

# GP SERIES

## GP-1510~10035

# 龍門定樑精密平面磨床

## Double Column Surface Grinding Machine

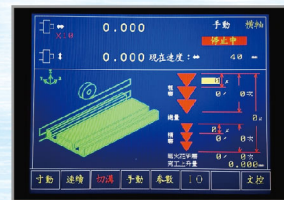
### 簡易操作畫面-人機介面設計 User-friendly Operation Screen-Human Machine Interface Design



主畫面 Main Menu



橫軸-寸動  
Hori. Spindle-Jog



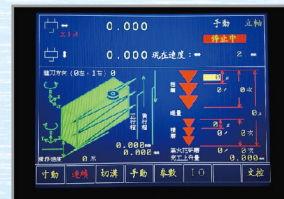
橫軸-切溝  
Hori. Spindle-Grooving



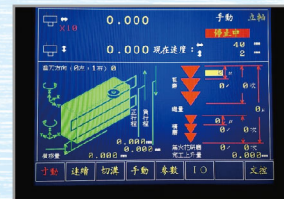
橫軸-連續  
Hori. Spindle-Cont.



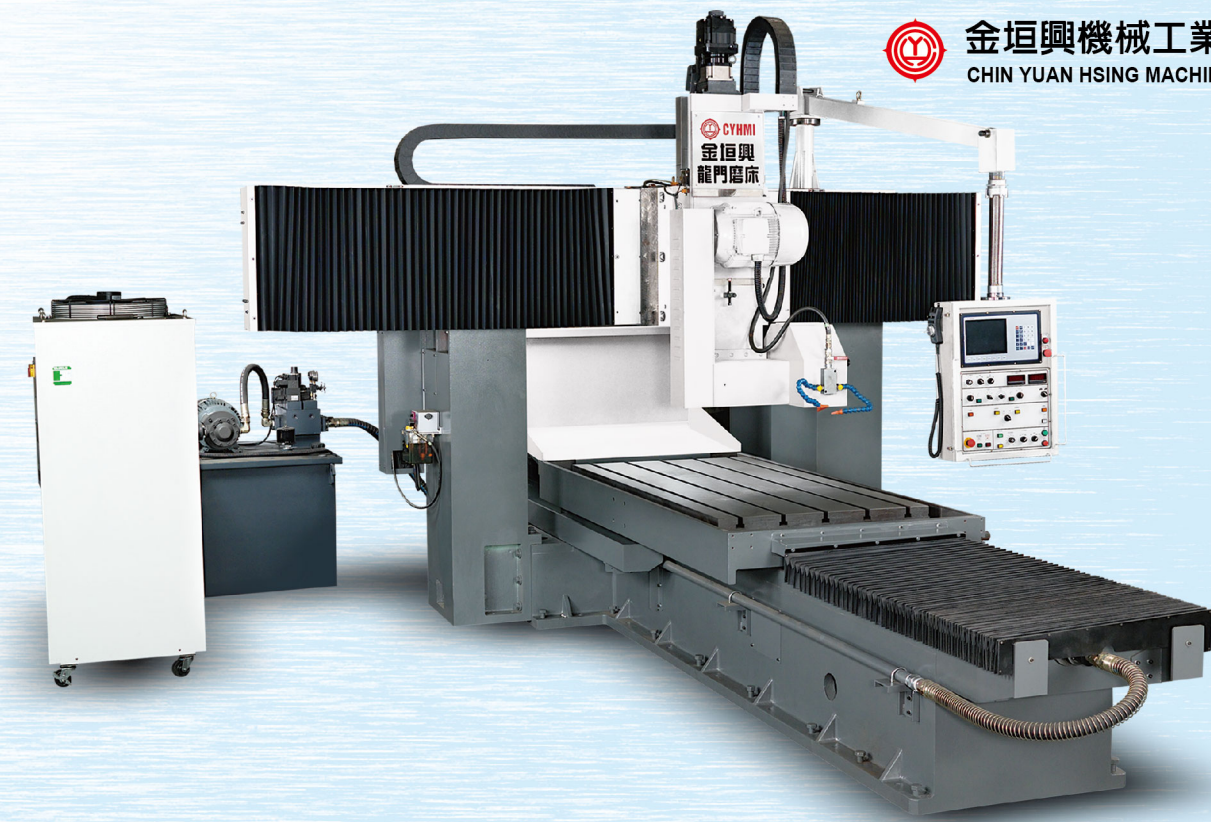
立軸-切溝  
Vert. Spindle-Grooving



立軸-連續  
Vert. Spindle-Cont.



