



賢興 精密平面磨床

Auto Surface Grinding

3-Axes | Auto Down Feed



APSG-1020 1A
APSG-1020 2A
APSG-1020 3A
APSG-1020 AD



精密高鋼性主軸

裝載 P4 級 NSK 軸承，結構採加長型可做精密切削，特殊設計其防水性佳，精密組裝確保主軸運轉維持高精度。

High Precision Spindle

The spindle equipped P4 NSK bearing with extra length design for ensure water resistance as well as maintain high rigidity and precision.

Description 規格

General Capacity	加工能力	Table Size	研磨面積	250 x 500 mm
		Max. Table Travel W x L	最大行程	300 x 600 mm
		Distance from Table Surface to Spindle Center	主軸中心到工作台面距離	500 mm
Longitudinal Movement	左右進給	Table Speed (Approx)	工作台左右速度	1 – 25 M/min
CrossFeed Movement	前後進給	Continuous Feed (Approx)	速度 (近似值)	60 HZ / 1100 mm/min 50 HZ / 900 mm/min
		Handfeed (1.gra.)	手輪一刻度	0.02 mm
		Handfeed (1.rev.)	手輪一轉	4 mm
		Intermittent Cross Feed	進給量	0.1 – 10 mm
Vertical Down Feed	上下進給	Handfeed (1.gra.)	手輪一刻度	0.005 mm
		Handfeed (1.rev.)	手輪一轉	2 mm
		Rapid Feed (3A.AD)	速度	200 mm/min
Automatic Down Feed	自動進給設定	Feed Rate (Coarse/Fine)	總進刀量設定	0.001 – 0.999 mm
		Fine Feed Stock Removal	最小進刀量設定	0.001mm – 0.099 mm
Grinding Wheel	砂輪	Wheel Size (Dia x Width x Bore)	尺寸 (外徑 x 寬 x 內淨)	180 x 13 (19) x 31.75 mm
		Wheel Speed	轉速	50 HZ / 2850 rpm 60 HZ / 3450 rpm
Motors	馬達	Spindle Motor	主軸馬達	3 HP (2 HP)
		Cross Feed Motor	前後馬達	1/5 HP
		Hydraulic Motor	油箱馬達	1HP
Weight	重量	Net/Packing Gross	淨重 / 毛重	1,500 / 1,750 kgs
Packing Size	尺寸	L x W x H	長 x 寬 x 高	2,280 x 1,790 x 2,100 mm

1A X Axis by Hydraulic and Y/Z Axes are Manual
左右油壓驅動，前後、升降手動

2A 1A+Z Axis (Cross) by Auto Motor and Y Axis is Manual
1A+ 前後自動

3A 2A+Y Axis with Rapid Downfeed
2A+ 升降快速進給

AD 3A+Y Axis (Vertical) with Auto Downfeed (Servo Motor & MPG)
3A+ 升降伺服馬達控制自動進給 & 脈波手輪

■ 1 inch =25.4mm

■ () 為特殊規格

■ 本公司隨時進行研究改進，本規格僅供參考

Standard Accessories

- 1 Grinding Wheel with Flange
- 2 Flange Extractor
- 3 Wheel Balancing Arbor
- 4 Wheel Balancing Base
- 5 Wheel Dresser with Diamond
- 6 Leveling Screw and Plates
- 7 Tooling Box and Tools
- 8 Work Lamp

標準配備

- 1 砂輪及法蘭組
- 2 砂輪拔取螺母
- 3 平衡棒
- 4 平衡台
- 5 鑽石修整座及修刀
- 6 水平調整螺絲及基礎座
- 7 工具箱及調整工具
- 8 工作燈

Optional Accessories

- 1 Electro / Permanent Magnetic Chuck
- 2 Auto Demagnetizer for Magnetic Chuck
- 3 Parallel Dresser
- 4 Coolant System
- 5 Dust & Coolant Unit
- 6 Auto Paper Strip Filter and Magnetic Separator with Coolant System
- 7 Punch Former
- 8 Tool Maker Vise
- 9 Radius Forming Attachment
- 10 Angle Dressing Device

