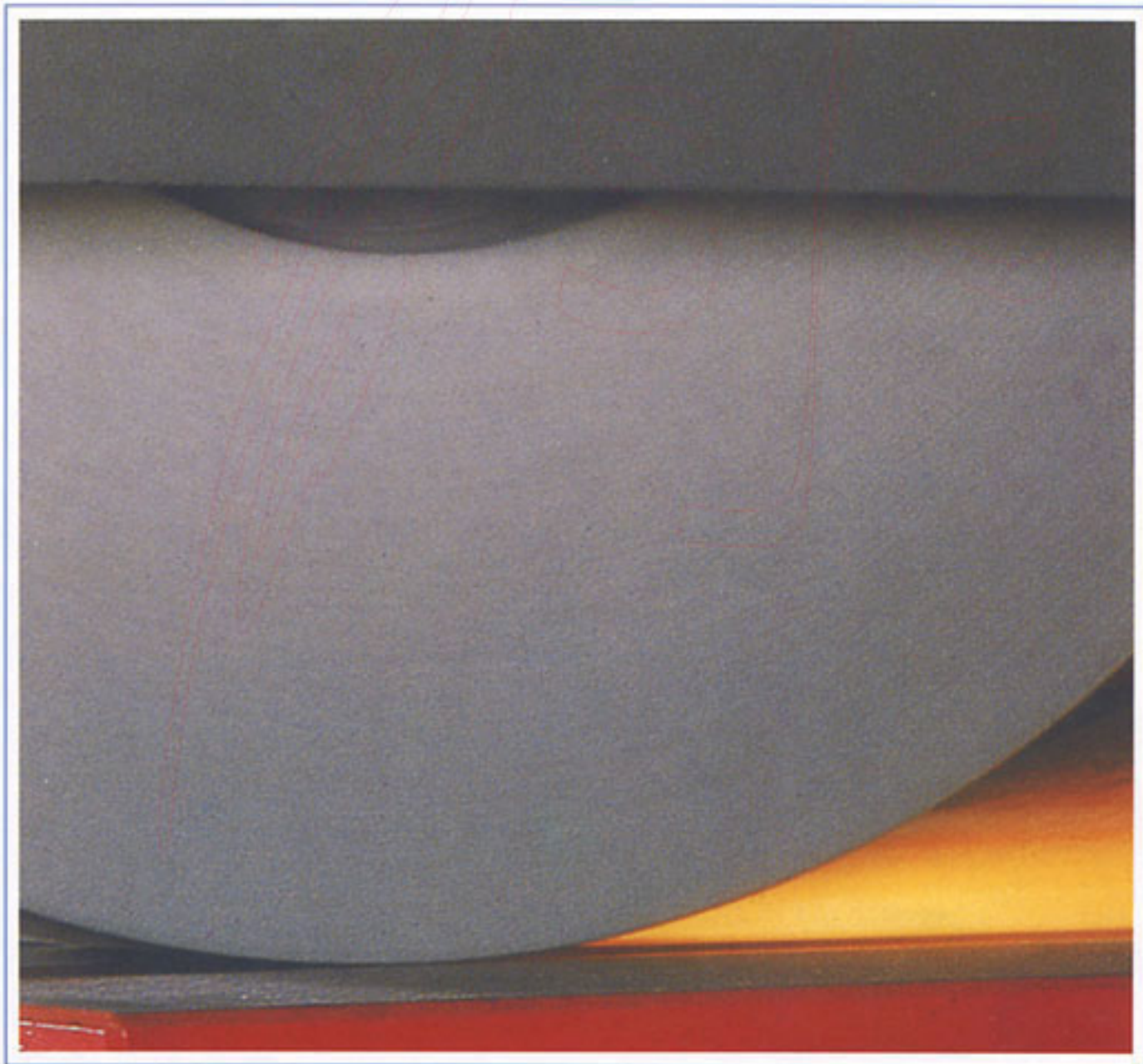


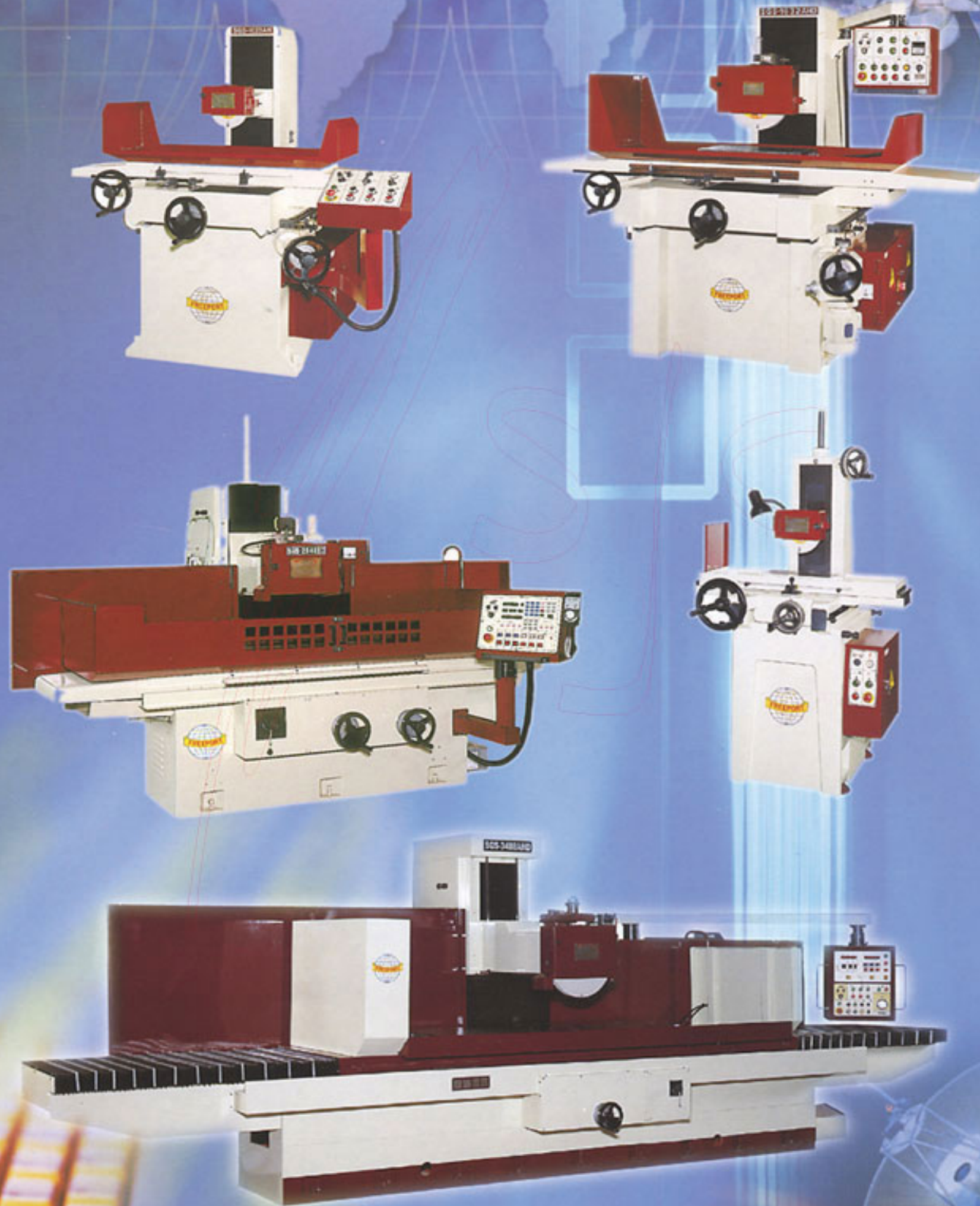
# FREEPORT

DOUBLE COLUMN TYPE  
PRECISION SURFACE GRINDER

龍門型精密平面磨床



Our other products  
本公司其它產品



Accuracy, Reliability, and Economy are what is pursued in metal working industry nowadays.  
In order to meet the request of customer, we have made a great contribution to research and development.

