

**HIGH PRECISION
HANDFEED SURFACE GRINDER
HYDRAULIC SURFACE GRINDER**



APSG-820/2A



**THE LEADER IN QUALITY AND RELIABILITY
~SINCE 1973~**

ACRA[®] HIGH PRECISION SURF

FEATURES

■ MACHINE CONSTRUCTION

The main parts of the machine such as base, column, saddle are made of Meehanite High Quality cast iron, which are stress released by annealing to ensure stable rigidity and high accuracy and extend machine life.

■ SLIDWAYS (BALL WAYS OR TURCITE WAYS)

Both longitudinal & cross slide-ways are precisely hand-scraped and laminated with **TURCITE-B** providing a smooth travels and ever low wearing, mostly suitable for **FORMING** grinding.

Ball ways are available for hand feed grinder **APSG-618B/818B** only. Finely selected steel balls are utilized for a light grinding jobs, and maximize working efficiency. Cross slideways on "DOUBLE VEES" structure to ensure the highest accuracy.

■ PRECISION GRINDING SPINDLE

The precision cartridge spindle, greased & free of maintenance, if incorporated with 4 pieces of Preloaded Calss 9(P4) super precision Angular contact ball bearing for heavy grinding.

The spindle is directly coupled with **V-3** motor, which ensure high spindle run out accuracy less than 0.002 mm. (8/Ten thousand",)

■ TABLE REVERSE DEVICE (1A/2A)

Longitudinal and cross slideways are made of full support design, offer table traverse at high precision during travels.

■ AUTOMATIC LUBRICATION SYSTEM

The Auto lubrication system is furnished as standard, it to provide ample lubricating on all slideways and leadscrew guaranteed a smooth travels as minimize wearing possibility.

■ RAPID VERTICAL FEED

Elevating movement is driven on **V Type** slideways, The backlash can adjust to match the precisely movement between lead-screw and worm gear. The Driving Shaft rigidly supported to two bearing for noise free and smooth running.

■ CENTRALIZED CONTROL PANEL

All push buttons & switch are situated on the controller panel for easy and convenient operations.



APSG-618



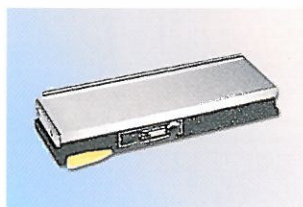
APSG-618/1A

ACE GRINDER

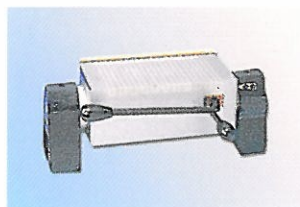
OPTIONAL ACCESSORIES AT EXTRA COSTS



Electro-magnetic chuck



Permanent mag.chuck



Inclinable permanent magnetic chuck



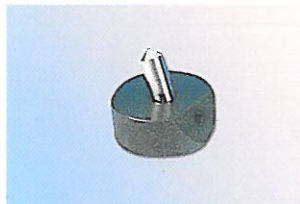
Dust collector



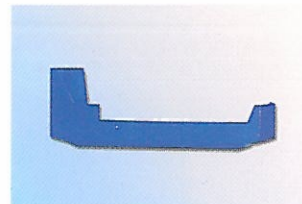
Coolant system



Coolant & dust unit



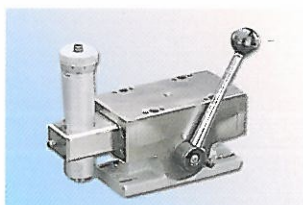
Diamond dresser



Splash guard



Balancing stand



Manual overhead dressing attachment



Manual demagnetizer



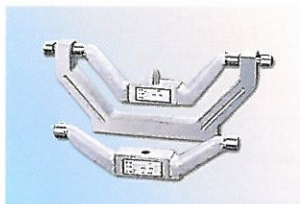
Chuck control with auto demagnetizer



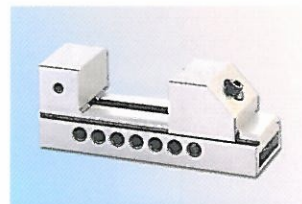
Spare Wheel flange



Halogen lamp

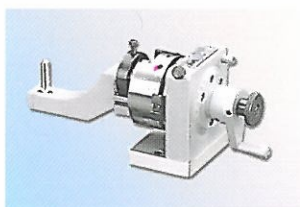
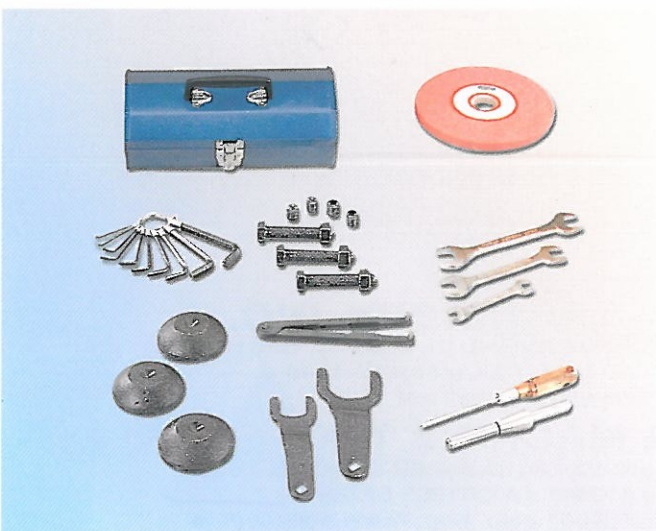


