

PRECISE, PERFECT AND EXCELLENT

HIGH PRECISION SURFACE GRINDERS

SADDLE TYPE
COLUMN TYPE



Deliver Uncompromising
Fine Results. *Since 1988*



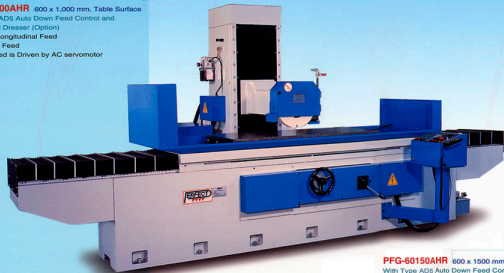


PERFECT Surface Grinders Perfectly Built to Optimize Grinding Accuracy and Efficiency



PERFECT gives you the most flexible selection of surface grinders. You can choose from manual models to servomotor driven models. Each machine is quality built and features high precision and maximum stability.

PFG-60100AHR 600 x 1,000 mm. Table Surface
With Type AD5 Auto Down Feed Control and
NC Parallel Dresser (Option)
Hydraulic Longitudinal Feed
Auto Cross Feed
Vertical Feed is Driven by AC servomotor



PFG-60150AHR 600 x 1500 mm. Table surface
With Type AD5 Auto Down Feed Control (Option)
Hydraulic Longitudinal Feed
Auto Cross Feed
Vertical Feed is Driven by AC servomotor



PFG-1545H 150 x 450 mm. Table surface
With Micro Cross/Vertical Feed (Option)
Hydraulic Longitudinal Feed
Cross and Vertical Feed Manually



PFG-2550AH 250 x 250 mm. Table Surface
Hydraulic Longitudinal Feed
Auto Cross Feed
Manual Vertical Feed



PFG-CL 3060AH 300 x 600 mm. Table Surface
Hydraulic Longitudinal Feed
Auto Cross Feed
Manual Vertical Feed



PFG-DL 3060AH 300 x 600 mm. Table Surface
With Type AD5 Auto Down Feed Control (Option)
Hydraulic Longitudinal Feed
Auto Cross Feed
Manual Vertical Feed



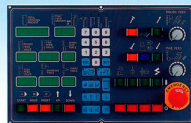
PFG-0408DAH 400 x 800 mm. Table Surface
Hydraulic Longitudinal Feed
Auto Cross Feed
Manual Vertical Feed
Table Longitudinal Travel is Controlled by Sensor and Solenoid Valve
Continuous Lubrication.

Precision, Quality and Dependability.

PERFECT Quality Features Assure Precision Grinding Performance - Year after Year.

1. Optimized Structure - The major parts of PERFECT grinders are manufactured from high quality cast iron combined with an outstanding structural design. Major parts are stress relieved to ensure maximum rigidity, stability and machining accuracy.
2. Guideway Steel Balls - The M series employs "AA" grade steel balls on guide ways for easier operation and saving labor.
3. Turcite-B on Slideways - The X-, Z-axis slideways on the H Series are coated with Turcite-B for stable movement and long term accuracy.
4. Precision Spindle Design - The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 μ m. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.
5. Auto Downfeed Control - Except for the M series, all models are available to equip with an auto downfeed control (AD5) for greatly increasing operational convenience.
6. Double Wall Construction - The structural parts, such as the column and table, etc., for models above PFG-50 series, feature double wall construction, assuring maximum rigidity and stability especially when performing heavy grinding.

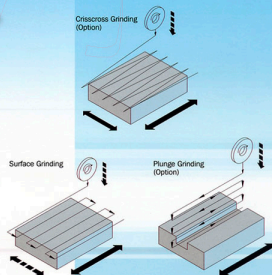
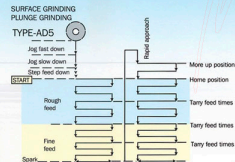
The Quality-proven Surface Grinders Designed with Accuracy and Productivity in Mind.