精確、可靠和經濟是今日金屬加工業所必備的，為了符合顧客的需求，我們無時無刻都在盡力研究與改良

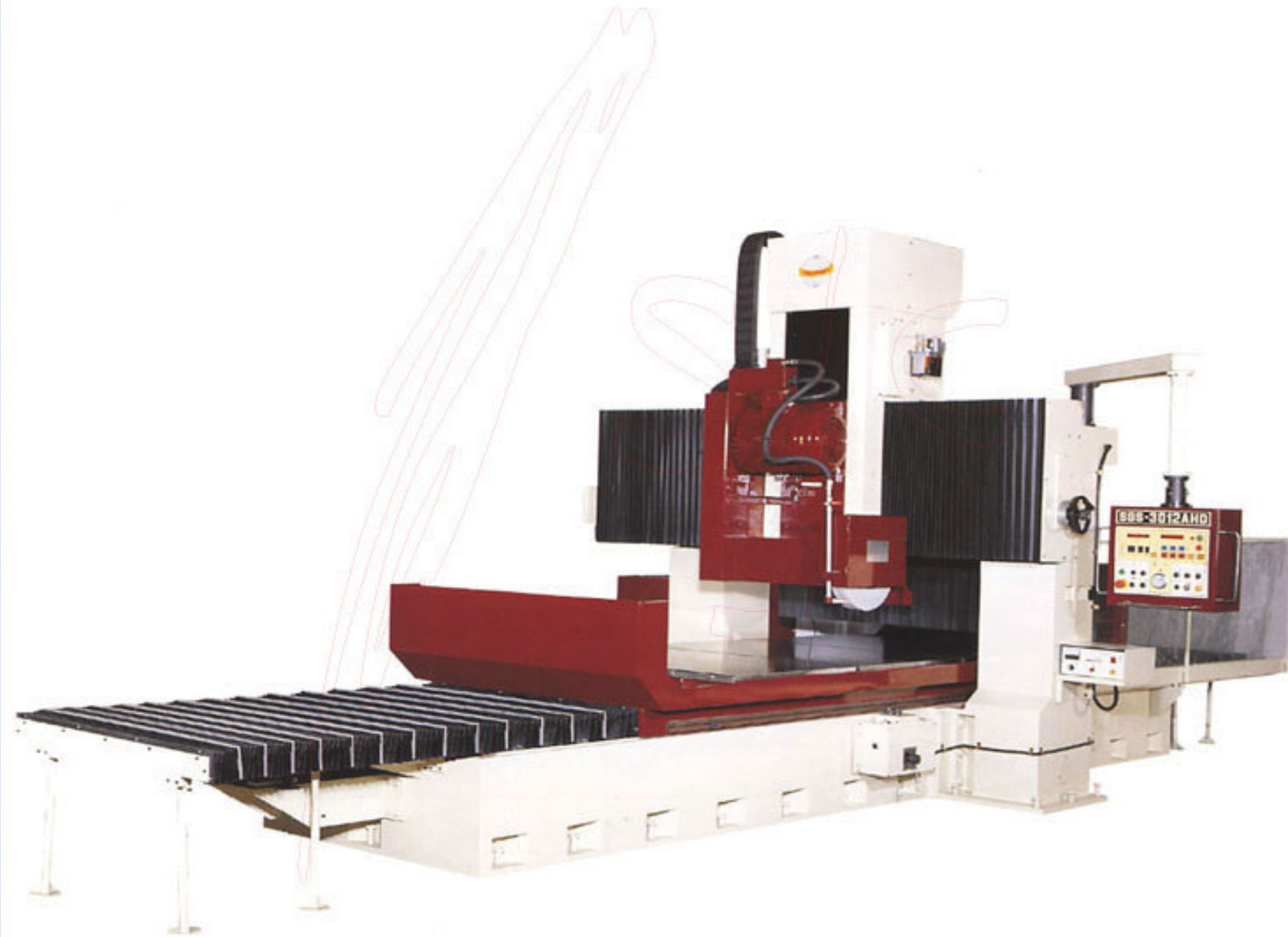


SUNNY MACHINERY

SINGLE HEAD DOUBLE COLUMN PRECISION SURFACE GRINDER 單頭龍門平面磨床

SGS-1512~4012 AHD/PNC

★ 1200 × 1500 ~ 1200 × 4000

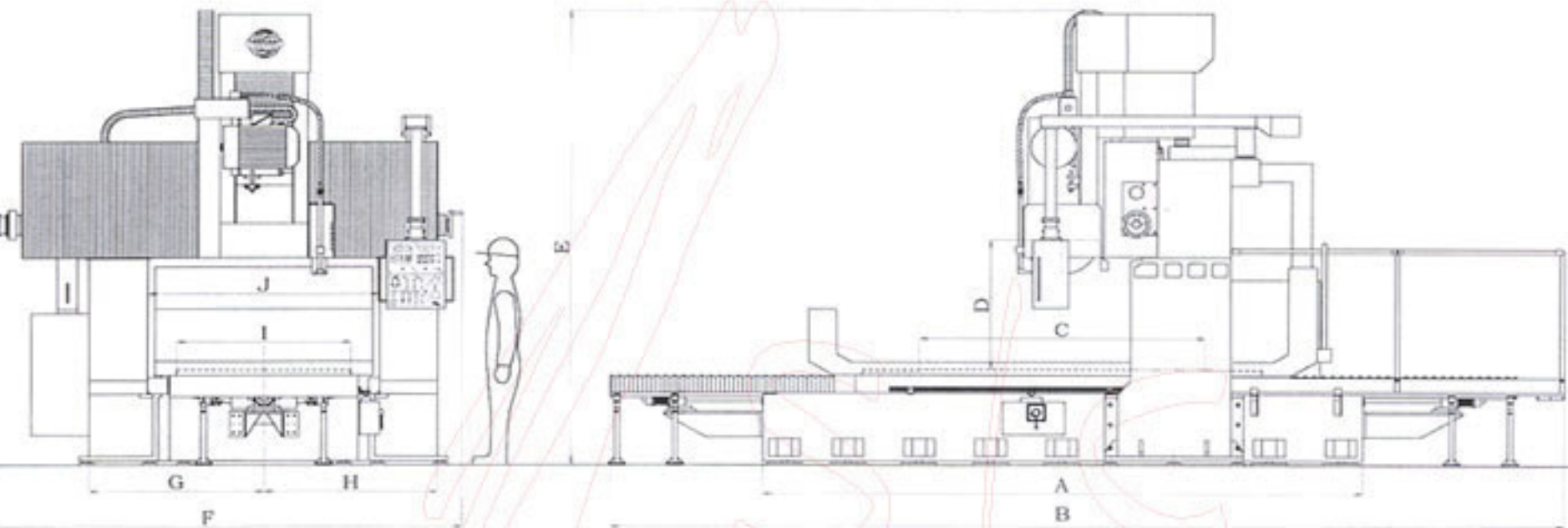




SINGLE HEAD DOUBLE COLUMN PRECISION SURFACE GRINDER 單頭龍門平面磨床

SGS-1512~4012 AHD/PNC

PROFILE DIMENSION 機器外觀尺寸



unit:mm

	SGS-1512 AHD/PNC	SGS-2012 AHD/PNC	SGS-2512 AHD/PNC	SGS-3012 AHD/PNC	SGS-4012 AHD/PNC
A	3200	4200	5200	6200	8200
B	5572	6672	7772	8872	11072
C	1500	2000	2500	3000	4000
D	950	950	950	950	950
E	3395	3395	3395	3395	3395
F	3380	3380	3380	3380	3380
G	1200	1200	1200	1200	1200
H	1200	1200	1200	1200	1200
I	1200	1200	1200	1200	1200
J	1600	1600	1600	1600	1600

SGS-1512~4012 AHD/PNC

SPECIFICATION 規格表

☆In specification, if there is a \* mark in front of item, it is an optional specification.  
 ☆規格表裏・前方有\*記號者・為特別規格・

unit:mm

Specification / 規格	Model / 機型	SGS-1512 AHD/PNC	SGS-2012 AHD/PNC	SGS-2512 AHD/PNC	SGS-3012 AHD/PNC	SGS-4012 AHD/PNC
Working Surface of table. (W x L) 工作台面積 寬×長		1200 x 1500	1200 x 2000	1200 x 2500	1200 x 3000	1200 x 4000
Max. Grinding surface. (W x L) 最大研磨面積 寬×長		1300 x 1600	1300 x 2100	1300 x 2600	1300 x 3100	1300 x 4100
Max. Horizontal travel of table. 工作台左右最大行程		1700	2200	2700	3200	4200
