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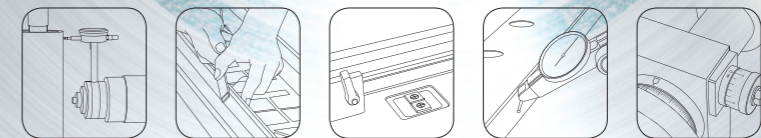
SHINE

Visual Design/ S&J tel +886 4 37038989 5/2016



# Focused Surface Grinding

## More Than Surface Deep



# Practical Machines & Dedicated Service

## Focused Surface Grinding More Than Surface Deep!

SHINE MACHINERY CO., LTD. was established in 1989 and has been manufacturing surface grinding machines for over 20 years. Our main products include bench surface grinders, hand feed surface grinders and automatic grinding machines. With a wealth of experience, our production engineers have accumulated immense technical skills to guarantee customers with the highest quality products.

In recent years Shine Machinery has been marketing their products under the brand name CShine. Also with the ever increasing demand from mainland China, Shine has established a new production facility there to utilize their technical expertise and boost production. With a high degree of professionalism, strict quality control and precision manufacturing, high-quality products and excellent service is guaranteed.

賢興公司成立於 1989 年，近 20 年來，始終致力於製造平面磨床，主要產品包括：桌上型平面磨床、手動成型平面磨床、半自動液壓磨床、3 軸全自動磨床。經過多年為國際品牌 OEM 及 ODM 生產機械，我們的生產工程師專注於過程中的每一個細節，從客戶的角度，生產出最高品質的機器。

賢興堅持以專業、勤奮和高品質，所使用的零組件，通過嚴格的選拔程序，實現生產過程中的每一個檢測。機台軌道鏟花的嚴格控管，更讓我們的機台實現了客戶對機械品質的期望。特別重視的軌道貼合面及準確性，這也是磨床最佳的運動和定位關鍵。因此我們絕對會滿足任何的需求，並展現經過 20 多年經驗，高品質、高精度、高效率。

Using a fixed hand scraper will not only increase the precision of your machine but it will also extend product life.