立軸-寸動  
Vert. Spindle-Jog



# GP-1510~10035

### 機械特性 Machine Features

整機採用FC灰口強韌鑄鐵鑄造而成，經強化熱處理與應力消除，長時間不變形機器長時間加工，具有最佳穩定性。

The structural parts of the machine are manufactured from durable gray cast iron (FC class), rib reinforced, heat treated and stress relieved for lifetime deformation-free. Maximum stability is ensured during a long time of machining operation.

高剛性結構設計  
整機滑道採高剛性硬軌設計，箱式結構與細密的肋骨排列支撐使長期研磨工作時，機台結構保有穩定度，剛性及長久壽命。

High Rigidity Structure Design  
All slideways are box ways design. This combined with box type structure and comprehensive ribs deployment to achieve maximum stability and rigidity of the machine structure during long time grinding operation. Long service life is ensured as well.

全機主要貼合面與滑動面專業精密鏟花，所有滑軌均以低磨擦，耐磨耗之"Turcite B"貼襯，部件移動順暢靈敏且穩定。

All contact surfaces and sliding surfaces are precision scraped. All slideways are coated with Turcite-B with low friction and maximum wear-resistance, allowing the parts to move smoothly, effortlessly and stably.

各式大小型規格設計，適合各式工件平面研磨及特大件加工，兼具高效率磨與高載重負荷能力。

A wide range of models to select for surface grinding on various workpieces and extra large workpieces, and provide high efficiency grinding and high loading capacity.

各式加工能力  
可輪磨各式金屬、石材等材質；實現平面、側面、斜面的超精密加工能力。

Machining Applications  
For grinding various metal and stone materials, etc.  
A super high precision grinding capability for surface, side and slant surfaces.



規格表 SPECIFICATIONS

龍門定樑精密平面磨床 Double Column Surface Grinding Machine

項目Item / 型號Model	單位Unit	GP-1510~3010	GP-2015~6015	GP-3020~6020	GP-3025~8025	GP-4030~10030	GP-4035~10035
X 軸行程 X Axis Travel	mm	1500~3000	2000~6000	3000~6000	3000~8000	4000~10000	4000~10000
Y 軸行程 Y Axis Travel	mm	1000	1500	2000	2500	3000	3500
Z 軸行程(頭部) Z Axis Travel (Head)	mm	500	600 (800)Opt.	600 (800)Opt.	600 (800)Opt.	750(1100)Opt.	750(1100)Opt.
雙柱間距離 Between Column Width	mm	1040	1640	2140	2640	3140	3640
工作台面尺寸(L x W) Table Size (L x W)	mm	1500~3000 x 700	2000~6000 x 1000	3000~6000 x 1600	3000~8000 x 2000	4000~10000 x 2500	4000~10000 x 3000
研磨高度 Wheel Bottom to Table	mm	0~500	0~900(1100)Opt.	0~900(1100)Opt.	0~900(1100)Opt.	0~1000(1350)Opt.	0~1000(1350)Opt.
主軸中心至工作台 Spindle Center To Table (Approx.)	mm	703	1154(1354)Opt.	1154(1354)Opt.	1154(1354)Opt.	1254(1604)Opt.	1254(1604)Opt.
X 軸進給速率 X Axis Feed Rate (Hydraulic type)	m/min	5~25	5~30	5~30	5~30	5~30	5~30
Y 軸快速進給速率 Y Axis Rapid Traverse	mm/min	2000	4000	4000	4000	4000	4000
Z 軸快速進給速率 Z Axis Rapid Traverse	mm/min	1000	2000	2000	2000	2000	2000
Z 軸進刀最小單位 Z Axis Min. Amount of Feed	mm	0.002	0.002	0.002	0.002	0.002	0.002
主軸轉速 Spindle Speed	rpm	1500	1200	1200標準(Std.); 1000選配(Opt.)	1200標準(Std.); 1000選配(Opt.)	1200標準(Std.); 1000選配(Opt.)	1200標準(Std.); 1000選配(Opt.)
主軸馬力 Spindle Motor	HP	10HP / 4P	20HP / 4P	20HP/4P標準(Std.); 30HP/4P選配(Opt.)	20HP/4P標準(Std.); 30HP/4P選配(Opt.)	20HP/4P標準(Std.); 30HP/4P選配(Opt.)	20HP/4P標準(Std.); 30HP/4P選配(Opt.)
砂輪尺寸 Grinding Wheel Size	mm	φ406 x φ127 x 50標準(Std.)	φ508 x φ203 x 50標準(Std.)	φ508 x φ203 x 50標準(Std.)	φ610 x φ254 x 100選配(Opt.)	φ508 x φ203 x 50標準(Std.)	φ610 x φ254 x 100選配(Opt.)
工作台T型槽 T-Slot of Table	mm	18 / 22	22 / 24	22 / 24	22 / 24	24 / 28	24 / 28
控制系統 Control System	-	PC-BASE	PC-BASE	PC-BASE	PC-BASE	PC-BASE	PC-BASE

