



PFG-100200AHD 1000x2000mm Table surface
 +NC Auto parallel dressing and compensating system (Option)
 • Stepless variable proportional valve hydraulic system
 Auto cross feed
 Vertical feed is driven by AC servo motor
 NC Auto down feed system



PFG-160300AHD 1600x3000mm Table surface
 +Vertical spindle head (Option)
 • Stepless variable proportional valve hydraulic system
 Cross & Vertical feed is driven by AC servo motor
 NC Auto down feed system



PFG-CL3060AH 300x600mm Table surface
 +NC Auto down feed system & Parallel dresser (Option)
 • Hydraulic longitudinal feed
 Auto cross feed
 Manual vertical feed



PFG-D4080AH 400x800mm Table surface
 +NC Auto down feed system, Parallel dresser,
 Back water splash shield (Option)
 • Hydraulic longitudinal feed
 Auto cross feed
 Manual vertical feed
 Table longitudinal travel is controlled by sensor and solenoid valve
 Continuous lubrication



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PFG-1545M 150x450mm Table surface
 + Digital readout (Option)
 • 3 axes manual



PFG-1545H 150x450mm Table surface
 + Micro feed for cross & vertical feed (Option)
 • Hydraulic longitudinal feed
 Manual cross & vertical feed



PFG-2550AH 250x500mm Table surface
 + Max. distance from center of spindle to table: 600 (Option)
 • Hydraulic longitudinal feed
 Auto cross feed
 Manual vertical feed



PFG-60100AHR 600x1000mm Table surface
 +NC Auto down feed system & NC Auto parallel dressing and compensating system (Option)
 • Hydraulic longitudinal feed
 Auto cross feed
 Vertical feed is driven by AC servo motor
 Table longitudinal travel is controlled by sensor and solenoid valve



PFG-60150AHR 600x1500mm Table surface
 +NC Auto down feed system (Option)
 • Hydraulic longitudinal feed
 Auto cross feed
 Vertical feed is driven by AC servo motor
 Table longitudinal travel is controlled by sensor and solenoid and solenoid valve

SURFACE GRINDERS

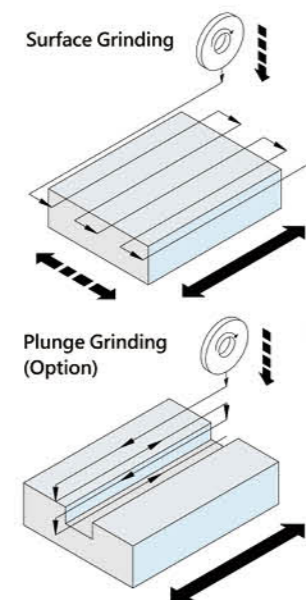
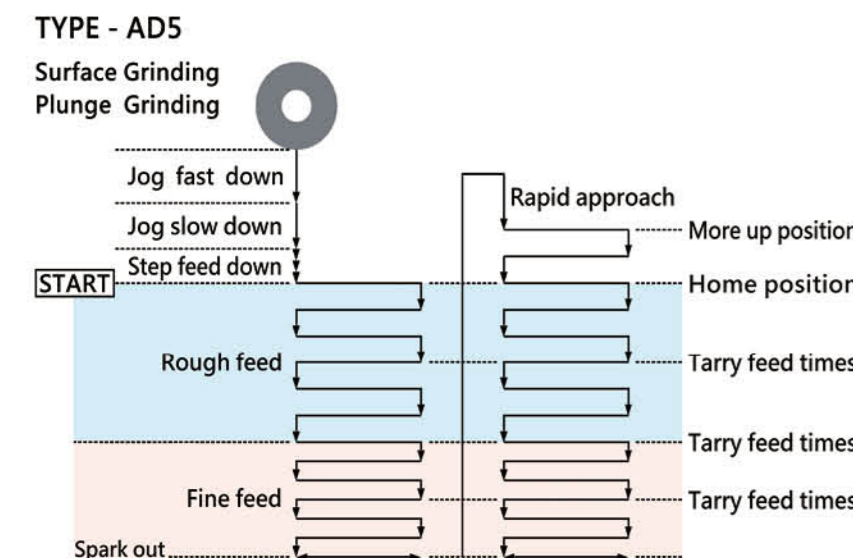
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FEATURE

