

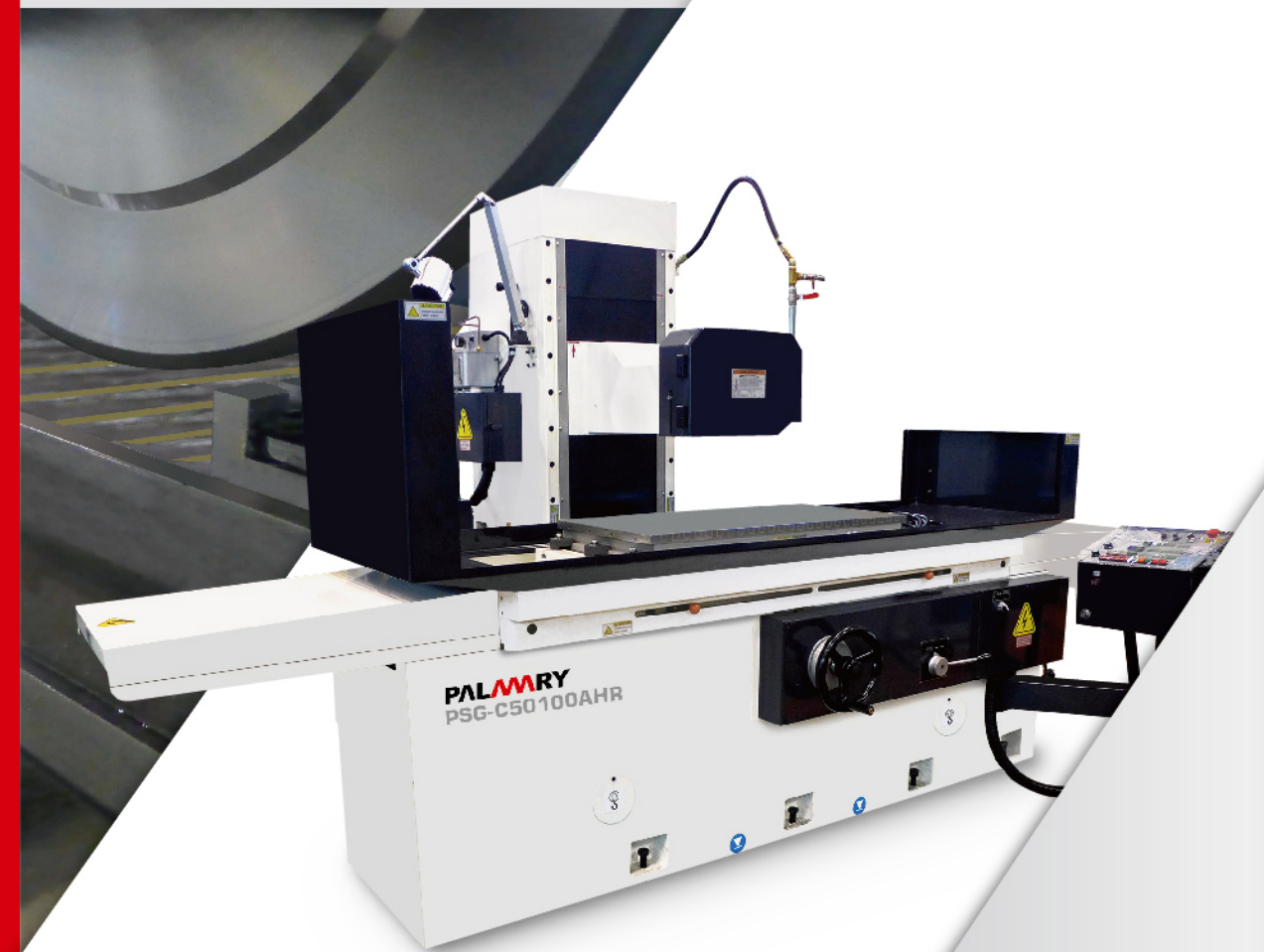
## PALMARY PRODUCTS

- Centerless Grinder
- Cylindrical Grinder
- Internal Grinder
- Vertical Grinder
- Surface Grinder
- Special Purpose Grinder

www.grinding.com.tw

# SURFACE GRINDER

## PSG series



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**PALMARY**  
PALMARY MACHINERY CO., LTD.

