀、尺寸、工件切削量、精度或其它因素等做正確選購。
- The m/c structure is designed of three boxes and those are machine base, column & grinding spindle etc., otherly, the casting with a heavily ribbed box struction and treated by annealing to eliminate internal stress, rugged and stable, for which can be absorbed the vibration during grinding processings and also can be resisted the strength torsion, not to deform.
- The vertical slide-way be processed by precision ground which can be maintained the smooth sliding of grinding spindle and assured grinding accuracy.
- During grinding, the processing workpiece is floated so that free trouble of deformation by clamping; moreover, the workpiece is fed horizontally and continuously, which can advance the efficiency. Especially, this m/c is well suited for thin workpiece to make double side grinding.
- The double spindle disc grinders provid versatile model available for selection which can make correct select according to workpiece profile, size, cutting rate & precision etc, or other consideration for lustomers demand.



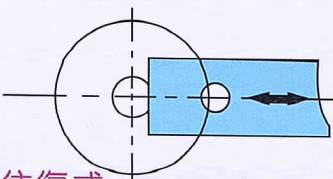
送料方式 FEEDING TYPE



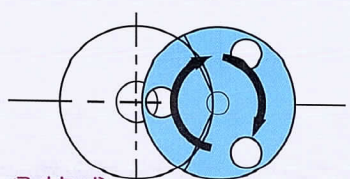
直通式
Straight through feeds



迴轉式
Rotary carrying feeds



往復式
Reciprocating feeds



分立式
Index distributing feeds

立式雙軸研磨機

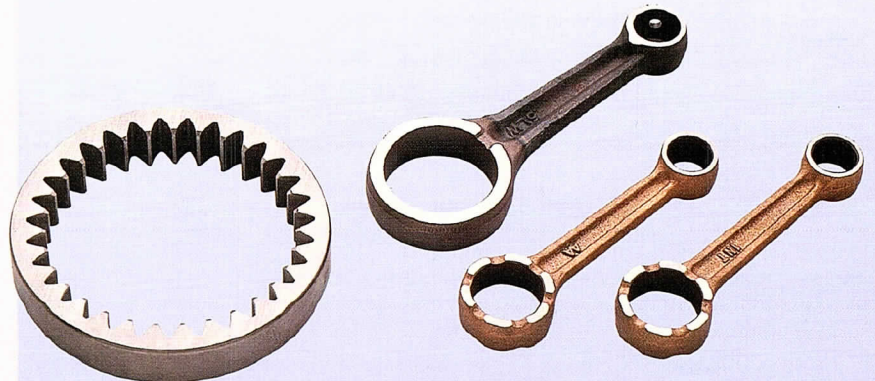
VERTICAL DOUBLE SPINDLE DISC GRINDERS

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成品樣式 END PRODUCT STYLE



臥式雙軸研磨機

HORIZONTAL DOUBLE SPINDLE DISC GRINDERS

- 直線通過加工方式
- 加工物在兩砂輪之間，直線通過的研磨方式。為雙端面研磨加工，效率最高。
- 加工速度，可依工件不同做調整。
- 此種加工方式，直線通過時，需有導板支撐，工件為連續接觸，在形狀上有所限制，硬、脆加工物不適合。
- 因工件不同，需更換導板，較費時。這種加工方式，適合大量生產的加工方式。



- Linear go-through machining.
- The workpiece is between the two grinding wheels, and straight goes through for grinding. The double-end grinding has the highest working efficiency.
- Machining speed is adjustable depending on the nature of the workpiece.
- Such machining method associated with linear going-through requires guide boards for support. The workpiece is processed under a continuous contact. Therefore, its shape is limited. Hard or fragile workpiece is not suitable.
- The guide board needs replacement because of different workpiece. It takes time. This kind of machining method is used for machining a large volume of workpiece.

型式號碼 MODEL NUMBER

CDG - 458 - V - F

送料方式 Feeding Type

ST : 直通式 Straight through feeds

R : 往復式 Reciprocating feeds

RC : 迴轉式 Rotary carrying feeds

ID : 分站式 Index distributing feeds

立式 Vertical

臥式 Horizontal

研磨砂輪尺寸 Grinding wheel size
(Ø305, Ø355, Ø458, Ø660, Ø760mm)

型式系列 Model Series

規 格 SPECIFICATIONS :

型 式 Model	CDG-305	CDG-355	CDG-458	CDG- 660 ⁵⁸⁵	CDG-760
主軸動力 Mainspindle power	5HP/3.7KW	7.5HP/5.6KW	15HP/11.2KW	20HP/15KW	30HP/22KW
砂輪直徑 Grindingwheel dia.	305mm	355mm	458mm	660 ⁵⁸⁵ mm	760mm
主軸轉速 Mainspindle rev. speed	2000rpm	1700rpm	1280rpm	900rpm	800rpm
最大工件外徑 Max. workpiece dia.	Ø 40mm	Ø 60mm	Ø 80mm	Ø 130mm	Ø 180mm
最小工作厚度 Min. workpiece thickness	0.6mm	0.7mm	0.8mm	1.0mm	1.2mm
機械尺寸 Machine size	1300x1000x1300mm(H)	1750X1500X2100mm(V) 2000x1500X1500mm(H)	1750X1500X2500mm(V) 2400x1700X1500mm(H)	1500x1800x2350mm(V) 2800x1700x1600mm(H)	2000x1800x3600mm(V) 3340x1800x1720mm(H)

※ 本公司有權修改規格及尺寸，如有變更恕不另行通知。

Our company reserves the right to modify the specifications or dimensions, if those are subjected to change, without prior notice.

標準附件 / STANDARD ACCESSORIES :

- 砂輪及砂輪法蘭 / Grinding wheel & flange 1 組 / set
- 工件導板 / Guide plate of workpiece 1 組 / set
- 光學尺及顯示器 (二軸) Linear scale & display unit(2 axis) 1 組 / set
- 工具及工具箱 / Tools & Tool box 1 組 / set
- 工作燈 / Working lamp 1 組 / set

特別附件 / OPTIONAL ACCESSORIES :

- 變頻器 / Inverter 2 組 / set
- 箱型冰水機組 / Chiller unit for cooling cutting fluid 1 組 / set
- 磁性分離機 / Magnetic separator 1 組 / set
- 紙帶過濾機 / Paper filter 1 組 / set

成 達 研 磨 精 機 廠 有 限 公 司

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