機台鏟花採用定盤式治具配合施作，可延長機台精度的壽命

# Quality Control Tests at Each Stage

## In Order to Ensure Efficient & Precise Grinding Performance All Machine Gaps Are Carefully Calibrated.

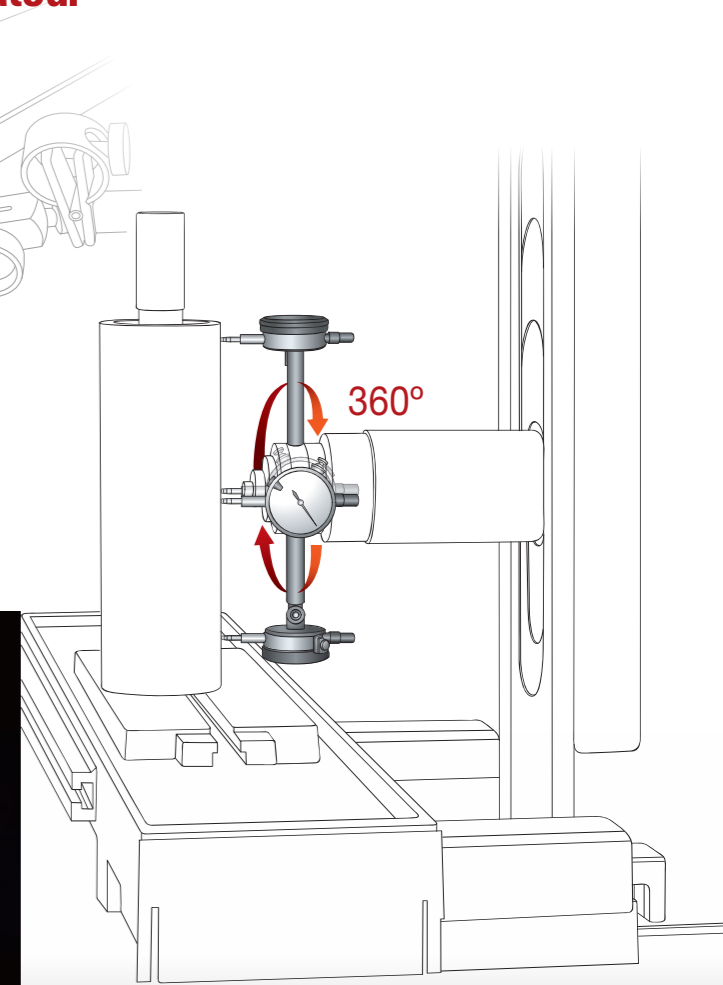
為求研磨時有高效率的加工表現  
仔細反覆校正配合間隙

Quality control tests at each stage of the production process reduce the cumulative tolerances during product assembly.

層層檢驗，降低組裝過程中累積公差之產生

Before any machine leaves the factory they are checked for a parallelism and straightness of 0.01 mm, which greatly increases the stability during grinding and extends product life.

PSG 系列前後螺桿經過熱處理及研磨加上組裝精度要求平行度與真直度 (0.01mm)，都大大增加其使用壽命及成型研磨之穩定性。



The spindle center is tested around 360° for perpendicularity (with the table support), and a maximum tolerance of 0.003 mm is ensured.

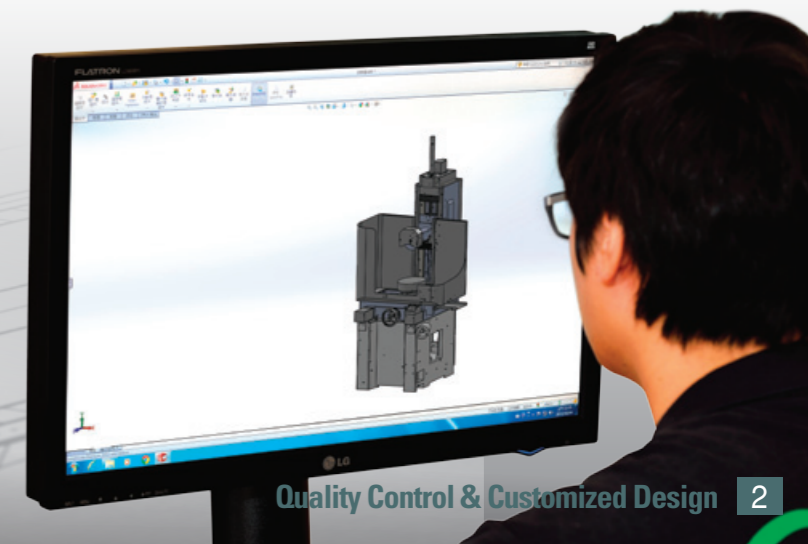
主軸中心 360° 校正 (與工作台之平行度及直角度)

# Customized Design

Through continuous innovation and R&D, our highly skilled personnel can create customized designs to meet customer requirements.

## 客製化服務

不斷創新的研發人員，為客戶的需求  
打造專屬的客製化服務



## Traditional Hand Scraping

### 手工傳承 鏟花藝術

## Maintaining Long-term Precision

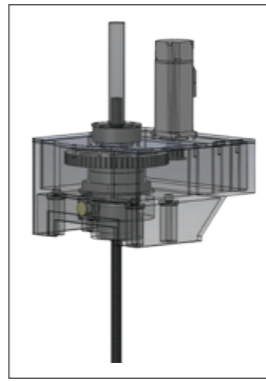
Spraying the hand scraper two times on both sides before use ensures that the machines sliding surface can be precisely and uniformly scraped. This will provide customers the best support for high precision machining.