## THE QUALITY-PROVEN SURFACE GRINDER DESIGNED WITH ACCURACY AND PRODUCTIVITY IN MIND

### PRECISION PERFORMANCE BUILT INTO EVERY FEATURE

1. Uses strong cast iron and excellent structural design which eliminates internal stress and ensures rigidity, stability and accuracy.
2. The "M" series uses "AA" grade steel balls for the guideway to make operation easier and saving labor.
3. The "H" series cross and vertical slideways are coated with Turcite-B providing stable movement and durable accuracy.
4. Uses P4 precision angular contact bearing for the spindle to ensure accuracy within  $2\mu$ . Also adopts a cartridge design which is completely sealed and lubricated for high durability and accuracy.
5. For "AH" series, can be installed with automatic downfeed AD5 (NC) which adds greater convenience for grinding operations (optional).
6. Models above the PSG-C50 Series all main casting parts like the column, table, etc. have double-wall construction to ensure rigidity and stability during heavy grinding.
7. Designed and manufactured to meet the needs of high accuracy and fine surface finish.
8. A wide range of models to choose from: manual, hydraulic and servomotor operated.



[ PSG-C50100AHR ]



[ PSG-D4080AH ]



[ PSG-CL3060AH ]

**PRECISION  
PERFECTION  
EXCELLENCE**

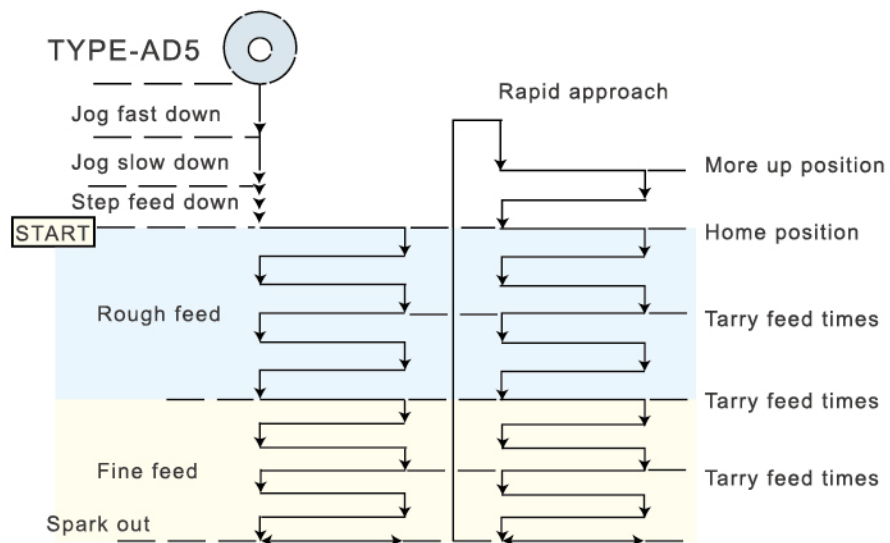


# COMPUTERIZED AUTOMATIC DOWN FEED AD5 (NC FUNCTION) (optional)

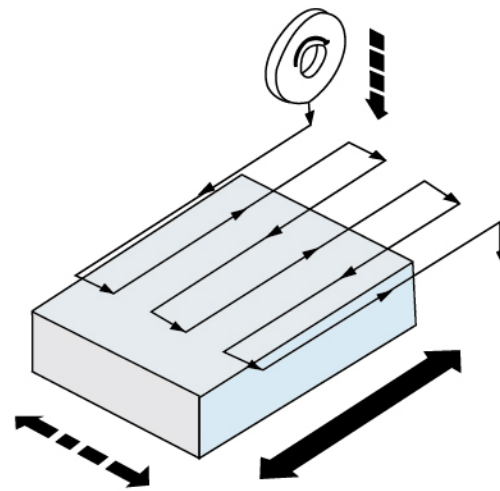


**AUTOMATIC DOWNFEED AD5 (NC)  
CONTROL PANEL (optional)**

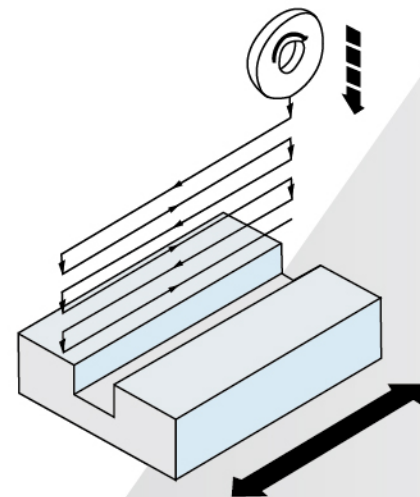
## SURFACE GRINDING PLUNGE GRINDING



### SURFACE GRINDING



### PLUNGE GRINDING



## OPTIONAL ACCESSORIES



### STANDARD ACCESSORIES

- Grinding wheel ---1
- Wheel flange ---1
- Flange extractor ---1
- Wheel balancing arbor ---1
- Wheel balancing stand ---1
- Wheel dresser with diamond ---1
- Leveling screw and plates ---1
- Work lamp (PSG-15/20/25/30/40 only) ---1
- Coolant system (PSG-C50/60/70 only) ---1
- Tools and kits ---1

