



CENTERLESS GRINDING MACHINE

Rugged machine structure
assures maximum stability during grinding

Equipped with NC / CNC controller
permits easy operation

Achieving high accuracy requirements
for all kinds of workpieces

Pintai Machinery is a specialized manufacturer of high precision samll grinders. In addition, we can design and manufacture various grinders according to customer's requirements. Currently we offer a series of equipment applicable for front process in tungsten carbide tool production, including tungsten carbide step-tool grinders, NC fully automatic chamfering machine, NC fully automatic carbide tool cutting machine, internal grinders, external grinders, polishing machines and cutting machines...etc.



CENTERLESS GRINDING MACHINE



Model / Specification		Unit	P-12/P12S	P-18/P-18S	P-20/P-20S
Grinding Range (Dia.)		mm	Ø1-Ø30	Ø2-Ø50	Ø2-Ø40
Grinding Wheel Size (Dia.*W*H)		mm	305*150*120	455*205*228.6	510*205*304.8
Regulating Wheel Size (Dia.*W*H)		mm	205*150*90	255*205*111.2	305*205*127
Grinding Wheel Speed		RPM	2000	1500	1350
Regulating Wheel Speed	Gear Box	RPM	21-300(7steps)	21-308(10steps)	21-308(10steps)
	Servo motor				
Grinding Wheel Motor		HP	10	15	20
Regulating Wheel Motor		HP	1	2	3
Hydraulic Pump		HP	1	1	1
Coolant Pump		HP	1/8	1/4	1/4
Upper Slide feed graduation		mm	0.05	0.05	0.05
Upper Slide min. feed graduation		mm	0.001	0.001	0.001
Lower Slide Feed Graduation		mm	0.05	0.05	0.05
Lower slide Min. Feed Graduation		mm	0.001	0.001	0.001
Dressing Device Graduation		mm	0.01	0.01	0.01
Regulating Wheel Tile Angle		deg.	±5°	±5°	±5°
Regulating Wheel Swivel Angle		deg.	±5°	±5°	±5°
Machine dimension (L*W*H)		mm	1900*1550*1420	2450*2050*1600	2650*2150*1600
Machine Weight		kg	1550	3200	4000

Standard Accessories

Regulating wheel and flange*1 set
Grinding wheel and flange*1 set
Flange Extractor*1 PC
Diamond tool*1 PC

Hydraulic tank*1 set
Coolant system*1 set
Oil cooling fan*1 set
Working Light*1 set

Tool box and Kit*1 set
Thrufeed work rest and carbide blade (1 set)*1 set



- ※ Customer can select difference axes (1 axis - 8 axes) for application.
- ※ Machine weight will be transaction against difference axes and options.

Model / Specification	Unit	P-12NC/CNC	P18-NC/CNC	P-20NC/CNC
Grinding Range (Dia.)	mm	Ø1-Ø30	Ø2-Ø50	Ø2-Ø40
Grinding Wheel Size (Dia.*W*H)	mm	305*150*120	455*205*228.6	510*205*304.8
Regulating Wheel Size (Dia.*W*H)	mm	205*150*90	255*205*111.2	305*205*127
Grinding Wheel Speed	RPM	2000	1500	1350
Regulating Wheel Speed	RPM	0-300	0-300	0-300
Grinding Wheel Motor	HP	10	15	20
Regulating Wheel Motor	HP	1	2	3
Hydraulic Pump	HP	1	1	1
Coolant Pump	HP	1/8	1/4	1/4
Upper Slide feed graduation	mm	0.05	0.05	0.05
Upper Slide min. feed graduation	mm	0.001	0.001	0.001
Lower Slide Feed Graduation	mm	0.05	0.05	0.05
Lower slide Min. Feed Graduation	mm	0.001	0.001	0.001
Dressing Device Graduation	mm	0.01	0.01	0.01
Regulating Wheel Tile Angle	deg.	±5°	±5°	±5°
Regulating Wheel Swivel Angle	deg.	±5°	±5°	±5°
Machine dimension (L*W*H)	mm	1900*1550*1420	2450*2050*1600	2650*2150*1600
Machine Weight	kg	1550	3200	4000

► Optional Accessories

Oil Mist Separator
 Paper Filter
 Magnetic Coolant Separator
 Hydrocyclone Coolant Separator
 Wheel Balancing Stand & Arbor
 Supporter for Long Bar Grinding

Automatic Loading Attachment for Infeed Grinding
 Automatic Unloading Attachment for Infeed Grinding
 Unloading Attachment for Thrufeed Grinding
 Automatic Loading Attachment for Thrufeed Grinding (Hopper Type)
 Automatic Loading Attachment for Thrufeed Grinding (Vibratory Feeder)
 Automatic Loading Attachment for Thrufeed Grinding (Magazine Type)

CUSTOMIZED MACHINE

Against customer's requirement to design automation, even conventional machine is also able to provide grinding efficiency.