Radius forming attachment



Precision vise

STANDARD ACCESSORIES



Punch former



Digital read out

- Grinding wheel with flange
- Wheel extractor
- Wheel wrench
- Balancing arbor
- Auto lube system
- Tool box with adjusting tools
- Leveling screws with blocks
- Operation manual with parts list

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Model Designation

B : Ball Sideways

1A : Long-Hydraulic Traverse

2A : 1A+Motorized Cross Feed

SPECIFICATION

MODEL		APSG-2045B	APSG-618B 618	APSG-818B	APSG-618/1A 618/2A	APSG-820/1A 820/2A
DESCRIPTION						
General Capacity	Table size	150 x 457mm (6" x 18")	150 x 457mm (6" x 18")	200 x 457mm (8" x 18")	150 x 457mm (6" x 18")	200 x 500mm (8" x 20")
	Max.grinding length	475mm (18-3/4")	475mm (18-3/4")	475mm (18-3/4")	475mm (18-3/4")	510mm (20")
	Max.grinding width	200mm (8.6")	160mm (6-1/4")	200mm (8.6")	160mm (6-1/4")	200mm (8.6")
	Distance from table surface To spindle center	520mm (20.47")	520mm (20.47")	490mm (19.3")	490mm (19.3")	490mm (19.3")
Longitudinal Movement	Manual travel	480mm (18-7/8")	480mm (18-7/8")	485mm (19")	485mm (19")	510mm (20")
	Hydraulic traverse	-	-	-	480mm (18-15/16")	510mm (20")
	Table speed (infi-variable)	-	-	-	1-25M/min	1-25M/min
Cross Movement	Manual travel	230mm (9")	176mm (6-15/16")	230mm (9")	180mm (7")	230mm (9")
	Rapid traverse (2A)	-	-	-	1200mm/min	1200mm/min
	Auto increment feeds(2A)	-	-	-	0.15-7.5mm	0.15-7.5mm
	Handwheel per graduation	0.02mm (0.001")	0.02mm (0.001")	0.02mm (0.001")	0.02mm (0.001")	0.02mm (0.001")
	Handwheel per revolution	5mm (0.2")	5mm (0.2")	5mm (0.2")	5mm (0.2")	5mm (0.2")
Vertical Downfeed	Handwheel per graduation	0.005mm (0.0002")	0.005mm (0.0002")	0.005mm (0.0002")	0.005mm (0.0002")	0.005mm (0.0002")
	Handwheel per revolution	1mm (0.05")	1mm (0.05")	1mm (0.05")	1mm (0.05")	1mm (0.05")
Grinding wheel	Wheel size (diaxwidthxbore)	180x16x32mm (7x2/3x1-1/4")	205x13x31.75mm (8x1/2x1-1/4")	205x13x31.75mm (8x1/2x1-1/4")	205x13x31.75mm (8x1/2x1-1/4")	205x13x31.75mm (8x1/2x1-1/4")
	Spindle speeds (60HZ/50HZ)	3600/3000 rpm	3600/3000 rpm	3600/3000 rpm	3600/3000 rpm	3600/3000 rpm
Motors	Spindle motor	2HP (3HP Opt)	1.5HP (2HP Opt)	2HP (3HP Opt)	1.5HP (2HP Opt)	2HP (3HP Opt)
	Cross feed motor (2A)	-	-	-	1/6HP	1/6HP
	Hydraulic motor	-	-	-	1HP	1HP
Weight		840 kgs (1848 lbs)	820 kgs (1804 lbs)	880 kgs (1936 lbs)	930 kgs (2046 lbs)	970 kgs (2134 lbs)
Packing size	Lengthxwidthxheight (mm)	1450x1150x2000 (57x45x78.7")	1450x1150x2000 (57x45x78.7")	1700x1150x2000 (66.9x45x78.7")	1700x1150x2000 (66.9x45x78.7")	1700x1250x2000 (66.9x49.2x78.7")

We reserve the right to modify and improve above specification without notice.



ACRA MACHINERY, INC.

2050 N. DURFEE AVE. S. EL MONTE, CA91733

TEL:(800)225-4631 FAX:(626)279-1540

E-MAIL:acramach@pacbell.net

ACRA MACHINE TOOLS (UK) LTD.

Bodmin Road,Wyken, Coventry, CV2 5DB

TEL:01203 612601 FAX:01203 612851

E-MAIL:hirek@a01.com <http://www.acra.com.tw>