### OPTIONAL ACCESSORIES

- Electro / permanent magnetic chuck
- Auto. demagnetizer for magnetic chuck
- Micro feed for vertical / corss feed
- Parallel dresser
- Coolant system
- Dust suction with coolant system
- Dust suction system
- Magnetic coolant separator
- Paper filter
- Power rapid for vertical
- Automatic down feed AD5 (NC FUNCTION)
- NC auto. dressing & compensation
- Back water splash guard (PSG-2550~70200 only)



**PSG**

MODEL	PSG-C1545M PSG-C2045M	PSG-C1545H/AH PSG-C2045H/AH	PSG-2550H PSG-2550AH
Working surface of table (mm)	150 x 450 mm (6" x 18") (for C1545)		250 x 500 mm (10" x 20")
Max. surface ground (mm)	200 x 450 mm (8" x 18") (for C2045)		
Max. distance center of spindle to table	450 mm (18")		500 mm (20")
Table speed	Manual	5~25 M/min.	
Table guideway	Ball rolling way	V & flat way	
Auto. cross feed increment approx.	Manual	Manual (for H) 0.1 mm x 12 mm (for AH)	
Rapid power cross feed approx. (mm/min.)	Manual	Manual (for H) 1100 (60 Hz) 900 (50 Hz) (for AH)	
Cross feed on hand wheel	1 rev 1 gra	5 mm (0.2") 0.02 mm (0.001")	
Rapid power head elevation approx. (Option)	60 Hz 50 Hz	550 mm/min. (13"/min.) (60Hz) 450 mm/min. (11"/min.) (50Hz)	
Vertical feed on hand wheel	1 rev 1 gra	2 mm (0.05") 0.01 mm (0.0002") (standard) / 0.005 mm (0.0001") (with AD5)	
Vertical feed with M.P.G.	1 rev 1 gra	-	
Auto. down feed (opt.)	0.001 mm~0.999 mm/Time (0.0001"~0.0999"/Time)		
Wheel speed	60 Hz / 50 Hz	3500 r.p.m. (60 Hz) / 2900 r.p.m. (50 Hz)	
Wheel dimension	180 x 13 x 31.75 mm (max. 200 x 20 x 31.75) (7" x 0.5" x 1.25") (max. 8" x 0.75" x 1.25")		
Spindle motor	2 HP		
Hydraulic pump motor	None	1 HP	
Auto. cross feed motor	None	25 W	1/5 HP
Rapid head elevation motor	1/5 HP (opt.)		
Coolant pump	1/8 HP (opt.)		
Sound pressure level	Below 78dB (A)		
Machine net weight	870 kg (1914 Lbs) 920 kg (2024 Lbs)	900 kg (1980 Lbs) 950 kg (2090 Lbs)	1350 kg (2970 Lbs)
Packing gross weight	970 kg (2134 Lbs) 1020 kg (2244 Lbs)	1100 kg (2424 Lbs) 1150 kg (2530 Lbs)	1550 kg (3410 Lbs)
Machine floor space	1900 x 1200 mm (1545 M) 1900 x 1300 mm (2045 M)	2100 x 1200 mm (1545 H/AH) 2100 x 1300 mm (2045 H/AH)	2340 x 1500 mm (89" x 55")
Packing dimensions (L x W x H)	1820 x 1280 x 1950 mm (72" x 51" x 77")	2120 x 1460 x 1950 mm (84" x 58" x 77")	2120 x 1460 x 2000 mm (84" x 58" x 79")

• The mentioned specifications & dimensions are subject to change without notice.

**M series**

3 axes, manual.

**H series**

Longitudinal (hydraulic) and cross feed/vertical axes are manual.

**AH series**

Auto. cross feed, longitudinal (hydraulic) and vertical axis is manual.

**PSG-D4080AH**

1. Table longitudinal travel by sensor & solenoid valve.
2. Continuous lubrication is a standard accessory.

**PSG-DL3060 / PSG-DS3060AH**

1. Table longitudinal travel by sensor & solenoid valve.
2. Continuous lubrication is a standard accessory.
3. Auto crossing stroke adjustment.
3. Back water splash shield.