## 高精度的長期維持

噴漆前後 2 次鏟花作業，以確保每一機台的前後、左右滑動面都能達到鏟花點數密集且分布均勻，為客戶的高精度加工提供最好的支援。



PSG-618AD



Optional ball screw lifting mechanism with a servo motor, drive more precise

升降機構可選配滾珠螺桿搭配伺服馬達，傳動更精確

### Feature

- Easy operation needs no calculation
- Rough and fine feed two phase processing ensures high precision.
- Zero set and zero return are available for easy handing, just press the return key to original start point.
- Even if the vertical head is moved or modified from the current position, original feed setting won't be affected.
- Automatic transverse and deep plunge cycles available.
- Two plunge mode feed selections: Left side or dual side
- Minimum increment 0.001 mm

**Automatic Models to Save Your Cost & Manpower**

## Auto Downfeed Surface Grinder Series

### AD PLC-controller Type Series 微電腦控制AD系列



APSG-1224AD

### Operation Panel 操作面板



### 特性

- 操作簡易無須計算，皆以數字輸入即可。
- 分粗、精磨兩階段加工，確保精度。
- 有零點復歸功能，當主軸移動後，按下零點復歸，即可回到零點。
- 中途移動主軸或修整砂輪，原設定進刀量不受影響。
- 可做平面循環及深槽研磨。
- 切槽加工可選擇單邊或雙邊進刀。
- 最小進給量設定：0.001 mm



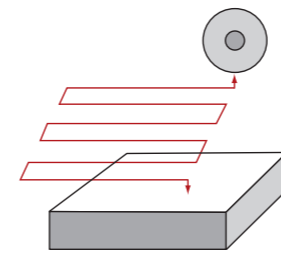
APSG-1020AD

### 全自動磨床系列

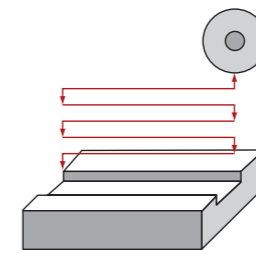
**PSG-618AD/820AD**

**APSG-1020AD/1224AD**

#### Surface Grinding

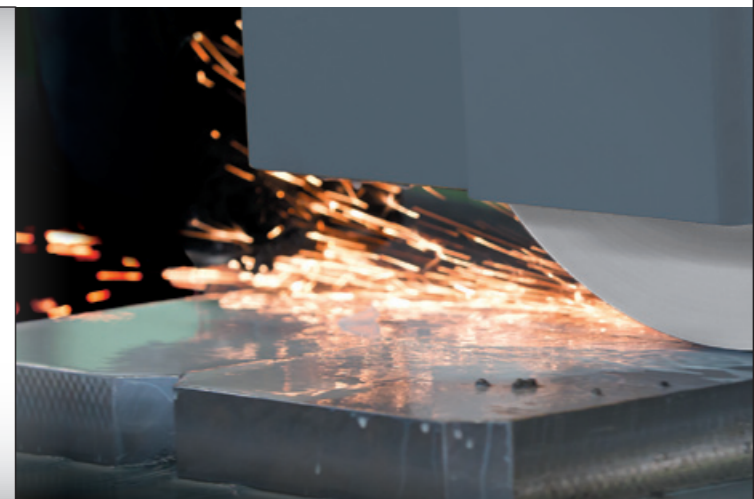
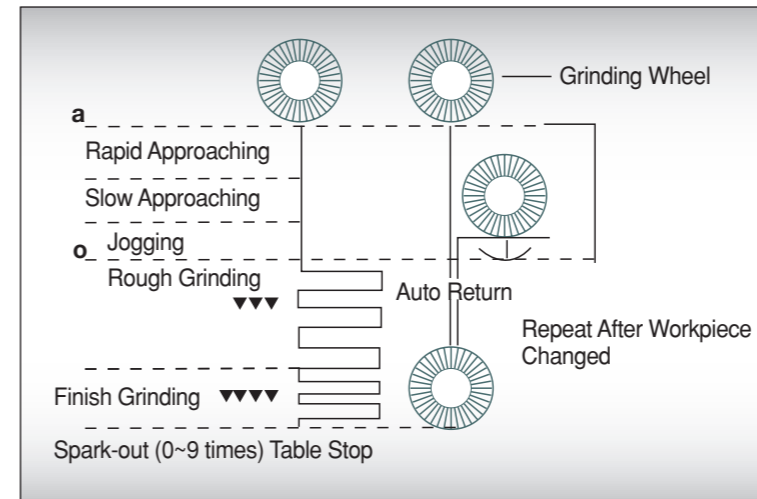


#### Plunge Grinding



### The Motor Control of Vertical 上下軸升降

Model	Stepping Motor 步進馬達	Servo Motor 伺服馬達
618	✓	
820	✓	
1020		✓
1024		✓



**The New Hydraulic Oil Tank**  
**新型油壓箱附風扇冷卻裝置**



PSG-618 2A



**左右無接觸式進接感應**

Table uses proximity switch for stepless, side to side speed changes and increases convenience.