Distance between two columns 雙柱間距離		1400				
Distance between table surface and spindle center 工作台面與主軸中心最大距離		950				
Table speed 工作台左右速度		5 ~ 25 M/min (16 ~ 80 fpm)				
Automatic crossfeed of spindle seat (60HZ) 前後每次進刀量 60HZ		0 ~ 25 (0"-1")				
Downfeed handwheel min.scale 上下進刀最小單位		0.005 (0.0002")				
Crossfeed handwheel (1 gra) 前後手輪每一刻度		AHD:0.02 (0.001") / PNC:0.005 (0.0002")				
Crossfeed handwheel (1 rev) 前後手輪每一轉		5 (0.2")				
Longitudinal travel adjustable (from~to) 左右行程調整距離		200 ~ 1800	200 ~ 2300	250 ~ 2800	200 ~ 3300	200 ~ 4300
Crossfeed travel adjustable (from~to) 前後行程調整距離		0 ~ 1400				
Spindle motor 主軸馬達		20HP x 4P *30HP x 4P				
Hydraulic pump motor 油壓泵馬達		15HP x 6P		20HP x 6P		
Crossfeed motor 前後馬達		AHD:1/4HP x 6P / PNC:AC SERVO				
Downfeed motor 上下馬達		AHD:DC SERVO / PNC:AC SERVO				
Grinding wheel (ODxTxID) 砂輪尺寸 (外徑×厚度×內徑)		510 x 50 x 127 *510 x 75 x 203.2				
Spindle speed 60/50HZ 主軸速度 60/50HZ		1250 RPM/60HZ 1050 RPM/50HZ				
Flow rate of coolant pump 沖水泵流量		90 L/min				
Max. Load capacity 工作台最大荷重		2100 kgs	2800 kgs	3500 kgs	4200 kgs	4900 kgs
Net Weight 機器重量		17000 kgs	19500 kgs	22000 kgs	24500 kgs	29500 kgs

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TWO HEADS PRECISION DOUBLE COLUMN SLIDEWAY AND SURFACE GRINDER 雙頭龍門成型及平面磨床