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無心磨床

CENTERLESS
GRINDING
MACHINE

高剛性機體結構

NC/CNC控制器簡易操作

高精度，可達到各種工件公差要求

鑽鈦機械是一家專業生產小型研磨機，我們能夠根據客戶的需求開發出各種研磨機。目前提供鎢鋼刀具前製程一系列設備：NC全自動倒角機、NC全自動鎢鋼切斷機、鎢鋼段差研磨機、內徑研磨機、外徑研磨機、拋光機、切斷機...等

The PINTAI logo is printed on the side of the machine's cabinet in a large, bold, black font.

PINTAI

無心磨床 系列

CENTERLESS GRINDING MACHINE



型號/規格		單位	P-12/P12S	P-18/P-18S	P-20/P-20S
研磨工作物直徑		mm	Ø1-Ø30	Ø2-Ø50	Ø2-Ø40
研磨砂輪尺寸 (外徑*寬*內徑)		mm	305*150*120	455*205*228.6	510*205*304.8
調整輪尺寸 (外徑*寬*內徑)		mm	205*150*90	255*205*111.2	305*205*127
砂輪轉速		RPM	2000	1500	1350
調整輪轉速	變速箱	RPM	21-300(7steps)	21-308(10steps)	21-308(10steps)
	伺服馬達		0-300	0-300	0-300
砂輪驅動馬達		HP	10	15	20
調整輪驅動馬達		HP	1	2	3
油壓泵驅動馬達		HP	1	1	1
冷卻泵驅動馬達		HP	1/8	1/4	1/4
上滑板進給刻度		mm	0.05	0.05	0.05
上滑板最小進給刻度		mm	0.001	0.001	0.001
下滑板進給刻度		mm	0.05	0.05	0.05
下滑板最小進給刻度		mm	0.001	0.001	0.001
修整裝置進給刻度		mm	0.01	0.01	0.01
調整輪傾斜角度		deg.	±5°	±5°	±5°
調整輪旋轉角度		deg.	±5°	±5°	±5°
機械尺寸 (長*寬*高)		mm	1900*1550*1420	2450*2050*1600	2650*2150*1600
淨重		kg	1550	3200	4000

▶ 標準配件

調整輪及調整輪法蘭×1組
 砂輪及砂輪法蘭×1組
 法蘭拔具×1只
 鑽石修刀×1組

油箱及泵浦×1組
 切削液桶及泵浦×1組
 油溫冷卻風扇×1組
 通過式刀架×1組

工作燈×1組
 工具箱及其工具×1組



※根據需求可選擇不同軸數(1軸-8軸)搭配應用。
 ※機器重量會依據搭配的軸數及選配件不同而有異動。

型號/規格	單位	P-12NC/CNC	P18-NC/CNC	P-20NC/CNC
研磨工作物直徑	mm	Ø1-Ø30	Ø2-Ø50	Ø2-Ø40
研磨砂輪尺寸(外徑*寬*內徑)	mm	305*150*120	455*205*228.6	510*205*304.8
調整輪尺寸(外徑*寬*內徑)	mm	205*150*90	255*205*111.2	305*205*127
砂輪轉速	RPM	2000	1500	1350
調整輪轉速(伺服馬達)	RPM	0-300	0-300	0-300
砂輪驅動馬達	HP	10	15	20
調整輪驅動馬達	HP	1	2	3
油壓泵驅動馬達	HP	1	1	1
冷卻泵驅動馬達	HP	1/8	1/4	1/4
上滑板進給刻度	mm	0.05	0.05	0.05
上滑板最小進給刻度	mm	0.001	0.001	0.001
下滑板進給刻度	mm	0.05	0.05	0.05
下滑板最小進給刻度	mm	0.001	0.001	0.001
修整裝置進給刻度	mm	0.01	0.01	0.01
調整輪傾斜角度	deg.	±5°	±5°	±5°
調整輪旋轉角度	deg.	±5°	±5°	±5°
機械尺寸(長*寬*高)	mm	1900*1550*1420	2450*2050*1600	2650*2150*1600
淨重	kg	1550	3200	4000

▶ 特殊配件

平衡台及棒
 紙帶過濾機
 電磁除屑機
 水力分離機

停止式自動送料裝置
 停止式自動收料裝置
 長棒研磨裝置
 油霧回收裝置

通過式自動送料裝置(切齒式)
 通過式自動送料裝置(震動盤)
 通過式自動送料裝置(圓帶式)
 通過式收料裝置

客製無心磨床 CUSTOMIZED MACHINE

依照客戶需求搭配自動化；即使是傳統機器也是能展現研磨效率。



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