## Semi-auto Forming Surface Grinder Series

**半自動精密成型平面磨床系列**

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

**Table Feeding Adjustment Lever**  
**工作台速度調節**



PSG-820 3A



1A	Hydraulic Table	工作台油壓驅動
2A	1A+Motorized Cross Feed	1A+ 前後馬達驅動
3A	2A+Power Rapid Vertical Feed	2A+ 上下快速升降、手動進刀

**The Lubrication Oil**

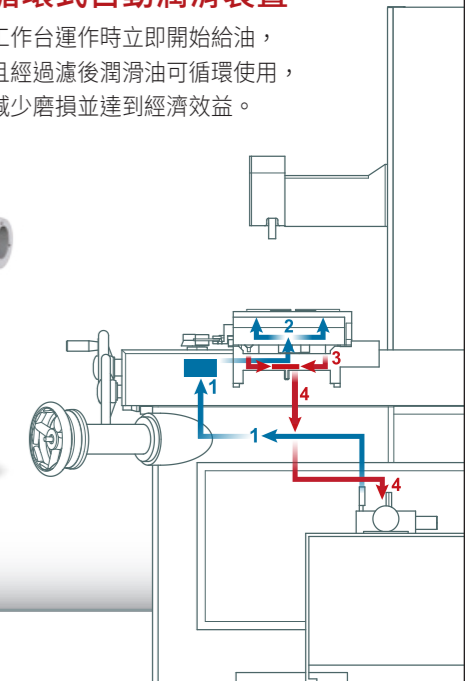
used in the auto-lubrication system is filtered and reused ensuring smooth movement along the slideways and minimizing wear and tear.

**循環式自動潤滑裝置**

工作台運作時立即開始給油，且經過濾後潤滑油可循環使用，減少磨損並達到經濟效益。



APSG-1020 3A



## Semi-auto Precision Surface Grinder Series

**半自動精密平面磨床系列**

**APSG-1020 1A/2A/3A**  
**APSG-1224 2A/3A**

**1224 Models - Before & After Use C5 Class Ball Screw**

1224 機型前後使用 C5 級滾珠螺桿



APSG-1224 3A

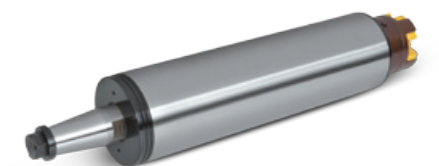


**Precision Spindle**

The low maintenance precision cartridge spindle is well lubricated and uses NSK P4 high precision bearings ensuring a spindle run out accuracy of 0.002 mm. The sealed and waterproof design also provide excellent durability and machining accuracy.

**精密主軸**

裝載 P4 級 NSK 軸承，主軸偏擺在 0.002mm 以下，結構經特殊加長設計，可以做精密切削。





## 高精密手動平面磨床系列 PSG-614T/618T (Turcite Way)

### Feature

- All casting pieces are made in Taiwan with the annealing treatment to enhance high rigidity and stability in grinding.
- Double V slideways are precision hand scraped and coated with Turcite B for smooth movement and stability.
- Standard auto-lube system provides lubrication on all slideways.
- The spindle is coupled directly with motor which ensures high spindle run out providing a precision grinding.

### 特性

- 全系列鑄件 Made in Taiwan，經弛力退火處理，剛性強、研磨時穩定性佳。
- 底座採雙 V 式，且滑動面貼上特選之耐磨片並在三軸施以精密的刮花技術（噴漆前後各一次），使其運動時更為穩定。
- 機台標準配置自動潤滑系統。
- 直結式主軸馬達，可使主軸軸度偏擺更加精確，在執行精密切削及成型研磨時更得心應手。

# High Precision Manual Surface Grinder Series

## Roller Guide Manual Precision Surface Grinder PSG-618B/818B

Designed by roller guide mounted in tracks under the table, provides smooth & light grinding and reduces the fatigue to the operator.