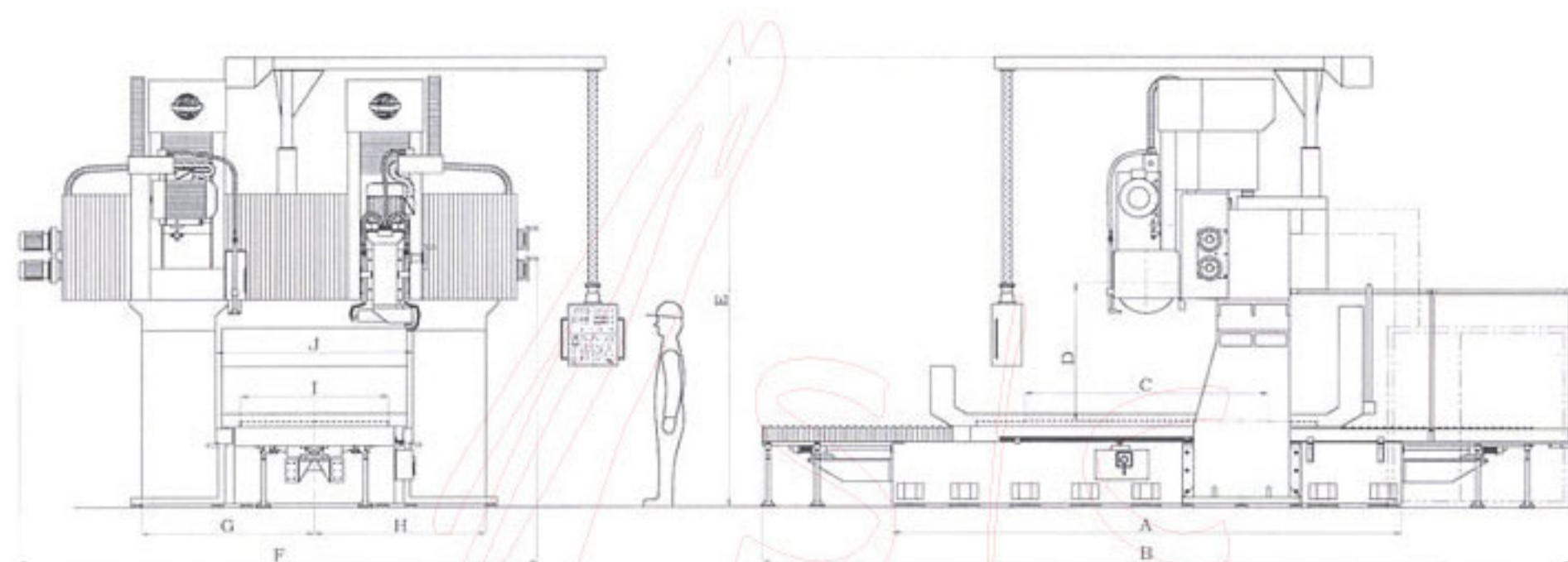
SGS-T2012-T6012 AHD/PNC

★ 1200 × 2000 ~ 1200 × 6000



SGS-T2012~T6012 AHD/PNC

■ PROFILE DIMENSION 機器外觀尺寸



unit:mm

	SGS-T2012 AHD/PNC	SGS-T3012 AHD/PNC	SGS-T4012 AHD/PNC	SGS-T5012 AHD/PNC	SGS-T6012 AHD/PNC
A	4200	6200	8200	10200	12200
B	6672	9160	11360	13560	15760
C	2000	3000	4000	5000	6000
D	1150	1150	1150	1150	1150
E	3775	3775	3775	3775	3775
F	4290	4290	4290	4290	4290
G	1400	1400	1400	1400	1400
H	1400	1400	1400	1400	1400
I	1200	1200	1200	1200	1200
J	1600	1600	1600	1600	1600



TWO HEADS PRECISION DOUBLE COLUMN SLIDWAY AND SURFACE GRINDER 雙頭龍門成型及平面磨床

SGS-T2012~T6012 AHD/PNC

■ SPECIFICATION 規格表

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 ☆規格表裏・前方有\*記號者・為特別規格。

unit:mm

Specification / 規格	Model / 機型	SGS-T2012 AHD/PNC	SGS-T3012 AHD/PNC	SGS-T4012 AHD/PNC	SGS-T5012 AHD/PNC	SGS-T6012 AHD/PNC
Working Surface of table. (W x L) 工作台面積 寬×長		1200 x 2000	1200 x 3000	1200 x 4000	1200 x 5000	1200 x 6000
Max. Grinding surface. (W x L) 最大研磨面積 寬×長		1300 x 2100	1300 x 3100	1300 x 4100	1300 x 5100	1300 x 6100
Max. Horizontal travel of table. 工作台左右最大行程		2200	3200	4200	5200	6200
Distance between two columns 雙柱間距離		1400				
Distance between table surface and spindle center(H.AXLE) 橫軸工作台面與主軸中心最大距離		1150				
Distance between table surface and wheel top(V.AXLE) 立軸工作台面與主軸中心最大距離		850				
Inclination of universal head 立式研磨頭傾斜角度		± 90°				
Table speed 工作台左右速度		5 ~ 25 M/min (16 ~ 80 fpm)				
Automatic crossfeed of spindle seat (60HZ) 前後每次進刀量 60HZ		0 ~ 25 (0"~1")				
Downfeed handwheel min.scale 上下進刀最小單位		0.005 (0.0002")				
Crossfeed handwheel (1 gra) 前後手輪每一刻度		AHD:0.02 (0.001") / PNC:0.005 (0.002")				
Crossfeed handwheel (1 rev) 前後手輪每一轉		5 (0.2")				
Longitudinal travel adjustable (from~to) 左右行程調整距離		200 ~ 2300	200 ~ 3300	200 ~ 4300	200 ~ 5300	200 ~ 6300
Crossfeed travel adjustable (from~to) 前後行程調整距離		0 ~ 1400				
Spindle motor (H.AXLE) 橫軸主軸馬達		20HP x 4P *30HP x 4P				
Spindle motor (V.AXLE) 立軸主軸馬達		10HP x 4P *15HP x 4P				
Hydraulic pump motor 油壓泵馬達		15HP x 6P	20HP x 6P	30HP x 6P		
Crossfeed motor 前後馬達		AHD:1/4HP x 6P / PNC:AC SERVO				
Downfeed motor 上下馬達		AHD:DC SERVO / PNC:AC SERVO				
Grinding wheel (ODxTxID) (H.AXLE) 橫軸砂輪尺寸 (外徑×厚度×內徑)		510x50x127 *510x75x203.2				
Grinding wheel (ODxTxID) (V.AXLE) 立軸砂輪尺寸 (外徑×厚度×內徑)		405 x 50 x 127				
Spindle speed 60/50HZ(H.AXLE) 橫軸主軸速度 60/50HZ		1250 RPM/60HZ 1050 RPM/50HZ				
Spindle speed 60/50HZ (V.AXLE) 立軸主軸速度 60/50HZ		1750 RPM/60HZ 1450 RPM/50HZ				
Flow rate of coolant pump 沖水泵流量		AHD:90 L/min / PNC:200 L/min				
Max. Load capacity 工作台最大荷重		3800 kgs	4800 kgs	5600 kgs	7000 kgs	8400 kgs
Net Weight 機器重量		21000 kgs	26000 kgs	30700 kgs	35500 kgs	40300 kgs