COMPUTERIZED AUTOMATIC DOWNFEED (Optional)
Type AD5 Automatic Downfeed Control Panel (Optional)



NC DRESSING CONTROL PANEL (Option)
NC Wheel Dressing & Compensating system Should be Built with AD5 in AH model (NC Control with 3 Speed: Fast, Slow, Jog)



Specifications:

Model	PFQ-1545M PFQ-2045M	PFQ-1545H/AH PFQ-2045H/AH	PFQ-2550H PFQ-2550AH
Table size (mm)	150 x 450 (6' x 18") (for 1545) 200 x 450 (8' x 18") (for 2045)		250 x 500 (10' x 20')
Max. grinding surface (mm)	150 x 450 (6' x 18") (for 1545) 200 x 450 (8' x 18") (for 2045)		250 x 500 (10' x 20')
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) 0.1mm ~ 12mm
Rapid power cross feed approx. (mm/min)	Manual		Manual (for H) 1100(60Hz) 900(50Hz)
Cross feed on hand wheel 1 rev / 1 ga		5 mm (0.2") 0.02 mm (0.001")	
Rapid power head elevation approx. (Option) 60Hz/50Hz		550 mm/min (13"/min) (60Hz) 450 mm/min (11"/min) (50Hz)	
Vertical feed on hand wheel 1 rev / 1 ga		2 mm (0.05") 0.01 mm (0.0002") (stand)/ 0.005 mm (0.0001") (with AD5)	
Vertical feed with M.R.G. 1 rev / 1 ga			
Auto. down feed (Option)		0.001 mm ~ 0.999 mm/Time (0.0001" ~ 0.0999"/Time)	
Wheel speed 60Hz/50Hz		3500 R.P.M. (60Hz) / 2900 R.P.M. (50Hz)	
Wheel dimension	180 x 13 x 31.75 mm (max. 7" x 0.5" x 1.25")	200 x 20 x 31.75 (max. 8" x 0.75" x 1.25")	
Spindle motor		2 HP	
Hydraulic pump motor	None	1 HP	1 HP
Auto. cross feed motor	None	25 W	1/5 HP
Rapid head elevation motor		1/5 HP (Optional)	
Machine net weight Kgs	870 (1914 Lbs) 920 (2024 Lbs)	900 (1980 Lbs) 950 (2090 Lbs)	1350 (2970 Lbs)
Packing gross weight Kgs	970 (2134 Lbs) 1020 (2244 Lbs)	1100 (2424 Lbs) 1150 (2530 Lbs)	1550 (3410 Lbs)
Machine floor space mm	1600 x 1100 (63" x 43")	2080 x 1200 (82" x 47")	2450 x 1450 (96" x 57")
Packing dimensions (L x W x H) cm	182 x 128 x 195 (72" x 51" x 77")	212 x 146 x 195 (84" x 58" x 77")	212 x 146 x 200 (84" x 58" x 79")

M: M Series are 3 axes by manual.

H: H Series are longitudinal by hydraulic and cross feed/vertical axes are manual.

AH: AH Series are auto. cross feed, longitudinal by hydraulic and vertical axis is manual.

AHR: AHR Series are auto. cross feed, longitudinal by hydraulic and vertical axis travel is by AC servo motor.

* Above the 50100AHR Series are equipped with auto. cross feed, longitudinal by hydraulic, vertical axis driven by AC servomotor and operated by MPG. The AD5, (designed by PERFECT) can be added to become 3 axes fully automated thereby making operation more convenient.

* The manufacturer reserves the right to modify the design and mechanism specifications, etc. without prior notice.

PFQ-D4080AH

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

PFQ-DL3060AH

PFQ-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.

Specifications:

PFQ-CS3060AH PFQ-CL3060AH	PFQ-DS3060AH PFQ-DL3060AH	PFQ-D4080AH	50100AHR PFQ-50100AHR 70100AHR	50150AHR PFQ-50150AHR 70150AHR	50200AHR PFQ-50200AHR 70200AHR
300 x 600(12' x 24')	300 x 600(12' x 24')	400 x 800(16' x 32')	500 x 1020(20' x 40') 600 x 1020(24' x 40') 700 x 1020(28' x 40')	500 x 1520(20' x 60') 600 x 1520(24' x 60') 700 x 1520(28' x 60')	500 x 2020(20' x 80') 600 x 2020(24' x 80') 700 x 2020(28' x 80')
300 x 600(12' x 24')	300 x 600(12' x 24')	400 x 800(16' x 32')	500 x 1020(20' x 40') 600 x 1020(24' x 40') 700 x 1020(28' x 40')	500 x 1520(20' x 60') 600 x 1520(24' x 60') 700 x 1520(28' x 60')	500 x 2020(20' x 80') 600 x 2020(24' x 80') 700 x 2020(28' x 80')
500 mm (20") [(Option: 600 mm (24"))]		550 mm (22")	600 mm (24") [(Option-800 mm (32') & 1000 mm (40'))]		
		5 ~ 25 M/min (200" ~ 1000"/min)			
			V & Flat way 0.1 mm ~ 20 mm (0.004" ~ 0.8")		
			1100 mm/min (44"/min) (60Hz) 900 mm/min (35"/min) (50Hz)		
		5 mm (0.2") 0.02 mm (0.001")			
	550 mm/min (13"/min) (60Hz) 450 mm/min (11"/min) (50Hz)			300 mm/min (10"/min)	
		2 mm (0.05") 0.01 mm (0.0002")			
			(x1) 0.1mm (0.01") (x5) 0.5mm (0.05") (x10) 1mm (0.1") (x1) 0.001mm (0.0001") (x5) 0.005mm (0.0005") (x10) 0.01mm (0.001")		
		0.001 mm ~ 0.999 mm/Time (0.0001" ~ 0.0999"/Time) (Option)			
	S:3500 R.P.M. (60Hz) / 2900 R.P.M. (50Hz) L:1750 R.P.M. (60Hz) / 1450 R.P.M. (50Hz)		1750 R.P.M. (60Hz) / 1450 R.P.M. (50Hz)		
	180 x 13 x 31.75 mm (max. 7" x 0.5" x 1.25")	406 x 50 x 127 mm (16" x 2" x 5")	406 x 50 x 127 mm (16" x 2" x 5")		
	2 HP (S type) / 5 HP (L type)	5 HP	5 HP	10 HP/15 HP (Option)	
	1 HP	2 HP	3 HP	5 HP	
	1/5 HP (Option)		1/5 HP		1kW AC servo motor
	1700 (3740 Lbs)	3250 (7150 Lbs)	6000 (13200 Lbs) 6300 (13890 Lbs) 6600 (14520 Lbs)	7200 (15840 Lbs) 7500 (16500 Lbs) 7800 (17160 Lbs)	8400 (18480 Lbs) 8700 (19140 Lbs) 9000 (19800 Lbs)
	1950 (4290 Lbs)	3500 (7700 Lbs)	6800 (15000 Lbs) 7100 (15620 Lbs) 7400 (16280 Lbs)	8100 (17820 Lbs) 8400 (18480 Lbs) 8700 (19140 Lbs)	9400 (20680 Lbs) 9700 (21340 Lbs) 10000 (22000 Lbs)
	2600 x 1800 (102" x 68")	3450 x 2000 (136" x 78")	4600 x 2300 x 2200 (181" x 91" x 87")	5150 x 2300 x 2200 (203" x 91" x 87")	6150 x 2300 x 2200 (242" x 91" x 87")
	228 x 179 x 210 (90" x 71" x 83")	276 x 228 x 215 (109" x 90" x 85")	376 x 228 x 228 (148" x 90" x 90")	391 x 228 x 228 (154" x 90" x 90")	477 x 228 x 228 (188" x 90" x 90")

* With AD5 AUTO. DOWN FEED, Vertical feed on hand wheel is 2mm(0.05")/rev. 0.005mm(0.0001")/ga.

STANDARD ACCESSORIES

1. Grinding Wheel 1
2. Wheel Flange 1
3. Flange Extractor 1
4. Wheel Balancing Arbor 1
5. Wheel Balancing Base 1
6. Wheel Dresser with Diamond 1
7. Leveling Scraper and Plates 1
8. Tool Box and Tools 1
9. Working Lamp (PFQ-50,60,70 not included) 1
10. Coolant System (PFQ-50,60,70 only) 1



OPTIONAL ACCESSORIES

1. Cross/Vertical Micro Feed
2. Wheel Flange
3. ElectroPermanent Magnetic Chuck
4. Demagnetizer (110V/220V) for workpiece
5. Automatic Demagnetizer for Magnetic Chuck
6. Parallel Dresser
7. NC Auto Parallel Dressing & Compensating Device
8. Coolant System (1/8 HP)
9. (Dust) Suction System (1/2 HP)
10. (Dust) Suction with Coolant System
11. Magnetic Separator with Coolant
12. Automatic paper Strip Filter with Coolant
13. Automatic Paper Strip Filter and Magnetic Separator with Coolant System
14. Rapid UP/Down System
15. Automatic Down Feed system
16. Automatic Crossing Stroke Adjustment by Control Panel Switch
17. Back Water Splash Shield
18. Semi enclosed Splash Shield
19. Enclosed Splash Shield
20. Auto. Balancing Device
21. Angles Forming
22. Radius Forming
23. Tool Makers Vise
24. Sine Bar
25. Punch Former



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