

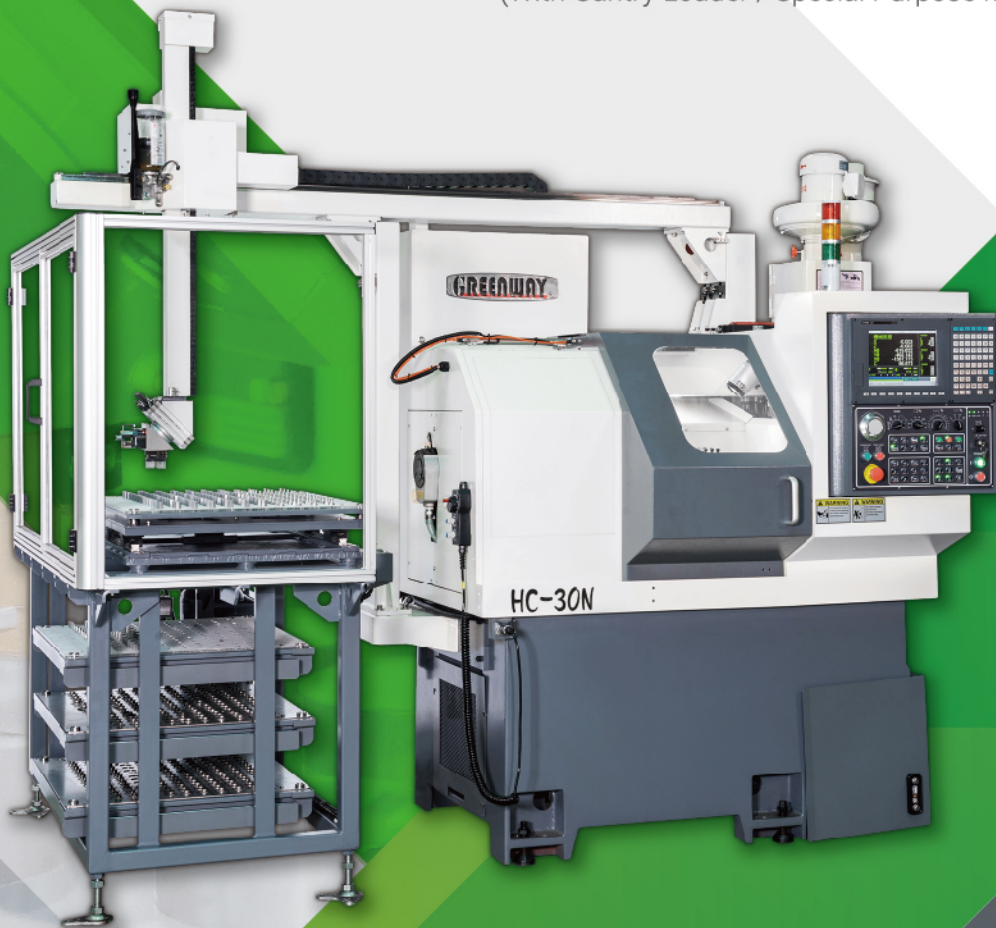
GREENWAY[®]

PRECISION CNC LATHE

HC-30N & HC-30 & JYN-42

精密臥式數控車床(門型機械手/專用機)

Precision Horizontal CNC Lathe
(With Gantry Loader / Special Purpose Machine)



www.cnc-lathe.com

JARNG YEONG ENTERPRISE CO., LTD.

HC-30/HC-30N/JYN-42

CNC LATHE WITH GANTRY LOADER

HC-30/HC-30N/JYN-42 搭配門型機械手

數控車床搭配門型機械手，做自動送料，雙軸伺服控制，高速度、高精度，提高生產效能與質量，節省人力成本，實現高速化作業，無論白天或夜晚時間，都能不間斷連續加工。

CNC lathe of Greenway can be equipped with gantry loader to make single workpiece auto feeding, and double axis servo control. It enhances the production efficiency and makes quality level up; meanwhile, it saves labor cost and realizes the high-speed operation. No matter daytime or nighttime, it can continuously work.