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雙頭超大型龍門成型及平面磨床

SUPER TWO HEADS PRECISION\*DOUBLE COLUMN SLIDWAY AND SURFACE GRINDER

SGS-T4018~T12018 PNC

★ 1800 x 4000 ~ 1800 x 12000





雙頭超大型龍門成型及平面磨床  
SUPER TWO HEADS PRECISION DOUBLE COLUMN SLIDWAY AND SURFACE GRINDER

SGS-T4018~T12018 PNC

SGS-T4018~T12018 PNC

■ SPECIFICATION 規格表

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☆規格表裏・前方有 \* 記號者・為特別規格。

Specification / 規格	Model / 機型	SGS-T4018PNC	SGS-T5018PNC	SGS-T6018PNC	SGS-T7018PNC	SGS-T8018PNC	SGS-T9018PNC	SGS-T10018PNC	SGS-T11018PNC	SGS-T12018PNC	
Working Surface of table. (W x L) 工作台面積 寬×長		1800 x 4000	1800 x 5000	1800 x 6000	1800 x 7000	1800 x 8000	1800 x 9000	1800 x 10000	1800 x 11000	1800 x 12000	
Max. Grinding surface. (W x L) 最大研磨面積 寬×長		2200 x 4100	2200 x 5100	2200 x 6100	2200 x 7100	2200 x 8100	2200 x 9100	2200 x 10100	2200 x 11100	2200 x 12100	
Max. Horizontal travel of table. 工作台面最大行程		4200	5200	6200	7200	8200	9200	10200	11200	12200	
Distance between two columns 雙柱間距離						2300					
Distance between table surface and spindle center(H.AXLE) 橫軸工作台面與主軸中心最大距離						1200					
Distance between table surface and wheel top(V.AXLE) 立軸工作台面與主軸中心最大距離						850					
Inclination of universal head 立式研磨頭傾斜角度						± 90°					
Table speed 工作台面速度						5 ~ 25 M/min (16 ~ 80 fpm)					
Automatic crossfeed of saddle (60HZ) 前後每次進刀量 60HZ						0 ~ 50 (0"~2")					
Downfeed handwheel min.scale 上下進刀最小單位						0.005 (0.0002")					
Crossfeed handwheel (1 gra) 前後手輪每一刻度						0.005 (0.0002")					
Longitudinal travel adjustable (from~to) 左右行程調整距離		200 ~ 4300	200 ~ 5300	200 ~ 6300	200 ~ 7300	200 ~ 8300	200 ~ 9300	200 ~ 10300	200 ~ 11300	200 ~ 12300	
Crossfeed travel adjustable (from~to) 前後行程調整距離						0 ~ 2300					
Spindle motor(H.AXLE) 橫軸主軸馬達						30HP x 4P					
Spindle motor(V.AXLE) 立軸主軸馬達						10HP x 4P *15HP x 4P					
Hydraulic pump motor 油壓泵馬達		30HP x 6P				50HP x 6P					
Crossfeed motor 前後馬達						AC SERVO					
Downfeed motor 上下馬達						AC SERVO					
Grinding wheel (ODxTxID)(H.AXLE) 橫軸砂輪尺寸 (外徑×厚度×內徑)						610 x 100 x 254 *610 x 100 x 304.8					
Grinding wheel (ODxTxID)(V.AXLE) 立軸砂輪尺寸 (外徑×厚度×內徑)						405 x 50 x 127					
Spindle speed 60/50HZ(H.AXLE) 橫軸主軸速度 60/50HZ						1050 RPM/60HZ 900 RPM/50HZ					
Spindle speed 60/50HZ(V.AXLE) 立軸主軸速度 60/50HZ						1750 RPM/60HZ 1450 RPM/50HZ					
Flow rate of coolant pump 沖水泵流量						250 L/min					
Max. Load capacity 工作台面最大荷重		8000 kgs	10000 kgs	12000 kgs	14000 kgs	16000 kgs	18000 kgs	20000 kgs	22000 kgs	24000 kgs	
Net Weight 機器重量		72000 kgs	78000 kgs	85000 kgs	92000 kgs	98000 kgs	105000 kgs	111000 kgs	118000 kgs	125000 kgs	

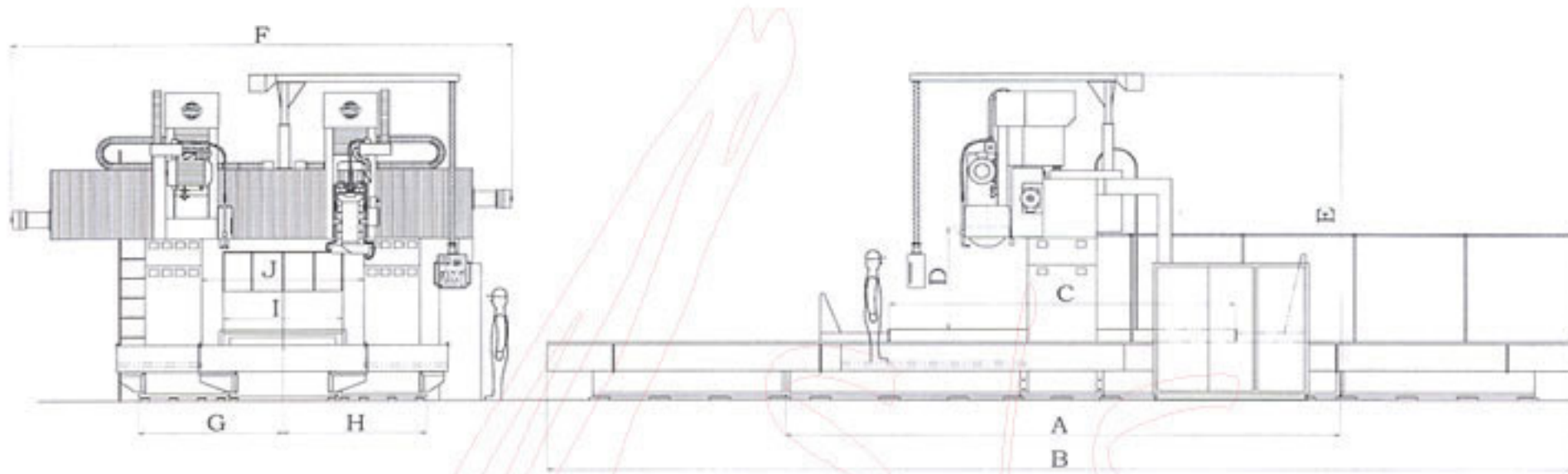
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雙頭超大型龍門成型及平面磨床  
SUPER TWO HEADS PRECISION DOUBLE COLUMN SLIDEWAY AND SURFACE GRINDER