\* 型錄之規格如有變更，恕不另行通知，且以契約為準。 \* Specifications subject to change without prior notice.

標準配件

- |                |               |
|----------------|---------------|
| 1.圖型對話人機介面操作系統 | 9.X、Y、Z軸伸縮防塵罩 |
| 2.磨石校正座        | 10.X軸循環潤滑系統   |
| 3.鑽石削刀         | 11.油壓系統冷卻機    |
| 4.砂輪平衡棒        | 12.工作臺側水槽鍍金   |
| 5.平、立磨砂輪       | 13.電氣箱空調      |
| 6.法蘭(含退石器)     | 14.穩壓 / 變壓器   |
| 7.紙帶過濾機        | 15.地基螺絲       |
| 8.集中潤滑操作系統     | 16.工具及工具箱     |
|                | 17.操作手冊       |

Standard Accessories

- |  |  |
|--|--|
| 1.Graphic HMI (Human-Machine Interface) Operating System | 9.X、Y、Z Axis Telescopic Cover            |
| 2.Grindstone Correcting Base                             | 10.X-Axis Circulating Lubrication System |
| 3.Diamond Cutting Tool                                   | 11.Hydraulic System Cooler               |
| 4.Grinding Wheel Balancing Arbor                         | 12.Sheet Metal Of Water Tank Side        |
| 5.Vertical & Horizontal Grinding Wheel                   | 13.Electrical Box Air Conditioner        |
| 6.Flange (Including Stone Reject)                        | 14.AVR / Transformer                     |
| 7.Paper Tape Filter                                      | 15.Foundation Bolt                       |
| 8.Central Lubrication System                             | 16.Tool & Tool Box                       |
|  | 17.Operation Manual                      |

選擇附件

- 立磨副頭
  - 砂輪尺寸 φ355 x φ127 x 50 mm / φ406 x φ203.2 x 50 mm
  - 主軸轉速 1800rpm / 1500rpm ●主軸馬力 10HP 4P / 15HP 4P
  - 電動旋轉功能 ●伺服驅動 ●油壓鎖固
  - \*\*GP-1510~3010恕不提供選購此項
- 自動砂輪修整裝置
- 半自動 / 全自動主輪動平衡校正系統
- 立柱後全密式外罩鍍金
- 切削液水霧回收裝置
- 清潔用風 / 水槽

Optional Accessories

- Additional Vertical Grinding Head
  - Grinding Wheel Size φ355 x φ127 x 50 mm / φ406 x φ203.2 x 50 mm
  - Spindle Speed 1800rpm / 1500rpm ●Spindle Motor 10HP 4P / 15HP 4P
  - Electric Swivel Function ●Servo-Driven ●Hydraulic Lock
  - \*\*We don't provide additional vertical grinding head with GP-1510~3010.
- Automatic Grinding Wheel Dresser
- Semi-Auto / Auto Grinding Wheel Dynamic Balance System
- Column Rear Full Chip Enclosure
- Coolant Mist Collectors
- Air / Water Cleaning Equipment



金恒興機械工業股份有限公司  
CHIN YUAN HSING MACHINE INDUSTRIAL CO., LTD.

■總公司 HEAD OFFICE

台灣彰化縣芬園鄉茄荖村芳草路一段342巷170號  
No.170, Ln. 342, Sec.1, Fencao Rd., Fenyuan Township,  
Changhua County 50245, Taiwan.  
TEL: 886-49-2510279 FAX: 886-49-2512897  
E-mail: cyhs1972@ms77.hinet.net http://www.cyhmi.com



CHIN YUAN HSING

龍門定樑精密平面磨床  
Double Column Surface Grinding Machine

GP series  
GP-1510~10035