- Optimized Structure** - The major parts 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.
- Precision Spindle Design** - The spindle runs in a class P4 high precision angular contact bearing, assuring run-out accuracy in 2 μm. The cartridge-type spindle is completely sealed and lubricated for long working lifetime, providing high accuracy grinding and a long service life.
- Ball bearing slideway** - The saddle type M series employs "AA" grade steel balls on longitudinal guide ways for easier operation and saving labor.
- Turcite-B on Slideways** - The X, Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.
- Heavy Duty Linear Guide Ways** - The beam surface of double column type is equipped with two heavy duty linear guide ways with great span for extra smooth movement and high rigidity.
- Precision Feed on Vertical-axis** - The vertical axis of cantilever type and double column type, are equipped with high precision linear guide ways combined with high precision ball screw transmission, assuring outstanding feed accuracy and maximum stability.
- M.P.G. handwheel** - Except for the saddle type, the vertical feed are controlled by an M.P.G. handwheel instead of a conventional handwheel. Feed is driven by an AC servomotor for effortless operation and high accuracy.
- Crisscross grinding function (option)** - Crisscross feed speed is infinitely variable, a very wide range of cross feed can be obtained. This grinding method is invaluable for grinding thin workpiece and can increase the efficiency significantly. (M & H series can't be installed)(This function is a standard function of the cantilever and double column series)
- NC auto down feed system (AD5 type) (option)** - Except for the M & H series, the AH, and AHR models are available to equip with an optional NC auto down feed system (AD5 type) to become 3 axes fully automated for greatly increasing operational convenience. (This function is a standard function of the cantilever and double column series)
- NC auto parallel dressing & compensating system (option)** - The optional NC auto parallel dressing & compensating system is available to equip with an optional NC auto down feed system (AD5 type), greatly increasing the grinding efficiency.
- Variable Table Speed** - The variable feed speed of the cantilever & double column type table is controlled by a proportional hydraulic valve, allowing for feed speed adjustment according to the workpiece type for increased convenience of operation.
- Vertical Wheel Head (option)** - Upon request, the double column type is available to equip with a vertical wheel head. It is suitable for grinding box slideways and dovetailed slideways.



