

GREENWAY®

PRECISION CNC LATHE

HC-30N & HC-30 & HC-20N

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-20N/HC-30/HC-30N

CNC LATHE WITH GANTRY LOADER

HC-30/HC-30N 搭配門型機械手

數控車床搭配門型機械手，做自動送料，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 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



▲ HC-30

產品說明 / DESCRIPTION

- ▶ 採伺服控制，進行單件送料，擁有高速度、高精度的優勢。
Equipped with servo control for single-piece feeding, offering the advantage of high speed and high precision.
- ▶ 可根據客戶毛坯之送料需求，選擇搭配不同形式的供料台。
Different forms of work feeder station can be selected according to the feeding requirements of customers' blank material.
- ▶ 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 placed above the machine can extend the lifespan of the automatic feeding system and reduce maintenance costs.
- ▶ 門型機械手採用手持式人機介面，擁有專用掌上型觸控螢幕、介紹明瞭，具有防呆設計，教導式教學。
The gantry loader is equipped with a handheld human-machine interface, featuring a dedicated palm-sized touch screen that provides clear instructions. It is designed with error-proofing and offers instructional teaching.
- ▶ 可配合製程規劃彈性運用，連結組成各式生產線。
It can be flexibly utilized in accordance with process planning and be linked to form various types of production lines.
- ▶ 若有遠端監控之需求，昌勇亦能提供相關配置協助。
If there is a need for remote monitoring, Greenway can also provide assistance in configuring relevant setups.

HC-20N SPECIAL PURPOSE MACHINE

HC-20N 專用機

後送式自動上 / 下料專用機

CNC lathe with Rear feeding system

- ▶ 適用於螺絲型心軸尾端車削(鑽孔/攻牙)。
Applicable for turning (drilling/tapping) the rear end of screw-type shafts.
- ▶ 送料合適長度100mm~190mm，最大送料外徑18mm。
Feeding suitable for lengths ranging from 100mm to 190mm, with a maximum feeding outer diameter of 18mm.
- ▶ 進/退料方式由主軸後端送料(後端進料，後端出料)。
Material feeding/retracting method is through rear-end spindle feeding (rear exit after feeding).
- ▶ 成品輸送滑道設有安全檢知，避免卡料問題。
The slide of parts conveyor is equipped with safety detection to prevent material jamming issues.



◀ HC-20N

HC-30N SPECIAL PURPOSE MACHINE

HC-30N 專用機

J型 / J-TYPE

圓棒式自動上/下料專用機

CNC lathe with Arranged-bar feeding system

- ▶ 此機型適用於長軸型工件。
This machine model is suitable for long shaft-type workpieces.
- ▶ 送料範圍：外徑 $\Phi 20\text{mm}$ 、長度 300mm 以內、置料槽可放置約300支外徑 $\Phi 10\text{mm}$ 的材料
Feeding range : outer diameter up to $\Phi 20\text{mm}$, length up to 300mm , material trough can accommodate approximately 300 pieces of outer diameter $\Phi 10\text{mm}$ material.
- ▶ 油壓式往復補料、伺服式進料、穩定平順。
Hydraulic reciprocating feeding, servo feeding, stable and smooth.
- ▶ 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/length of the material can be easily adjusted; to change workpieces, simply replace the material tube and clamping chuck (or collet).



▲ J-type



U型 / U-TYPE

自動上/下料專用機

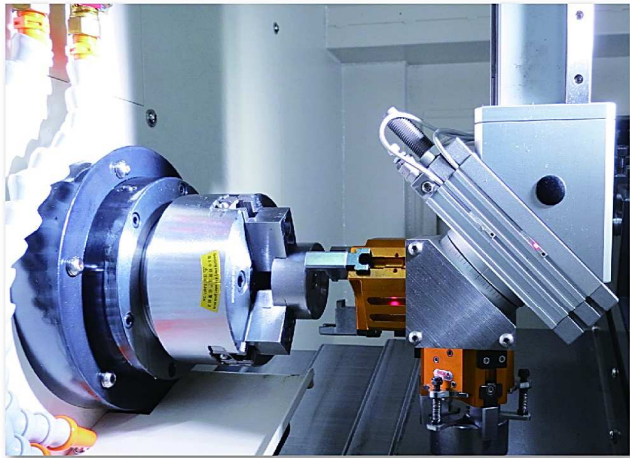
CNC lathe with Vibration bowl feeding system

- ▶ 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。
The U-type feeding mechanism is installed outside the machine to prevent oil stains or iron chips from affecting the mechanism.
- ▶ 送料範圍：外徑 $\Phi 8\sim 35\text{mm}$ 、長度 65mm 以內。
Feeding range : outer diameter $\Phi 8\sim 35\text{mm}$, length up to 65mm .
- ▶ 調整式滑道適用於圓形/六角形工件，配合旋轉氣缸與夾具可做六角形快速定位。
Adjustable slide is suitable for round/hexagonal workpieces, can be quickly positioned for hexagonal shapes with the rotation cylinder and fixture.
- ▶ 可搭配直接式或輔助式氣缸送料機構，選用震動送料桶，自動送料穩定效率高。
To combine with a direct or auxiliary cylinder feeding mechanism, select a vibration bowl feeder for high efficiency in automatic feeding stability.

