Automatic Cold Drawing Machine

Main Features

- ▼ Fully automated loading and unloading workfow for efficiency
- ✓ PLC system enables easy operation and provides data for analysis
- ✓ Processes equilateral workpieces with hydraulic push pointer

The Automatic Cold Drawing machine is a chain-type machine equipped with a loading machine, feeding machine, hydraulic push pointer, and discharging arms. The HS model series is designed to streamline the cold drawing process by utilizing a hydraulically powered extrusion unit, known as the push pointer, to secure the workpiece and push it directly against the drawing die. Subsequently, the drawn materials are carried out using unloading arms to designated collection racks next to the drawbench.

The entire process, from loading to unloading, is controlled using a PLC system, ensuring high efficiency and making it ideal for automatic bar-to-bar drawing. The head-press mechanism eliminates the need for the swaging process typically required during traditional cold drawing. Furthermore, the fully automated process reduces the dependency on costly manpower and helps streamline the precision drawing process. The automation offered by the HS models is suitable for the drawing of round, hexagonal, and square metal bars.

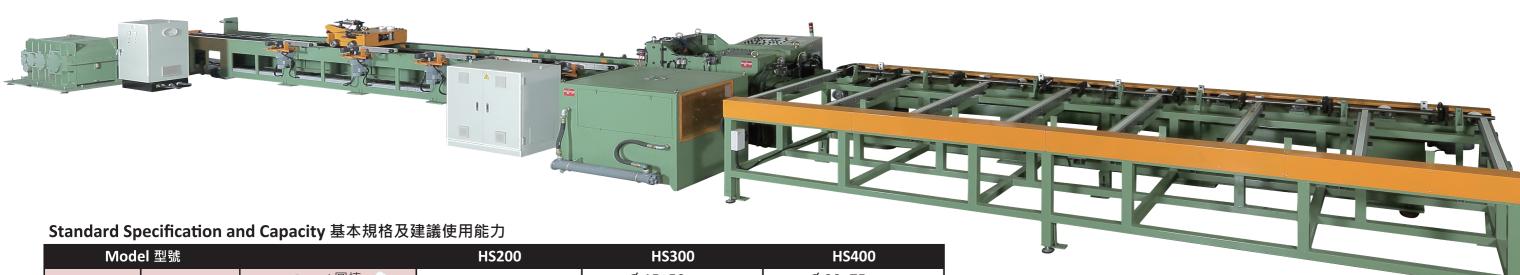
自動金屬冷伸拉機

3大優點

- ▼ 全自動加工流程,提高人力資源運用及生產效率
- ▼ PLC控制系統操作簡便,提供稼動時所需數據作為分析
- ▼ 適合於各種異形及等邊材料,搭配油壓擠頭機可節省損耗

HS型鏈條式冷伸拉機基本配備有置料機、送料機、油壓擠頭機座及下料臂裝置。主要設計是將材料以自動化方式送入擠頭機座,再利用機座產生的液壓力將金屬棒材推進伸拉模具,並透過數控方式使夾車自動感應,進行夾取及拉拔作業,完成後,收料模式則是利用旋轉手臂機組,將材料轉送入定位收料架。

機台運作全程均採用PLC程式控制,相較於傳統手動冷伸拉機,具有優勢。油壓擠頭機座可取 代束頭作業,將材料直接送入伸拉段進行加工。該款機型適用於圓形、六角形及四方形等各種 邊形棒材,在自動模式下,不僅能有效提升人力資源的利用率和簡化生產流程,手動模式也可 用於異形材料的加工,其適用性對於棒材加工而言非常廣泛。



Model 型號			HS200	HS300	HS400
Applicable material 適用材質 (mm)	Non-ferrous 非鐵 (銅/鋁)	Round 圓棒	Ø 26	Ø 15~50	Ø 20~75
		Hexagonal 六角棒		HEX. 15~45	HEX. 20~58
		Square 四方棒		SQ. 15~38	SQ. 20~50
	Steel / Alloy 鋼鐵 / 合金材	Round 圓棒	Ø 16	Ø 15~40	Ø 20~60
		Hexagonal 六角棒		HEX. 15~32	HEX. 20~45
	料	Square 四方棒		SQ. 15~25	SQ. 20~38
Motor 馬力			30HP	50HP / 75HP	75HP / 100HP
Spherical Dice Size 半弧形模具外徑尺寸			JIS 125 / 100	JIS 230 / 215	JIS 250 / 230
Hydraulic Push Pointer 油壓擠頭機			15HP PC28 (H40)	20HP PC60 (H70)	30HP PC100 (H110)
Average Tensile Strength (Chain) 鏈條平均抗拉強度*			36,000 kgf / 52,000 kgf	52,000 kgf / 97,000 kgf	151,000 kgf / 183,000 kgf
Optional Model 選配款			HS200P	HS300P HS300H	HS400P HS400H
			300F-25RC05/3RC10T	400F-3RC1015T/4RC1530T	600F-6RC1530T/5RC2050T

- ※Above specifications and dimensions are subject to updates according to the requirements without prior notice.
 以上規格、尺寸因需求變更而有所調整設計,恕不另行通知。
- * The average tensile strength of roller chains is for reference only. 抗拉強度資訊僅供參考,實際強度會依照鏈條材質需求而定。

Major Structure	主要機構	
■ PLC system	■ PLC控制系統	
■ Inverter	■變頻器	
■ Hydraulic push pointer	■油壓擠頭機座	
■ Discharging arms	■下料臂機組	
■ High strength roller chair	■高強度鏈條	
■ Power drive system	■動力結合機組	
Optional	選配項目	
■ Automatic loading unit	■自動置料機座	
■ Automatic feeding unit	■自動送料機組	
■ Carriage on linear guideway	■ 線型滑軌式夾車	
■ Human-machine Interface (HMI)	■人機介面	