SGS-T4018~T12018 PNC

■ PROFILE DIMENSION 機器外觀尺寸



unit:mm

	SGS-T4018 PNC	SGS-T5018 PNC	SGS-T6018 PNC	SGS-T7018 PNC	SGS-T8018 PNC	SGS-T9018 PNC	SGS-T10018 PNC	SGS-T11018 PNC	SGS-T12018 PNC
A	8000	10000	12000	14000	16000	18000	20000	22000	24000
B	11300	13800	16300	18800	21300	23800	26300	28800	31300
C	4000	5000	6000	7000	8000	9000	10000	11000	12000
D	1200	1200	1200	1200	1200	1200	1200	1200	1200
E	4200	4200	4200	4200	4200	4200	4200	4200	4200
F	7140	7140	7140	7140	7140	7140	7140	7140	7140
G	2050	2050	2050	2050	2050	2050	2050	2050	2050
H	2050	2050	2050	2050	2050	2050	2050	2050	2050
I	1800	1800	1800	1800	1800	1800	1800	1800	1800
J	2300	2300	2300	2300	2300	2300	2300	2300	2300

HORIZONTAL GRINDING HEAD 橫式研磨頭

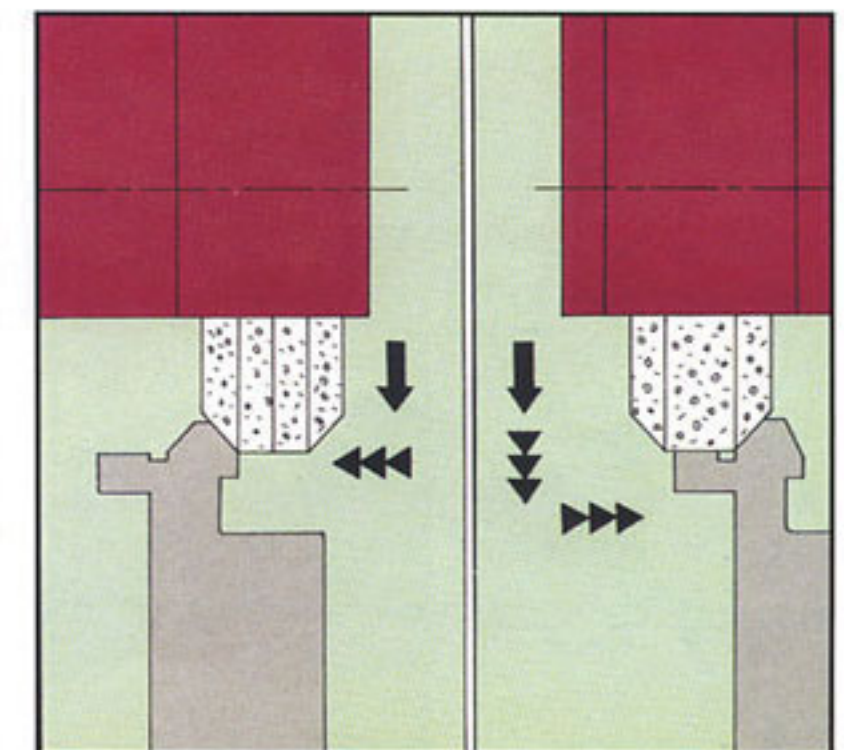
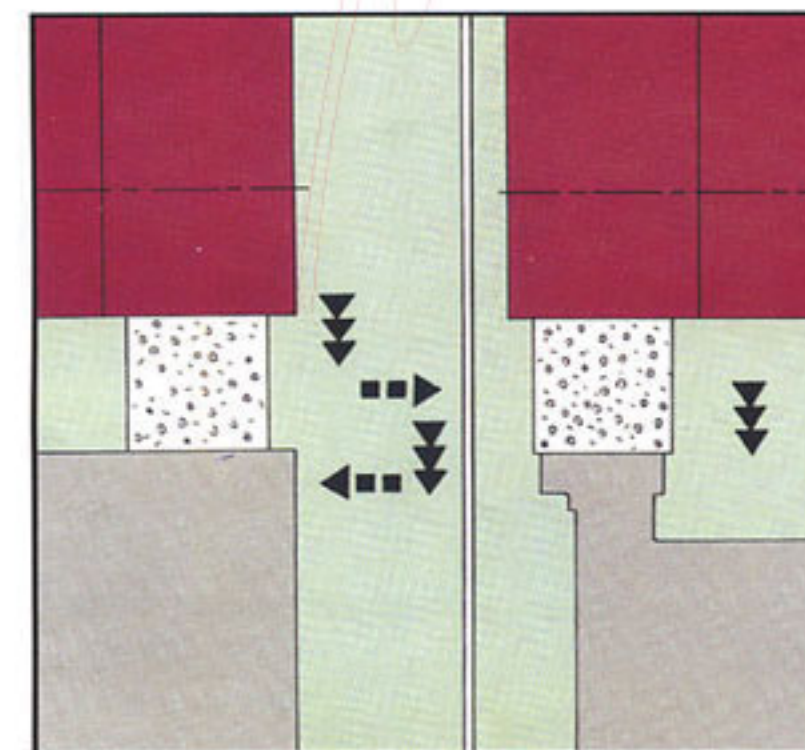
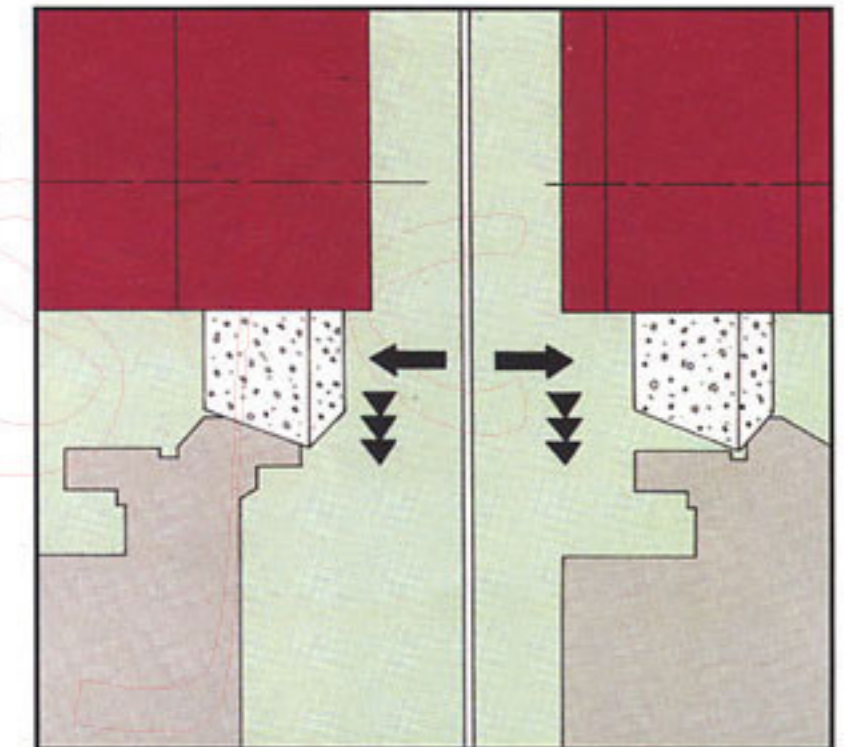
Operation Example Of Horizontal Grinding Head