▲ HC-30



▲ HC-30N



▲ JYN-42

產品說明 / DESCRIPTION

- ▶ 採雙軸伺服控制，進行單件送料，擁有高速度、高精度的優勢。
Double axis adopt servo control, with superiority in high speed and high precision for single workpiece loading.
- ▶ 可根據客戶毛胚之送料需求，選擇搭配不同形式的供料台。
Can work with different types of feeder station based on customer's feeding requirement on blank materials.
- ▶ 門型機械手置於機台上方，此設計可延長自動送料系統的壽命，並降低耗損成本。
Gantry Loader is on top of machine. The design can extend lifetime of auto loading / unloading system and decrease the consumption cost.
- ▶ 門型機械手採用手持式人機介面(選配)，擁有專用掌上型觸控螢幕，介面明確，具有防呆設計，教導式教學。
Gantry Loader uses remote control interface(opt), owing professional handheld touchscreen with clear interface, fool-proof design, and guide with teaching.
- ▶ 可配合製程規劃彈性運用，連結組成各式生產線。
Various possibilities for production line lineage according to process plan.
- ▶ 若有遠端監控之需求，昌勇亦能提供相關配置協助。
We, GREENWAY can also provide the relative assistance if customer has remote monitoring requirement.

HC-30N SPECIAL PURPOSE MACHINE

HC-30N 專用機

F型 / F-TYPE

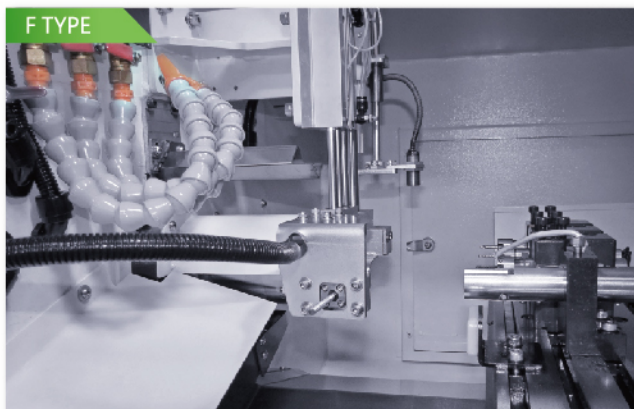
內置式自動上 / 下料專用機

INTERIOR AUTO LOADING / UNLOADING SPM

- ▶ 送料範圍：外徑 $\varnothing 50$ mm、長度35 mm以內。
Its feeding capability is max. O.D. $\varnothing 50$ mm, max. length 35 mm.
- ▶ 可搭配直接式或輔助式氣缸送料機構，配合震動送料桶，自動送料穩定且效率高。
It's available with direct or auxiliary cylinder feeding mechanism and vibration barrel, which is high auto feeding efficiency.



▲ F-type



J型 / J-TYPE

圓棒式自動上／下料專用機

ROUND BAR AUTO LOADING/UNLOADING SPM

- ▶ 此機型適用於長軸型工件。
This machine type is suitable for long shaft workpiece.
- ▶ 送料範圍：外徑 $\text{Ø}20\text{ mm}$ 、長度 300 mm 以內，置料槽可放置約300支 $\text{Ø}10\text{ mm}$ 的材料。
Its feeding capability is max. O.D. $\text{Ø}20\text{ mm}$, max. length 300 mm . Material feeding station can accommodate up to about 300 pieces of $\text{Ø}10\text{ mm}$ blank material.
- ▶ 油壓式往復補料，伺服式進料，穩定平順。
It's stable via hydraulic continuous material supplement and smooth by servo feeding.
- ▶ 材料的大小/長度可簡易調整；更換工件只需更換料管與夾頭(或筒夾)即可。
The size and length of material could be easily adjusted. Moreover, it only needs to change feed pipe and chuck (or collet) when changing into different workpieces.



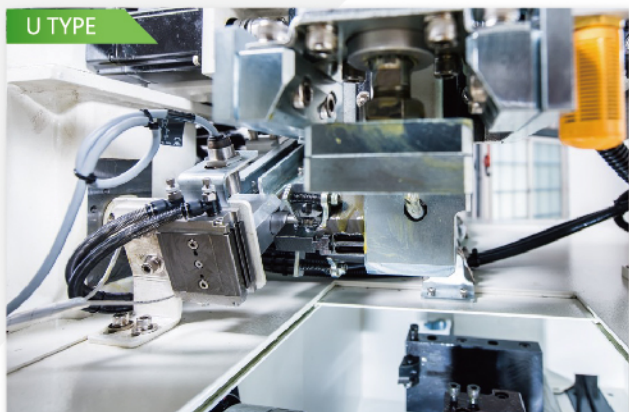
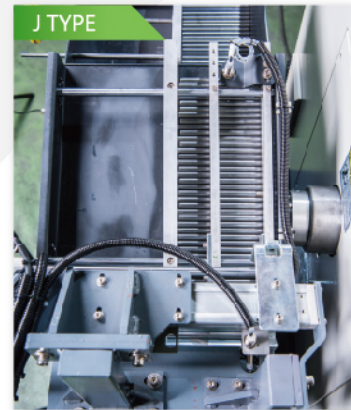
▲ J-type