### 鋼珠滾動滑軌平面磨床

此機型工作台採用鋼珠滾動，使得工作台在移動時更輕鬆、更順暢。雖然跟 T Type 相比整體精度稍差，但是可減少工作人員疲勞。

### Rapid Feed or MPG Micro Feed (Vertical)

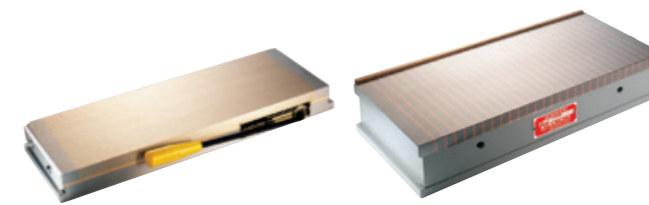
The rapid feed device can promote the efficient work. The MPG micro feed provides the accuracy of feed adjustment and suits for extra fine surface grinding.

### 上下可選配快速進給或 MPG 微調進給

快速進給裝置可提升工作時效率。上下 MPG 裝置適用於精細研磨，可提升進給時的調整精度，增加效率。進給倍率可選擇 0.001/0.005/0.01 mm。



# Accessories



Permanent Chuck  
永久電磁盤

Permanent Magnetic Chuck  
永久電磁盤



Tool Box & Tool Kit  
工具箱及調整工具 (PSG & APSG)

Tool Box & Tool Kit  
工具箱及調整工具 (1224)



Auto Balancing Device  
線上砂輪自動平衡儀

DRO & Linear Scale  
光學尺



Tool Maker Vise  
精密虎鉗

Wheel Flange  
砂輪法蘭

Parallel Dresser  
輪頂修整器



Dust Suction & Coolant System  
沖水與吸塵兩用裝置

Dust Suction System  
吸塵裝置

Coolant System  
冷卻裝置

Coolant System with Auto Paper Filter & Magnetic Separator  
磁鐵附紙袋過濾機

Wheel Inverter  
變頻器

### Standard

- Working Lamp
- Wheel Balancing Arbor
- Grinding Wheel with Flange
- Flange Extractor
- Wheel Dresser with Diamond
- Leveling Screw & Plate
- Toolbox & Tools
- Operation Manual

### Optional

- Permanent/ Electro Magnetic Chuck
- Inclinable Permanent Magnetic Chuck
- Parallel Dressing Attachments
- Angle Dressing Device

- Radius Dressing Device
- Demagnetizer
- Coolant System W/ Splash Guard
- Coolant System & Dust Unit W/ Splash Guard
- Dust Suction System
- Wheel Balance Stand
- Grinding Wheel Flange
- Vertical MPG Microfeed Device
- Punch Former
- Precision Vise
- LED Working Lamp
- Magnetic Separator Filter
- Paper Filter W/ Coolant System
- Coolant System with Auto Paper Filter and Magnetic Separator
- DRO & Linear Scale
- Wheel Inverter
- CBN/ Diamond Dresser
- Auto Balancing Device

### 標準配件

- 工作燈
- 平衡棒
- 砂輪及法蘭組
- 法蘭拔取工具
- 鑽石修整座及鑽石修刀
- 水平調整螺絲及基礎座
- 工具箱及調整工具
- 使用說明書

### 選購配件

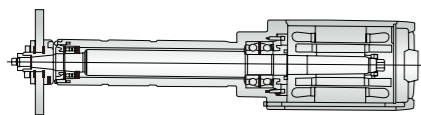
- 永久 / 電磁盤 (S101)
- 可傾式永久磁盤 (S102)
- 輪頂修整器 (S103)
- 角度修整器 (S104)
- 半徑修整器 (S105)
- 脫磁器 (S106)
- 冷卻裝置 & 防水護罩 (S107)
- 沖水與吸塵兩用裝置 (S108)
- 吸塵裝置 (S109)
- 平衡台 (S110)
- 砂輪法蘭 (S111)
- 上下 MPG 微調裝置 (S112)
- 沖子成型器 (S113)
- 精密虎鉗 (S114)
- 工作燈 (S115)
- 磁鐵過濾水機 (S116)
- 紙帶過濾水機 (S117)
- 磁鐵附紙袋過濾機 (S118)
- 光學尺 (S119)
- 變頻器 (S120)
- 鑽石砂輪修整 ((S121)
- 線上砂輪自動平衡儀 (S122)