- Operation of horizontal axle grinding wheel can cooperate with special wheel dressers to make surface, slot, and different kinds of forming grinding easily.

橫軸砂輪頭使用範例

- 橫軸砂輪頭配合特殊砂輪修整器，不僅可作平面往復式和溝槽研磨，且可作多種成型研磨。以簡易的操作方式可輕易達到多種模式研磨。

- ← Rapid wheel head displacement 快速進刀
- ⇐ Automatic stepping cross feed 慢速進刀
- ⇐⇐ Automatic pulse feed 寸動微調進刀





UNIVERSAL GRINDING HEAD 立式研磨頭

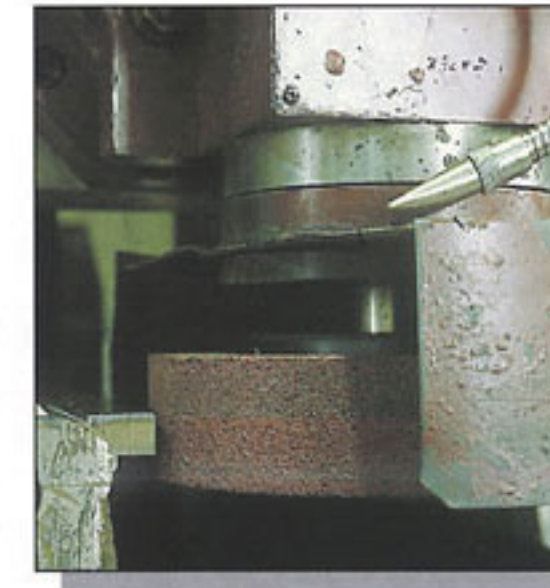
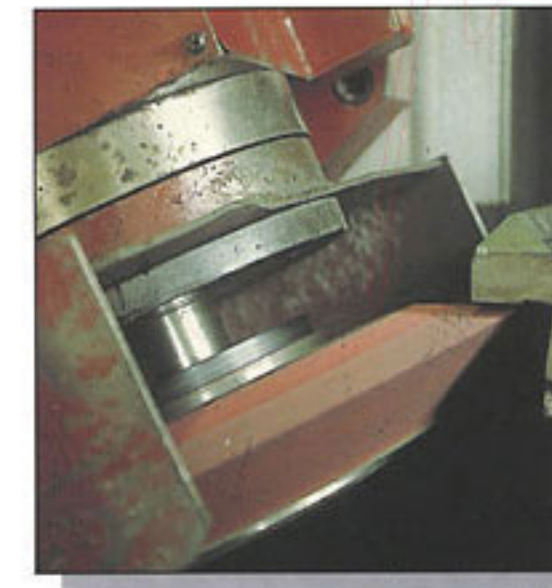
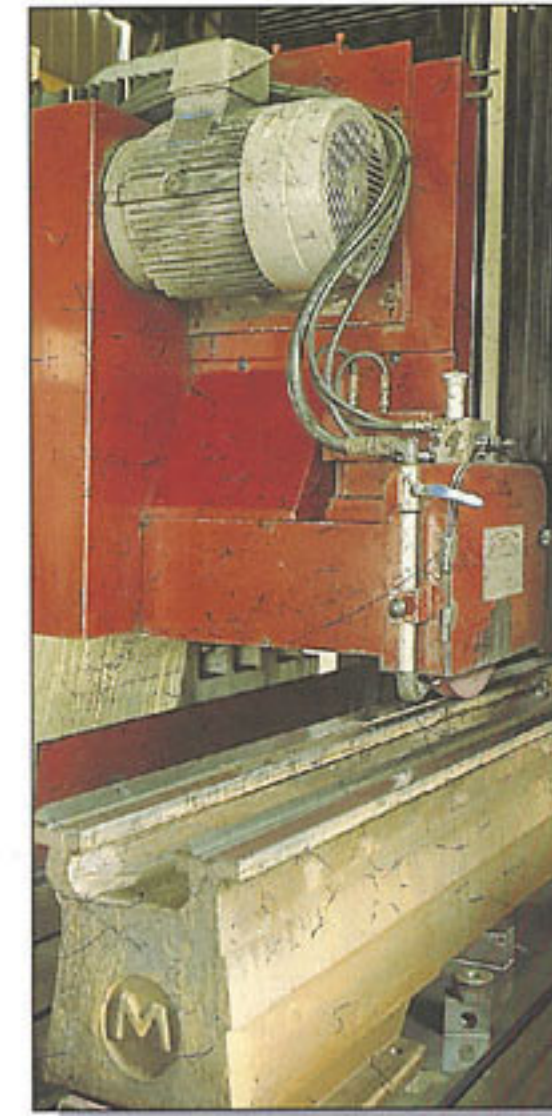
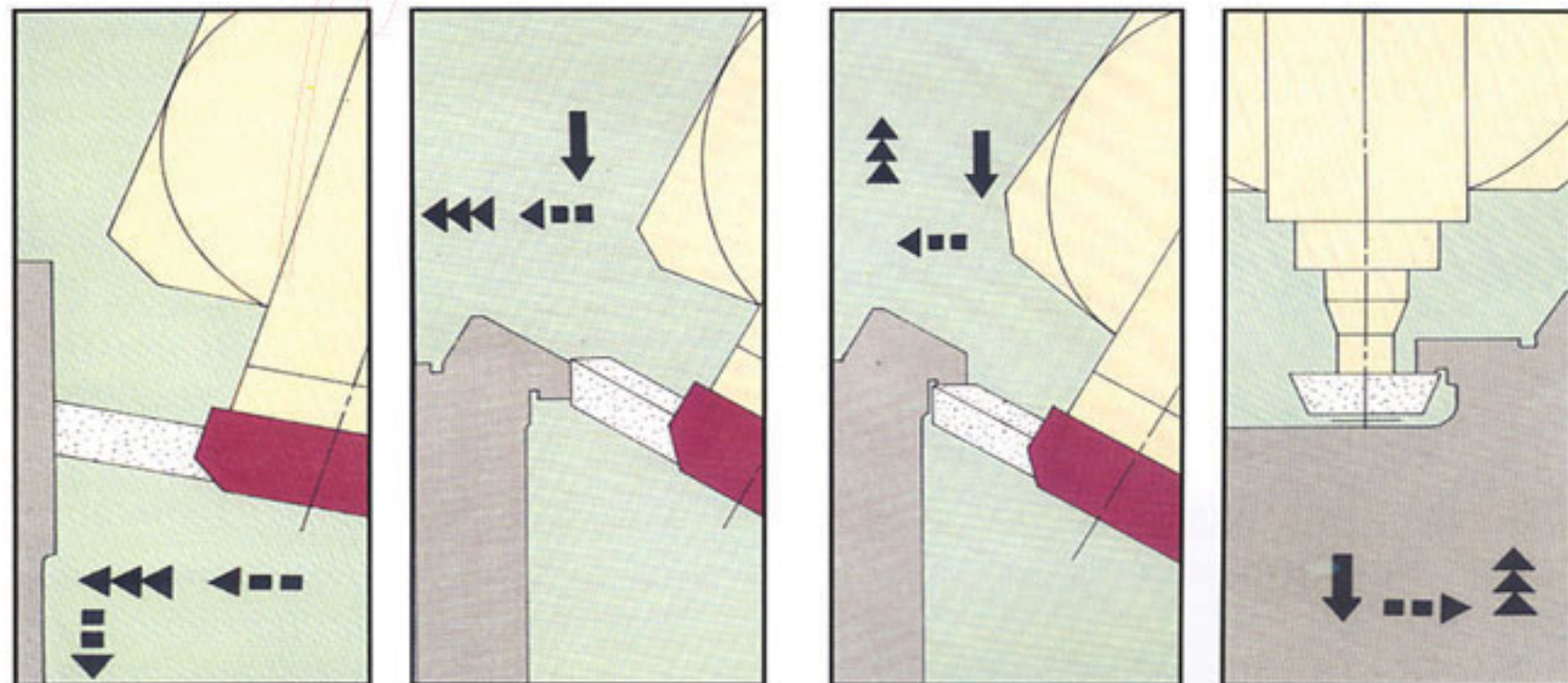
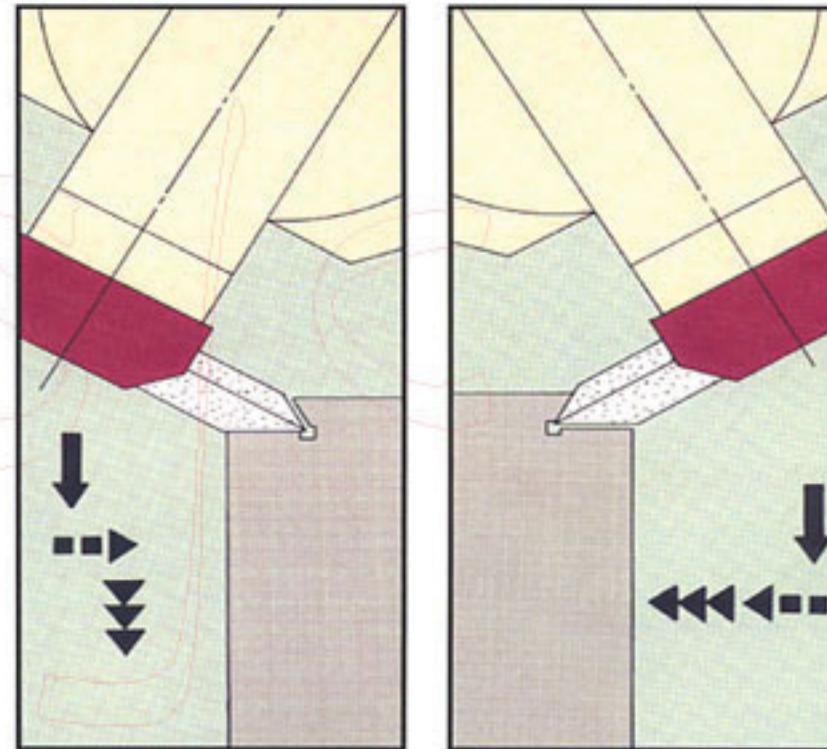
Operation Example Of Universal Grinding Head

- Angle swivel of universal axle wheel head is driven through lead screw and worm gear, it can swiftly turn wheel head within  $\pm 90^\circ$ , which is very convenient for forming grinding procession.
- Vertical feeding cooperates with cross movement of wheel head to achieve the surface and forming grinding, see diagram.

立軸砂輪頭使用範例

- 立式砂輪座角度利用螺桿與蝸輪傳動，故旋轉非常輕巧且砂輪座可作  $\pm 90^\circ$  的角度變換，對工作的成型加工極為便利。
- 如圖之成型工件，可以利用砂輪上下進刀及砂輪頭前後移動來達到工件平面或成型研磨。

- ← Rapid wheel head displacement 快速進刀
- ⚡ Automatic stepping cross feed 慢速進刀
- ⚡ Automatic pulse feed 寸動微調進刀







Agent:



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