U型 / U-TYPE

外置式自動上／下料專用機

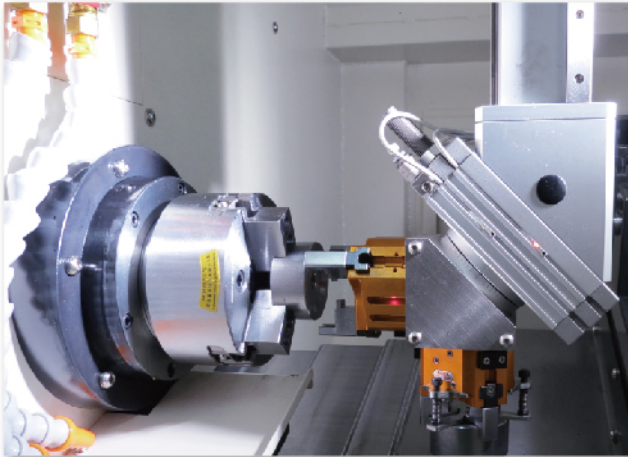
EXTERNAL AUTO LOADING / UNLOADING SPM

- ▶ U型的送料機構安裝於機台外，可避免油漬或鐵屑，影響機構。
Its feeding mechanism is placed outside of machine to keep mechanism from chips and oil stain.
- ▶ 送料範圍：外徑 $\text{Ø}6\sim\text{Ø}35\text{ mm}$ 、長度 40 mm 以內。
Its feeding capability is O.D. $\text{Ø}6\sim\text{Ø}35\text{ mm}$ and max. length 40 mm .
- ▶ 調整式滑道適用圓形/六角形工件，配合旋轉氣缸與夾具，可作六角形快速定位。
Adjustable feedingway is suitable for round / hex shape workpiece along with rotary cylinder and fixture, which can make hex material positioning in short time.



▶ U-type

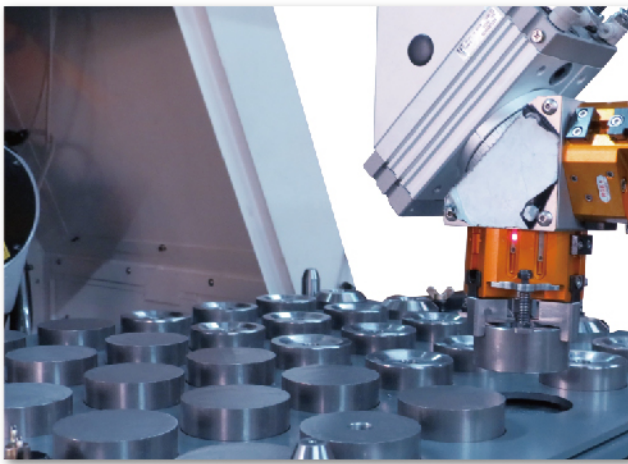
HC-30/HC-30N/JYN-42



▲ 迴轉氣缸含三指定心機械夾爪
Pneumatic rotary air-cylinder with 3-jaw concentric gripper



▲ 翻轉台(選配)
Rotary station(opt)



▲ 平板式供料台
Pallet type work feeder station

搭配門型機械手標準配件 With Gantry Loader Standard Accessories

控制系統 Control Systems

採用雙系統控制，與車床控制器為一體，門型機械手操作為教導模式。
Dual-system control with all in one on lathe controller, Gantry Loader operation is teaching style.

配備串列式通訊系統，更易擴充與安裝，提供良好的同步控制。
Equipped with serial bus communication system, more expandable, easier to install, provide good synchronous control.

供料台類型(擇一) Work Feeder Station Type(Choose One)

| | | |
|---|--|---|
| 平板式供料台 Pallet type work feeder station | 震動筒式供料台 Vibration barrel type work feeder station | 堆疊式循環供料台 Rotary lifting type work feeder station |
|---|--|---|

可依據客戶需求，訂做其它型式供料台。
Other types of work feeder station, can depend on customer's requirement to custom-made.