選購配備

- 1 電磁 / 永久吸盤
- 2 電磁盤用整流脫磁控制器
- 3 手動輪頂修整器
- 4 冷卻裝置
- 5 冷卻附吸塵裝置
- 6 過濾紙式附磁鐵冷卻裝置
- 7 沖子成型器
- 8 精密虎鉗
- 9 R 型修整器
- 10 角度成型器



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Smoothing the World's Corners

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Practical Machines and Dedicated Service



SHINE MACHINERY CO., LTD. was established in 1989. The company has been committed to manufacturing surface grinding machines for almost 20 years. Our chief products include Bench Grinding Machines, Hand Feed Grinding Machines, Semi-Auto Hydraulic Grinding Machines, up to Automatic 3 Axes Grinding Machines. Within our product line there is something for all types of grinding. We have accumulated superior technical skills and experience through years of producing machinery for international brand name OEM's. Our production engineers apply this experience to every aspect of the production process. From our customers' point of view this is the strongest guarantee they could have!

In recent years SHINE introduced our latest brand-CSHINE marketed around the world. And with the huge demand coming from China, SHINE established the HEFENG PRECISE MACHINE (CHANGSHU) CO., LTD. in the Macheng Industrial Park, Changshu City, Jiangsu Province, China. With this facility in China and technical expertise coming from Taiwan, production is more efficient than ever and the key to opening the Chinese market.

SHINE adheres to professionalism, diligence, and quality. We only use parts and components that pass strict selection procedures, and every aspect of the production process is expertly implemented. One example of our diligence is in the attention paid to our slideways. Because slideways are key to optimal motion and positioning, we only use precision hand scraped slideways. We are absolutely certain to satisfy any precision production demands. Layer after layer of checks achieve the high quality, high precision, and high efficiency expected after 20 years of service.

SHINE : Dedicated and professional service, now and forever.



A Shine Co. craftsman performing precision hand scraping, our guarantee of high precision.



Handfeed Surface Grinder

Handfeed Series

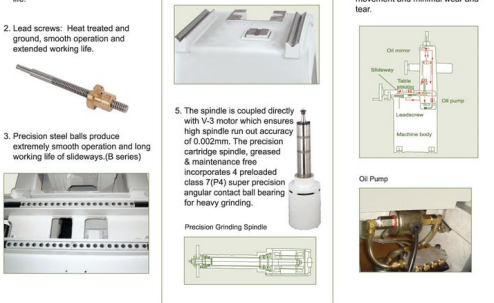
PSG-614T
PSG-618B/T
PSG-818B

Handfeed Series

PSG-618R

Machine Features:

- Major cast parts are made of stress relieved and annealed Meehanite castings to ensure stability, rigidity, high accuracy, and extended working life.
- Lead screws: Heat treated and ground, smooth operation and extended working life.
- Precision steel balls produce extremely smooth operation and long working life of slideways (B series)
- Double V Slideways are precision hand scraped and coated with Turcite B for smooth movement and extra stability.
- The spindle is coupled directly with V-C motor which ensures high spindle run out accuracy of 0.002mm. The precision cartridge spindle, gressed & maintenance free incorporates 4 preloaded class (P4) super precision angular contact ball bearing for heavy grinding.
- Standard auto-lube system provides ample lubrication on all slide ways, lead screws and nuts. Lubricating oil is filtered and recycled, smooth movement and minimal wear and tear.



- Worktable longitudinal and cross feed parallelism. Gauge is fixed in spindle and placed in light contact with worktable. Standard cross feed results below 0.002mm.
- Before any machine leaves the factory, it is checked for perpendicularity using a cylindrical angle square.

Specifications:

Description	Model	PSG-614T	PSG/APSG-614T & 618B	PSG/APSG-818B&T	PSG-618R
General Capacity	Table size	150 x 355mm	150 x 457mm	200 x 457mm	150 x 457mm
	Max. grinding length	275mm	475mm	475mm	475mm
	Max. grinding width	160mm	160mm	200mm	160mm
Longitudinal Movement	Distance from table surface to spindle center	410mm	410mm / 520mm (spig)	410mm / 490mm (spig)	400mm
	Manual travel	380mm	480mm	485mm	480mm
Cross Feed Movement	Manual travel	170mm	176mm	230mm	176mm
	Handfeed per rev.	5mm	5mm	5mm	5mm
	Handfeed per gra.	0.02mm	0.02mm	0.02mm	0.02mm
Vertical Downfeed	Micro feed per gra. (opt.)	0.002mm	0.002mm	0.002mm	0.002mm
	Handfeed per gra.	1mm	1mm	1mm	1mm
	Micro feed per gra. (opt.)	0.005mm	0.005mm	0.005mm	0.005mm
Grinding Wheel	Wheel size (dia. x width x bore)	180 x 13 x 31.75mm	180 x 13 x 31.75mm	180 x 13 x 31.75mm	180 x 13 x 31.75mm
	Spindle speed (50/60HZ)	3000 / 3600rpm	3000 / 3600rpm	3000 / 3600rpm	3000 / 3600rpm
Motors	Spindle motor (opt.)	1.5 HP (2HP)	1.5 HP (2HP)	2 HP (3HP)	1.5 HP (2HP)
	Weight	670kg	780kg / 820kg	800kg / 850kg	720kg
Packing size	Length x width x height	1300 x 1050 x 2100mm	1450 x 1100 x 2100mm	1670 x 1150 x 2100mm	1400 x 1040 x 2000mm

Note: We reserve the right to modify machine specifications of this brochure without prior notice. 1 inch = 25.4mm approx.

Model Designation:
T: 3 axes manual and working table transmit with Turcite way.
B: 3 axes manual and working table transmit with high grade steel ball.
R: 3 axes manual and working table transmit with high grade steel ball.
Vertical MPG Control: Y-axis MPG control & servo motor (Optional)



Hydraulic Surface Grinder

Hydraulic Series

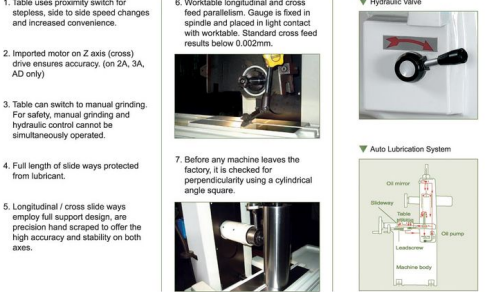
PSG-618 1A/2A/3A
PSG-820 1A/2A/3A

Hydraulic Series

APSG-618 1A/2A
APSG-820 1A/2A

Machine Features:

- Table uses proximity switch for stepless, side to side speed changes and increased convenience.
- Imported motor on Z axis (cross) drive ensures accuracy. (on 2A, 3A, AD only)
- Table can switch to manual grinding. For safety, manual grinding and hydraulic control cannot be simultaneously operated.
- Full length of slide ways protected from lubricant.
- Longitudinal / cross slide ways employ full support design, are precision hand scraped to offer the high accuracy and stability on both axes.
- Worktable longitudinal and cross feed parallelism. Gauge is fixed in spindle and placed in light contact with worktable. Standard cross feed results below 0.002mm.
- Before any machine leaves the factory, it is checked for perpendicularity using a cylindrical angle square.



Specifications:

Description	Model	PSG/APSG-618 (1A/2A/3A)	PSG/APSG-820 (1A/2A/3A)
General Capacity	Table size	150 x 457mm	200 x 508mm
	Max. grinding length	475mm	510mm
	Max. grinding width	160mm	210mm
Longitudinal Movement	Distance from table surface to spindle center	415mm (PSG) 490mm (APSG)	415mm (PSG) 490mm (APSG)
	Manual travel	485mm	530mm
Cross Feed Movement	Hydraulic travel	480mm	508mm
	Table speed (approx.)	1-25mm/min	1-25mm/min
	Manual travel	160mm	230mm
Vertical Downfeed	Hydraulic travel	170mm	210mm
	Continuous feed (approx.)	1200mm/min	1200mm/min
	Handfeed per rev.	5mm	5mm
Grinding Wheel	Handfeed per gra.	0.02mm	0.02mm
	Micro feed per gra. (opt.)	0.002mm	0.002mm
	Intermittent cross feed	0.15-7.5mm	0.15-7.5mm
Motors	Handfeed per gra.	1mm	1mm
	Micro feed per gra. (opt.)	0.005mm	0.005mm
	Feed by MPG (opt.) per gra.	0.001mm	0.001mm
Weight	Rapid feed (SA, AD)	(3A) 220mm/min	(3A) 220mm/min
	Feed by MPG (opt.) per gra.	(X1) 0.001mm (X10) 0.01mm (X100) 0.1mm	(X1) 0.001mm (X10) 0.01mm (X100) 0.1mm
Packing size	Wheel size (dia. x width x bore)	180 x 13 x 31.75mm	180 x 13 x 31.75mm
	Spindle speed (50/60HZ)	3000 / 3600rpm	3000 / 3600rpm
Motors	Spindle motor (opt.)	1.5 HP (2 HP)	2 HP (3 HP)
	Cross feed motor	25W	40W
	Hydraulic motor	1 HP x 3P	1 HP x 3P
Weight	Hydraulic motor	25W	25W
	Elevated motor	25W	25W
Packing size	Weight	850kg / 920kg	900kg / 970kg
	Length x width x height	1750 x 1150 x 2100mm	1750 x 1300 x 2100mm