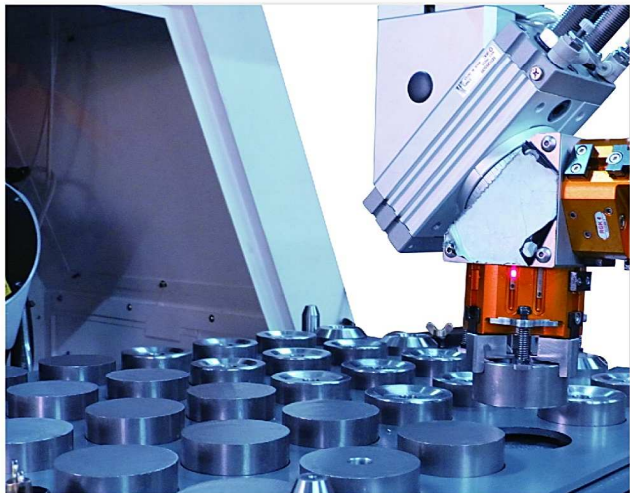


U-type ▶





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



▲ 平板式供料台
Pallet type work feeder station



▲ 翻轉台(選配)
Rotary station(opt)

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

控制系統 Control Systems

機械手由新代手持式控制器控制，操作教導式容易上手。
The gantry loader system is controlled by Syntec handheld controller, and the operation teaching style is easy to use.

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 bowl type work feeder station	堆疊式升降供料台 Stackable lifting type work feeder station
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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

機械規格 / MACHINE SPECIFICATION

機型 MODEL		單位	HC-30	HC-30N	HC-20N
床面上旋徑	Swing over cross bed	mm	300	250	150
最大加工外徑	Max. turning dia	mm	Ø170	Ø135	Ø20
最大加工長度	Max. turning length	mm	150	100	60
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	Ø33/45(opt)	Ø33	Ø22
棒材容納直徑	Max. bar feeding dia	mm	Ø30/42(opt)	Ø30	Ø20
主軸馬達	Spindle motor	KW	3.75/5.5(opt)	3.75/5.5(opt)	2.2/3.75(opt)
X軸移動量	X-axis travel	mm	350	300	220
Z軸移動量	Z-axis travel	mm	250	300	185
X軸快速移動	X-axis rapid travel speed	m/min	20	20	30
Z軸快速移動	Z-axis rapid travel speed	m/min	20	20	30
X/Z軸伺服馬達	X/Z-axis servo motor	KW	1	1	1
筒夾規格	Turret type	-	163E/173E(opt)/C44(opt)	C32/163E(opt)	YB-20
主軸鼻端	Spindle nose	-	A2-4/A2-5(opt)	A2-4	A2-3(opt)
油壓夾頭	Hydraulic chuck	inch	5"6" (opt)	5"	4"(opt)
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	1/4
切削液容量	Cutting coolant volume	L	120	85	90
軌道型式	Guideway type	-	硬軌 Box guideway 線軌 Linear guideway(opt)	線軌 Linear guideway 硬軌 Box guideway(opt)	線軌 Linear guideway
門型機械手 Gantry Loader					
橫移軸行程	Horizontal-axis travel	mm	1950	1850	-
上下軸行程	Up/down-axis travel	mm	650	650	-
橫移軸速度	Horizontal-axis speed	m/min	95	95	-
上下軸速度	Up/down-axis speed	m/min	90	90	-
軸向驅動器/馬達	Axis servo driver/motor	W	400	400	-
工件荷重能力	Workpiece load capacity	kg/pc	3	3	-
搭配門型機械手 With Gantry Loader					搭配後方送料系統 With Rear Feeding System
機器尺寸(大約值)	Approx. machine size	mm (LxWxH)	2800 x 1450 x 2350	2650 x 1550 x 2300	2600 x 1250 x 1800
機器淨重(大約值)	Approx. net weight	KGS	2400	2100	1250

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.

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