SPECIFICATIONS	SADDLE TYPE					COLUMN TYPE			CANTILEVER TYPE				DOUBLE COLUMN TYPE																						
	PFG-1545M PFG-2045M	PFG-1545H/AH PFG-2045H/AH	PFG-2550H PFG-2550AH	PFG-CS3060AH PFG-DS3060AH	PFG-CL3060AH PFG-DL3060AH	PFG-D4080AH	PFG-50100AHR PFG-60100AHR PFG-70100AHR	PFG-50150AHR PFG-60150AHR PFG-70150AHR	PFG-50200AHR PFG-60200AHR PFG-70200AHR	PFG-80150AHD PFG-100150AHD	PFG-80200AHD PFG-100200AHD	PFG-80300AHD PFG-100300AHD	PFG-80400AHD PFG-100400AHD	PFG-120200AHD PFG-160200AHD	PFG-120300AHD PFG-160300AHD	PFG-120400AHD PFG-160400AHD	PFG-120500AHD PFG-160500AHD	PFG-120600AHD PFG-160600AHD																	
Grinding surface of table	150 X 450 200 X 450		250 X 500	300 X 600		400 X 800	500 X 1000 600 X 1000 700 X 1000			800 X 1500 1000 X 1500	800 X 2000 1000 X 2000	800 X 3000 1000 X 3000	800 X 4000 1000 X 4000	1200 X 2000 1600 X 2000	1200 X 3000 1600 X 3000	1200 X 4000 1600 X 4000	1200 X 5000 1600 X 5000	1200 X 6000 1600 X 6000																	
Max. grinding surface	150 X 450 200 X 450		250 X 500	300 X 600		400 X 800	500 X 1000 600 X 1000 700 X 1000			800 X 1500 1000 X 1500	800 X 2000 1000 X 2000	800 X 3000 1000 X 3000	800 X 4000 1000 X 4000	1200 X 2000 1600 X 2000	1200 X 3000 1600 X 3000	1200 X 4000 1600 X 4000	1200 X 5000 1600 X 5000	1200 X 6000 1600 X 6000																	
Max. distance center of spindle to table	450		500 [Option: 600]	500 [Option: 600]		550 [Option: 650]	600 [Option: 800 & 1000]			800 [Option: 1000]	700 [Option: 900]	1000 [Option: 1200]	900 [Option: 1100]																						
Total Max. safety table load	114 120	144 150	250	300		400	800 1000 1000	1200 1400 1400	1500 1700 1700	2000 2400	2650 3200	3950 4800	5000 5500	5200 6000	6340 7300	7600 9000	8700 10700	9880 12400																	
Table speed approx.	manual		5-25			5-25			5-25			3-25			3-25																				
Table guideway	Ball bearing slideway		V & Flat way			V & Flat way			V & Flat way			V & V way			V & V way																				
Auto. Cross feed increment approx.	manual		manual (for H), 0.1-12 (for AH)			0.5-20			0.5-20			0.1-15			0.1-35																				
Rapid power cross feed	manual		manual (for H), 1100 [60HZ] / 900 [50HZ] (for AH)			1100 [60HZ] / 900 [50HZ]			1100 [60HZ] / 900 [50HZ]			1500			3000																				
Cross feed on hand wheel	5/rev. ; 0.02/gra.		5/rev. ; 0.02/gra.			5/rev. ; 0.02/gra.			5/rev. ; 0.02/gra.			5/rev. ; 0.02/gra.			(X 1) 0.1 (X 1) 0.001																				
Rapid power head elevation	550 [60HZ] / 450 [50HZ] (Power rapid up/down system) [Option] 350 (NC Auto down feed system) [Option]		550 [60HZ] / 450 [50HZ] (Power rapid up/down system) [Option] 350 (NC Auto down feed system) [Option]			300			225			300																							
Vertical feed on hand wheel	2/rev. ; 0.01/gra.		2/rev. ; 0.01/gra.			(X 1) 0.1 (X 1) 0.001			(X 5) 0.5 (X 5) 0.005	(X 10) 1 (X 10) 0.01	(X 1) 0.1 (X 1) 0.001	(X 5) 0.5 (X 5) 0.005	(X 10) 1 (X 10) 0.01	(X 1) 0.1 (X 1) 0.001	(X 5) 0.5 (X 5) 0.005	(X 10) 1 (X 10) 0.01	(X 10) 1 (X 10) 0.01	(X 10) 1 (X 10) 0.01																	
Auto down feed	0.001-0.999 [2/rev. ; 0.005/gra.] [Option]		0.001-0.999 [2/rev. ; 0.005/gra.] [Option]			0.001-0.999 [Option]			0.001-0.999			0.001-0.999																							
Wheel speed	3500 [60HZ] 2900 [50HZ]		3500 [60HZ] 2900 [50HZ]		1750 [60HZ] 1450 [50HZ]	1750 [60HZ] 1450 [50HZ]			1750 [60HZ] 1450 [50HZ]			1100																							
Wheel dimension	180 X 13 X 31.75		180 X 13 X 31.75		355 X 38 X 127	405 X 50 X 127			405 X 50 X 127			405 X 50 X 203			508 X 76 X 203																				
Spindle motor	2		2		5	5			10 [Option: 15]			20 [Option: 30]																							
Hydraulic pump motor	None		1		1	2			3			5			7.5			10			15			15			20			25					
Auto Cross feed motor	None		25W (for AH)		1/5	1/5			1/5			1/5			1/5			1/5			1/5			1/5			1/5			1/5			1/5		
Rapid head elevation motor	None		1/5 [Option]		1/5	1/5 [Option]			1KW AC servo motor			1KW AC servo motor			1KW AC servo motor			1KW AC servo motor			1KW AC servo motor			1KW AC servo motor			1KW AC servo motor			1KW AC servo motor					
Coolant pump [Option]	None		1/8		1/8	1/8			1/4			1/2			1/2			1/2			1/2			1/2			1/2			1/2					
Machine net weight	870 920	900 950	1350	1700		3250	6000 6300 6600	7200 7500 7800	8400 8700 9000	12800 13800	14300 15300	17300 18800	20300 21300	20000 23000	24000 28000	28500 33000	33000 38000	37500 43000																	
Packing gross weight	970 1020	1100 1150	1550	1950		3500	6800 7100 7400	8100 8400 8700	9400 9700 10000	13800 14800	15500 16500	17800 19800	21800 22800	22000 25500	26300 30800	31000 36000	36000 41500	41500 48000																	
Floor space (L x W x H)	1900 X 1200 X 1700 1900 X 1300 X 1700		2100 X 1200 X 1700 2100 X 1300 X 1700		2250 X 1400 X 1800	2650 X 1550 X 1800		3450 X 2050 X 1900	4600 X 2300 X 2040 4600 X 2450 X 2040 4600 X 2550 X 2040			4800 X 2300 X 2040 4800 X 2450 X 2040 4800 X 2550 X 2040	6000 X 2300 X 2040 6000 X 2450 X 2040 6000 X 2550 X 2040	5160 X 2400 X 2555 5160 X 2660 X 2555	6260 X 2400 X 2555 6260 X 2660 X 2555	8460 X 2400 X 2555 8460 X 2660 X 2555	10660 X 2400 X 2555 10660 X 2660 X 2555	6600 x 3700 x 4000 6600 x 4100 x 4000	8800 x 3700 x 4000 8800 x 4100 x 4000	11000 x 3700 x 4000 11000 x 4100 x 4000	13200 x 3700 x 4000 13200 x 4100 x 4000	15400 x 3700 x 4000 15400 x 4100 x 4000													
Packing dimension (L x W x H)	182 X 128 X 195		212 X 146 X 195		212 X 146 X 200	228 X 179 X 210		276 X 228 X 225	* 20' General Container: Max. distance center of spindle to table: 600mm * 40' High Container: Max. distance center of spindle to table: 800mm * 20' Flat rack: Max. distance center of spindle to table: 1000mm			167 X 167 X 206 (NW: 630kgs / GW: 730kgs) * Shipping by 40' Flat rack			40' HQ X 1			40' HQ X 1 + 20' X 1			40' HQ X 2			40' HQ X 2			40' HQ X 1 + 40' FR X 1								