Note: We reserve the right to modify machine specifications of this brochure without prior notice. 1 inch = 25.4mm approx.

Model Designation:
1A: Longitudinal (X-axis) by hydraulic and vertical/cross feed (YZ-axis) all manual.
2A: Longitudinal (X-axis) by hydraulic, auto cross feed (Z-axis) and Vertical (Y-axis) are manual.
3A: Longitudinal (X-axis) by hydraulic, auto cross feed (Z-axis) and power rapid vertical (Y-axis) down feed.
Vertical MPG Control: Y-axis MPG control & servo motor (Optional)



Auto Surface Grinder

Auto Series

PSG-618AD
PSG-820AD

8. Vertical feed uses stepping motor control to match AD system and NC functions. Simplifies precision surface or plunge grinding operations in great detail.



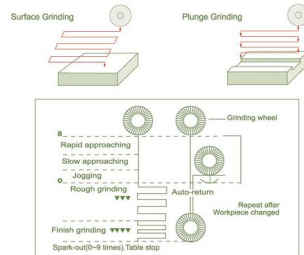
Operation Panel (NC System for AD Series)



- Total Feed Amount
- Rough Feed Rate
- Fine Feed Rate
- Position
- Spindle Motor Power
- Hydraulic Motor Power
- Coolant & Dust Collector Motor Power
- Main Power
- Emergency Stop
- End Mode
- Feed Mode
- Cross Feed Rate
- Spindle Rising Mode
- Plunge Mode
- Magnetic Control & Demagnetization Control

Machine Features:

1. Easy operation needs no calculation.
2. Rough and fine feed two phase processing ensures high precision.
3. Vertical axis is constantly displayed for easy monitoring, can arbitrarily set zero position.
4. Zero set and zero return are available for easy handling, just press the return key to return to original starting point.
5. Even if the vertical head is moved or modified from the current position, original feed setting won't be affected.
6. Automatic transverse and deep plunge cycles available.
7. Two plunge mode feed selections:
 - a) Left side feed
 - b) Dual side feed



Specifications:

Description	Model	PSG-618AD	PSG-820AD
General Capacity	Table size	150 x 457mm	200 x 508mm
	Max. grinding length	475mm	510mm
	Max. grinding width	160mm	210mm
	Distance from table surface to spindle center	415mm	415mm
Longitudinal Movement	Manual travel	485mm	530mm
	Hydraulic travel	480mm	508mm
	Table speed (approx.)	1-25m/min	1-25m/min
	Manual travel	190mm	230mm
Cross Feed Movement	Hydraulic travel	170mm	210mm
	Continuous feed (approx.)	1200mm/min	1200mm/min
	Handfeed per rev.	5mm	5mm
	Handfeed per gra.	0.02mm	0.02mm
Vertical Downfeed	Micro feed per gra. (opt.)	0.002mm	0.002mm
	Intermittent cross feed	0.15-7.5mm	0.15-7.5mm
	Handfeed per rev.	1mm	1mm
	Handfeed per gra. (opt.)	0.005mm	0.005mm
Automatic Downfeed	Micro feed per gra. (opt.)	-	-
	Rapid feed (3A,AD)	220mm/min	220mm/min
	Feed by MPG (opt.) per gra.	(X1) 0.001mm (X10) 0.01mm (X100) 0.1mm	(X1) 0.001mm (X10) 0.01mm (X100) 0.1mm
	Feed rate (rough/line)	0.001-0.080mm	0.001-0.080mm
Grinding Wheel	Total stock removal	0.001-999.999mm	0.001-999.999mm
	Fine feed stock removal	0.001mm	0.001mm
	Spark out	0-9 passes	0-9 passes
	Wheel size (dia. x width x bore)	180 x 13 x 31.75mm	180 x 13 x 31.75mm
Motors	Spindle speed (50/60HZ)	3000 / 3600rpm	3000 / 3600rpm
	Spindle motor (opt.)	1.5 HP (2 HP)	2 HP (3 HP)
	Cross feed motor	25W	40W
	Hydraulic motor	1 HP x 3P	1 HP x 3P
Weight	Elevated motor	21.6 kg/cm	21.8 kg/cm
		850kg	900kg
Packing size	Length x width x height	1900 x 1500 x 2100mm	1900 x 1500 x 2100mm