Description		Unit	Model						
			PSG-614T	PSG-618T PSG-618B	PSG-818B	PSG-1A618 PSG-2A618 PSG-3A618 PSG-618AD	PSG-1A820 PSG-2A820 PSG-3A820 PSG-820AD	APSG-1020 2A/3A/AD	APSG-1224 2A/3A/AD
<b>General Capacity</b>	<b>加工能力</b>								
Table Size	工作台面積	mm	150x352	150x460	200x450	150x457	200x500	250x500	300x600
Max. Table Travel	工作台最大行程 / 手動		170x380	176x480	220x485	180x485	230x530	300x580	340x700
Max.Grinding Surface	最大研磨面積		150x350	150x450	200x450	150x450	200x500	250x500	300x600
Max.Distance Center of Spindle to Table	砂輪軸心至工作檯面距離		420 / 460 (Opt.)		410 / 460 (Opt.)			510	
<b>Longitudinal Movement</b>	<b>工作台</b>								
Table Guideway	工作台滑道		V & Flat Way						
Table Speed	工作台移動速度	M/min	-	-	-	3 ~ 25		5 ~ 25	
<b>Cross Feed Movement</b>	<b>鞍座移動</b>								
Rapid Power (Approx.)	電動快速進給 (約)	mm/min	-	-	-	1,100 (60HZ) / 9,00 (50HZ)		1,100 (60HZ) / 9,00 (50HZ)	
Handfeed (per rev.)	手輪進給 (每轉)	mm	5	5	5	5	5	4	4
Handfeed (per gra.)	手輪進給 (每刻度)		0.002	0.002	0.002	0.02			
Microfeed (per gra.) / Opt.	前後微調 (每刻度) / 選配		-	-	-	0.15 ~ 7.5	0.15 ~ 7.5	0.15 ~ 7.5	0.15 ~ 7.5
Increment (Approx.)	自動前後進給量 (約)		-	-	-	0.15 ~ 7.5	0.15 ~ 7.5	0.15 ~ 7.5	0.15 ~ 7.5
<b>Vertical Downfeed</b>	<b>上下進給</b>								
Handfeed (per rev.)	手輪進給量 (每轉)	mm	1	1	1	1	1	2	2
Handfeed (per gra.)	手輪進給量 (每刻度)		0.005						
Rapid Power Elevation (Approx.) (3A/AD)	快速進給	mm/min	-	-	-	220 (60HZ)	220 (60HZ)	200 (60HZ)	200 (60HZ)
MPG Micro Feed / Opt.	上下 MPG 伺服微調 / 選配	mm	(x1) 0.001 (x5) 0.005 (x10) 0.01						
<b>Auto. Downfeed (Only for AD Series)</b>	<b>上下自動進刀 (AD Series)</b>								
Feed Rate (Coarse / Fine)	進刀量速度	mm	-	-	-	0.001 ~ 0.099			
Total Stock Removal	總進刀量設定		-	-	-	0.001 ~ 999.999			
Fine Feed Stock Removal	最小進刀量設定		-	-	-	0.001			
Spark Out	空磨次數	passes	-	-	-	0 ~ 9			
<b>Grinding Wheel</b>	<b>砂輪</b>								
Wheel Dimensions (Dia.xWidthxBore)	尺寸 (外徑x寬度x孔徑)	mm	180x13x31.75			180x13x31.75			355x37.5x127
Wheel Speed/ Spindle Speed	主軸轉速 (50/60 HZ)	rpm	3,000 / 3,600						1,450 / 1,750
<b>Motor</b>	<b>馬達</b>								
Spindle Motor	主軸馬達	HP	1.5	1.5	2	1.5	2	3	5
Cross Feed	自動前後馬達	W	-	-	-	25	40	40	80
Hydraulic	油壓泵浦馬達	hpxp	-	-	-	1x6	1x6	1x6	1x6
Vertical Feed (Only for 3A/ AD Series)	上下快速升降馬達 (3D/ AD Series)		-	-	-	25W (3A) / 21.6 kg-cm (AD)		80W (3A) 400W (AD)	
Coolant Pump	冷卻泵浦馬達	HP	1/8			1/8			
<b>Weight</b>	<b>機器重量</b>	kgs	670	780 / 870	800 / 890	850 / 950	920 / 1,020	1,350	1,650
<b>Packing Size (LxWxH)</b>	<b>裝箱尺寸 (長x寬x高)</b>	mm	1,300x1,050x2,100	1,450x1,100x2,100	1,670x1,150x2,100	1,700x1,150x2,100 190x150x210 (AD)	1,720x1,250x2,100 190x150x210 (AD)	1,800x1,600x2,100	2,200x1,900x2,100