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

- 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, vertical axis travel is by AC servo motor, power Rapid up/down.
- AHD:** AHD series are Auto Cross feed, longitudinal by Hydraulic, auto Down feed.

- PFG-D4080AH (16")**
 - 1. Table longitudinal travel by Sensor & solenoid valve.
 - 2. Continuous Lubrication is standard accessory.

- PFG-DS3060AH (7")**
- PFG-DL3060AH (14")**
 - 1. Table longitudinal travel by Sensor & solenoid valve.
 - 2. Continuous Lubrication is standard accessory.
 - 3. Automatic crossing stroke adjustment.
 - 4. Back water splash shield.

OPTIONAL ACCESSORIES

- Electro/Permanent magnetic chuck
- Automatic demagnetizer for Electro magnetic chuck
- Micro feed for Cross/vertical feed (0.001mm/gra.)(For saddle type only)
- Power Rapid up/down system
- NC Auto down feed system (AD5 type)
- Parallel dresser (Manual)
- NC auto parallel dressing & compensating system
- Coolant system
- (Dust) suction system (1/2HP)
- (Dust) suction with coolant system
- Magnetic separator with coolant system

- Auto paper strip filter with coolant system
- Auto paper strip filter and magnetic separator with coolant system
- Automatic crossing stroke adjustment by control panel switch
- Back water splash shield (Excluded 1545/2045 series)
- Enclosed splash shield (Excluded 1545/2045 series)
- Spindle motor inverter
- Wheel flange
- Tool makers vise
- Auto balancing device
- Digital readout unit
- Crisscross grinding function



STANDARD ACCESSORIES

- Grinding wheel
- Wheel flange
- Flange extractor
- Wheel balancing arbor
- Wheel balancing base
- Wheel dresser with diamond
- Leveling screw and plates
- Tool box and tools
- Working lamp (Saddle type only)
- Parallel dresser (Manual)(Cantilever and Double column type only)
- NC Automatic down feed system (Cantilever and Double column type only)