Note: We reserve the right to modify machine specifications of this brochure without prior notice. 1 inch = 25.4mm approx.

Model Designation:
AD: Function 3A with Y-axis micro computer control auto down feed.
Vertical MPG Control: Y-axis MPG control & servo motor (Optional)



Bench Surface Grinder (Handfeed)

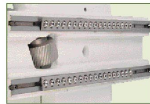
GSG Series

GSG-612B
Steel floor stand is optional

GSG-612BC
GSG-618BC

Machine Features:

1. Major cast parts are made of stress relieved and annealed Meehanite castings to ensure stability of machine frame.
2. Table drive slides on steel ball slide rails, super quick motion.
3. Precision constructed wheel head produces extremely smooth finishes. Spiral bevel gear produces very smooth vertical motion.
4. This model is handy and flexible. Very low spindle motor vibration.



Specifications:

Description	Model	GSG-612 B	GSG-612 BC
General Capacity	Table size	152 x 305mm	152 x 305mm
	Max. grinding length	320mm	320mm
	Max. grinding width	170mm	200mm
	Distance from table surface to spindle center	280mm	320mm
Grinding Wheel	Wheel size (dia. x width x bore)	180 x 13 x 31.75mm	180 x 13 x 31.75mm
	Spindle speed (50 / 60HZ)	2800 / 3600rpm	2800 / 3600rpm
Spindle motor		0.75 HP	0.75 HP
	Trislot	12.7 x 19.5 x 368mm	12.7 x 19.5 x 368mm
Vertical feed handwheel per gra.		0.01mm	0.01mm
		0.02mm	0.02mm
Coolant pump motor		-	0.125 HP
Floor space		430 x 440mm	550 x 600mm
Net weight		205kg	310kg
Gross Weight		260kg	410kg
Packing dimensions		1040 x 730 x 950mm	1050 x 690 x 1520mm

Note: We reserve the right to modify machine specifications of this brochure without prior notice. 1 inch = 25.4mm approx.

Model Designation:
B/BC: 3 axes manual and working table transmit with grade steel ball.



Standard Accessories (PSG & APSG):

1. Grinding wheel flange
2. Wheel extractor
3. Wheel wrench
4. Working lamp
5. Balancing arbor
6. Auto lube system
7. Tool box with adjusting tools
8. Leveling screws with blocks & eyebolts
9. T-nut & screws
10. Lubrication oil
11. Spare paint
12. Operation manual



Standard Accessories (GSG):

1. Steel floor stand (618BC, 612BC only)
2. Coolant system (618BC, 612BC only)
3. Splash guard (618BC, 612BC only)
4. Hand operated lubricator
5. Grinding wheel, wheel flange, wheel guard
6. Tool box with tools kit



Optional Accessories:

1. Electromagnetic chuck
2. Permanent chuck
3. Inclined permanent magnetic chuck
4. Dust collector
5. Coolant system with splash guard
6. Coolant & dust unit
7. Coolant system with paper filter
8. Coolant system with magnetic dust separator
9. Diamond dresser
10. Balancing stand
11. Demagnetizer (for permanent magnetic chuck)
12. Automatic demagnetizing controller (for electro-magnetic chuck)
13. Inverter
14. Digital read out
15. Radius forming attachment
16. Precision vise
17. Punch former
18. Angle dressing device
19. Vertical MPG control
20. Cross/vertical micro feed