夾爪組合 Jaws Combination

| | | | | | |
|------------------------------------|--------|--------------------------------------|--------|---|--------|
| 修爪模具 Jaws-modification module | 2 SETS | 三指定心機械夾爪 3-jaw concentric gripper | 2 SETS | 標準軟爪(3只/組) Standard soft jaws(3 pcs/set) | 2 SETS |
| 氣壓迴轉缸 Pneumatic rotary cylinder | 1 SET | 頂料機構 Ejector mechanism | 1 SET | 蓄壓筒 Accumulator container | 1 SET |

搭配門型機械手選購配件 With Gantry Loader Optional Accessories

| | | |
|-------------------------------|-------------------------------|-----------------------|
| 手持式控制器 Handheld controller | 夾爪吹氣裝置 Jaw air-blow device | 翻轉站 Rotary station |
|-------------------------------|-------------------------------|-----------------------|

機械規格 / MACHINE SPECIFICATION

| 機型 MODEL | | 單位 | HC-30 | HC-30N | JYN-42 |
|-----------------------------------|---------------------------|---------------|--|--------------------|--------------------------------------|
| 床面上旋徑 | Swing over cross bed | mm | 300 | 250 | 400 |
| 最大加工外徑 | Max. turning dia | mm | Ø250 | Ø110 | Ø320 |
| 最大加工長度 | Max. turning length | mm | 150 | 100 | 310(選配尾座) 310(Optional tailstock) |
| 主軸迴轉速 | Spindle rotating speed | rpm | 6,000 | 6,000 | 4,500 |
| 主軸貫穿孔徑 | Bore of spindle | mm | Ø33 | Ø33 | Ø45 |
| 棒材容納直徑 | Max. bar feeding dia | mm | Ø30 | Ø30 | Ø42 |
| 主軸馬達 | Spindle motor | KW | 3.75/5.5(opt) | 3.75/5.5(opt) | 5.5/7.5(opt) |
| X軸移動量 | X-axis travel | mm | 350 | 300 | 250 |
| Z軸移動量 | Z-axis travel | mm | 250 | 200 | 400 |
| X軸快速移動 | X-axis rapid travel speed | m/min | 20 | 20 | 20 |
| Z軸快速移動 | Z-axis rapid travel speed | m/min | 16 | 20 | 20 |
| X/Z軸伺服馬達 | X/Z-axis servo motor | KW | 1 | 1 | 1 |
| 筒夾規格 | Turret type | - | 163E | C32/163E(opt) | 173E/C44 |
| 主軸鼻端 | Spindle nose | - | A2-4 | A2-4 | A2-5 |
| 油壓夾頭 | Hydraulic chuck | inch | 5" | 5" | 6" |
| 外徑刀尺寸 | O.D. turning tool size | mm | □20 | □20 | □20 |
| 內徑刀尺寸 | I.D. turning tool size | mm | Ø20 | Ø20 | Ø20 |
| 切削液幫浦 | Cutting coolant pump | HP | 1 | 1 | 1 |
| 切削液容量 | Cutting coolant volume | L | 120 | 85 | 120 |
| 軌道型式 | Guideway type | - | 硬軌 Box guideway 線軌 Linear guideway(opt) | 硬軌 Box guideway | 硬軌 Box guideway |
| 門型機械手 Gantry Loader | | | | | |
| 橫移軸行程 | Horizontal-axis travel | mm | 1,985 | 1,800 | 1,985 |
| 上下軸行程 | Up/down-axis travel | mm | 740 | 680 | 740 |
| 橫移軸速度 | Horizontal-axis speed | m/min | 90 | 90 | 90 |
| 上下軸速度 | Up/down-axis speed | m/min | 100 | 100 | 100 |
| 軸向驅動器/馬達 | Axis servo driver/motor | W | 400 | 400 | 400 |
| 工件荷重能力 | Workpiece load capacity | kg/pc | 3 | 3 | 3 |
| 搭配門型機械手 With Gantry Loader | | | | | |
| 機器尺寸(大約值) | Approx. machine size | mm (LxWxH) | 2800 x 1450 x 2350 | 2650 x 1550 x 2300 | 3200 x 1500 x 2400 |
| 機器淨重(大約值) | Approx. net weight | KGS | 2400 | 2100 | 2800 |

本公司產品規格/設計/特性，均不斷研究改進，如有變更，不再另行通知。

All specifications, dimensions and design characteristics shown in this catalogue are subject to change without notice.

Version 2018.11



昌勇實業股份有限公司

JARNG YEONG ENTERPRISE CO., LTD.

43346 台中市沙鹿區清泉路1-9號

No. 1-9, Ching Chien Rd., Ching Chien Village, Shalu District, Taichung City 43346, Taiwan

Tel +886-4-2615-2157

Fax +886-4-2615-2161

Web www.cnc-lathe.com

E-mail greenway@cnc-lathe.com

代理商 / AGENT