PSG-CS3060AH PSG-CL3060AH	PSG-DS3060AH PSG-DL3060AH	PSG-D4080AH	PSG-C50100AHR PSG-C60100AHR PSG-C70100AHR	PSG-C50150AHR PSG-C60150AHR PSG-C70150AHR	PSG-C50200AHR PSG-C60200AHR PSG-C70200AHR
300 x 600 (12" x 24")		400 x 800 (16" x 32")	500 x 1000 (20" x 40") 600 x 1000 (24" x 40") 700 x 1000 (28" x 40")	500 x 1500 (20" x 60") 600 x 1500 (24" x 60") 700 x 1500 (28" x 60")	500 x 2000 (20" x 79") 600 x 2000 (24" x 79") 700 x 2000 (28" x 79")
500 mm (20")		550 mm (22")	600 mm (24")		
5~25 M/min. (200"~1000"/min.)					
V & flat way					
0.5 mm~20 mm (0.02"~0.8")					
1100 mm/min. (44"/min.) (60 Hz) 900 mm/min. (36"/min.) (50 Hz)					
5 mm (0.2") 0.02 mm (0.001")					
550 mm/min. (13"/min.) (60 Hz) 450 mm/min. (11"/min.) (50 Hz)			300 mm/min. (10"/min.)		
2 mm (0.05") 0.01 mm (0.0002")			-		
-			(x1) 0.1 mm (0.01") (x1) 0.001 mm (0.0001")	(x5) 0.5 mm (0.05") (x5) 0.005 mm (0.0005")	(x10) 1 mm (0.1") (x10) 0.01 mm (0.001")
0.001 mm~0.999 mm/Time (0.0001"~0.0999"/Time) (opt.)					
S: 3500 r.p.m. (60 Hz) / 2900 r.p.m. (50 Hz) L : 1750 r.p.m. (60Hz) / 1450 R.P.M. (50Hz)			1750 r.p.m. (60 Hz) / 1450 r.p.m. (50 Hz)		
S: 180 x 13 x 31.75 mm (7" x 0.5" x 1.25") L: 355 x 38 x 127 mm (14" x 1.5" x 5")		405 x 50 x 127 mm (16" x 2" x 5")	405 x 50 x 127 mm (16" x 2" x 5")		
2 HP (S type) / 5 HP (L type)		5 HP	10 HP / 15 HP (opt.)		
1 HP		2 HP	3 HP	5 HP	
			1/5 HP		
1/5 HP (opt.)			1 kw AC servo motor		
1/8 HP (opt.)			1/4 HP		
Below 78dB (A)					
1700 kg (3740 Lbs)	3250 kg (7150 Lbs)	6000 / 6300 / 6600 kg (13200 / 14520 / 15000 Lbs)	7200 / 7500 / 7800 kg (15840 / 16500 / 17160 Lbs)	8400 / 8700 / 9000 kg (18480 / 19140 / 19800 Lbs)	
1950 kg (4290 Lbs)	3500 kg (7700 Lbs)	6800 / 7100 / 7400 kg (15000 / 15620 / 16280 Lbs)	8100 / 8400 / 8700 kg (17820 / 18480 / 19140 Lbs)	9400 / 9700 / 10000 kg (20680 / 21340 / 22000 Lbs)	
2650 x 1550 mm (104" x 61")	3450 x 2050 mm (118" x 79")	4800 x 2400 4800 x 2500 4800 x 2600	4850 x 2400 4850 x 2500 4850 x 2600	6000 x 2400 6000 x 2500 6000 x 2600	
2280 x 1790 x 210 mm (90" x 71" x 83")	2760 x 2280 x 2250 mm (109" x 90" x 85")	3760 x 2300 x 2280 mm (148" x 90" x 90")	3910 x 2300 x 2280 mm (154" x 90" x 90")	4770 x 2300 x 2280 mm (188" x 90" x 90")	

• With AD5 auto. down feed vertical feed on hand wheel is 2 mm (0.05")/rev. 0.005 mm (0.0001")/gra.

**AHR series**

Auto. cross feed, longitudinal (hydraulic) and vertical axis travel is by AC servomotor.

**PSG-C50100AHR**

Equipped with auto. cross feed, longitudinal (hydraulic), vertical axis driven by AC servo motor and operated by MPG. The AD5, can be added to become 3-axes fully automated thereby making operation more convenient.