## 614/618/818/820 Feature

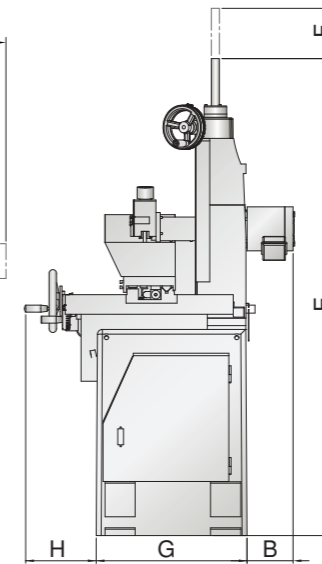
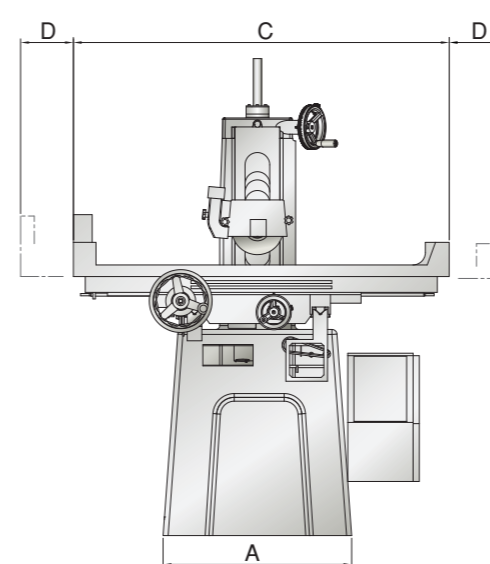
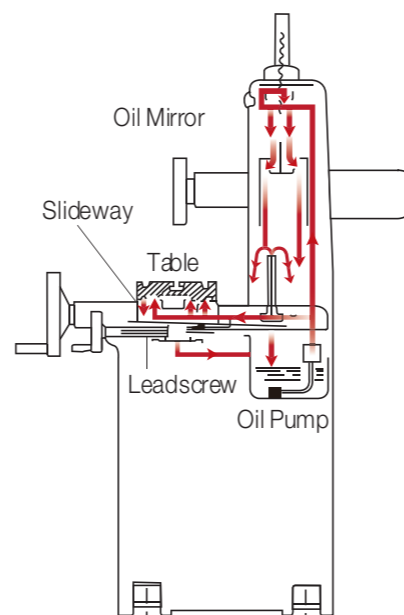
### Precision Grinding Spindle

is coupled directly with V-3 motor which ensures high spindle run out accuracy of 0.001 mm. The precision cartridge spindle, greased & maintenance free incorporates 4 preloaded class 7(P4) super precision angular contact ball bearings for heavy grinding.



### Standard Auto-lube System

Standard auto-lube system provides ample lubrication on all slideways, lead screws and nuts, Lubricating oil is filtered and recycled, smooth movement and minimize wear and tear.



### Working Area 佔地面積

Model	Unit	614T	618T/B	618/820	1020	1224
A	mm	640	760	760	760	760
B		180	180	500	80	240
C		1,000	1,210	1,510	1,700	1,890
D		238	238	265	300	320
E		1,800	1,800	1,900	1,820	1,820
F		200	200	200	-	-
G		600	600	600	1,020	1,060
H		375	400	475	460	512