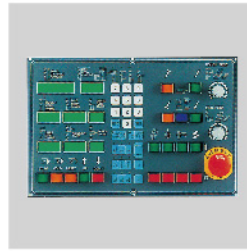


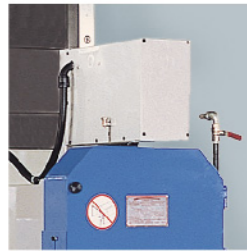
### Crisscross Grinding Function (Option)

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. (H series can't be installed) (This function is a standard function of the cantilever and double column series)



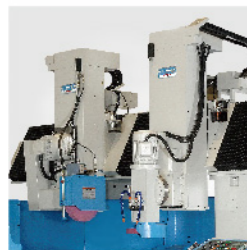
### NC Auto Down Feed System (AD5 type) (Option)

Except for 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.

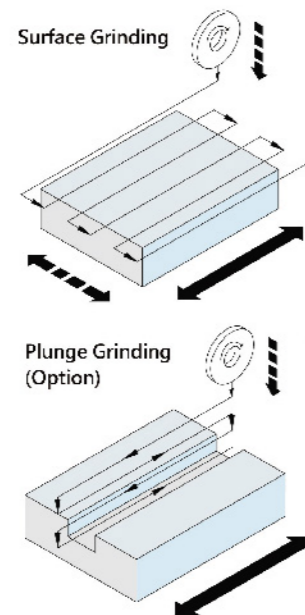
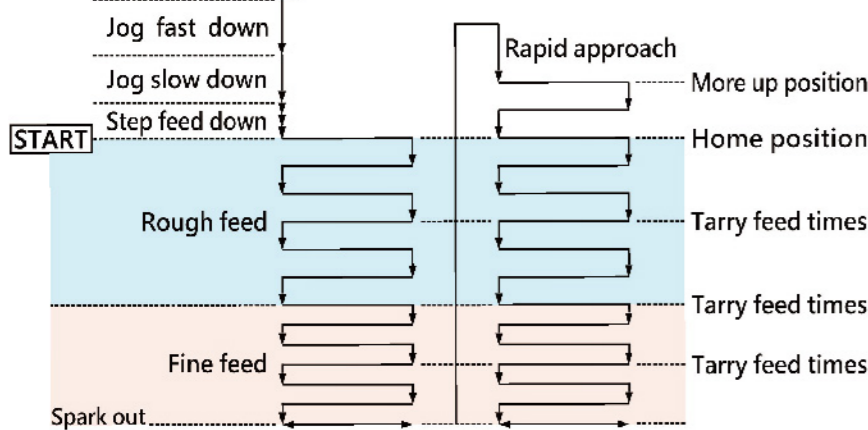


### Vertical Wheel Head (Option)

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.

### TYPE - AD5

Surface Grinding  
Plunge Grinding



# SURFACE GRINDERS

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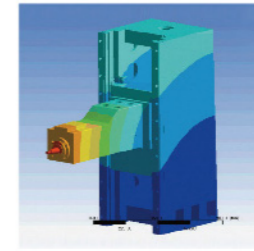
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# SURFACE GRINDERS



### 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.



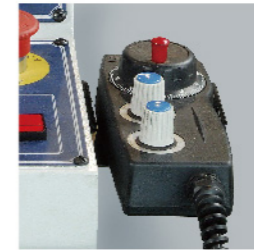
### Precision Spindle Design

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.



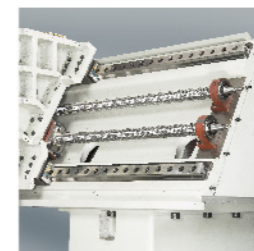
### Turcite-B on Slideways

The X, Z axes slideways are coated with Turcite-B for stable movement and long term accuracy.



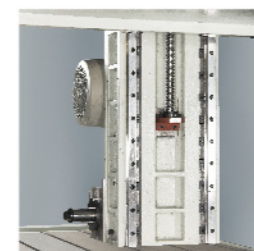
### M.P.G. Handwheel

Except for the saddle type, the vertical feed 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.



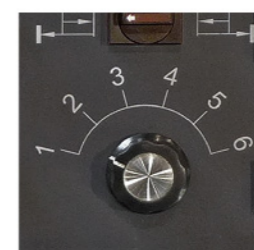
### Heavy Duty Linear Guide Ways

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.



### 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.

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SPECIFICATIONS			SADDLE TYPE				COLUMN TYPE			CANTILEVER TYPE				DOUBLE COLUMN TYPE							
			PGF-1545H/AH PGF-2045H/AH	PGF-2550H PGF-2550AH	PGF-CL3060AH PGF-DL3060AH	PGF-D4080AH	PGF-50100AHR PGF-60100AHR PGF-70100AHR	PGF-50150AHR PGF-60150AHR PGF-70150AHR	PGF-50200AHR PGF-60200AHR PGF-70200AHR	PGF-80150AHD PGF-100150AHD	PGF-80200AHD PGF-100200AHD	PGF-80300AHD PGF-100300AHD	PGF-80400AHD PGF-100400AHD	PGF-120200AHD PGF-160200AHD	PGF-120300AHD PGF-160300AHD	PGF-120400AHD PGF-160400AHD	PGF-120500AHD PGF-160500AHD	PGF-120600AHD PGF-160600AHD			
Travel	Grinding surface of table	mm	150 X 450 200 X 450	250 X 500	300 X 600	400 X 800	500 X 1000 600 X 1000 700 X 1000	500 X 1500 600 X 1500 700 X 1500	500 X 2000 600 X 2000 700 X 2000	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	mm	150 X 450 200 X 450	250 X 500	300 X 600	400 X 800	500 X 1000 600 X 1000 700 X 1000	500 X 1500 600 X 1500 700 X 1500	500 X 2000 600 X 2000 700 X 2000	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	mm	450	500 [Option: 600]	500 [Option: 600]	550 [Option: 650]	600 [Option: 800 & 1000]			800 [Option: 1000]				1000 [Option: 1200]		900 [Option: 1100]					
Feeding	Table speed approx.	M/min	5-25		5-25		5-25			3-25				3-25							
	Table guideway		V & Flat way		V & Flat way		V & Flat way			V & V way				V & V way							
	Auto. Cross feed increment approx.	mm	manual (for H), 0.1-12 (for AH)		0.5-20		0.5-20			0.1-15				0.1-35							
	Rapid power cross feed	mm/min	manual (for H), 1100 [60HZ] / 900 [50HZ] (for AH)		1100 [60HZ] / 900 [50HZ]		1100 [60HZ] / 900 [50HZ]			1500				3000							
	Cross feed on hand wheel	mm	5/rev. ; 0.02/gra.		5/rev. ; 0.02/gra.		5/rev. ; 0.02/gra.			5/rev. ; 0.02/gra.				(x1) 0.1 (x1) 0.001		(x5) 0.5 (x5) 0.005		(x10) 1 (x10) 0.01			
	Rapid power head elevation	mm/min	550 [60HZ] / 450 [50HZ] [Power rapid up/down system] [Option] 300 (NC Auto down feed system) [Option]		550 [60HZ] / 450 [50HZ] [Power rapid up/down system] [Option] 300 (NC Auto down feed system) [Option]		300			225				300							
	Vertical feed on hand wheel	mm	2/rev. ; 0.01/gra.		2/rev. ; 0.01/gra.		2/rev. ; 0.01/gra.			2/rev. ; 0.01/gra.				(x1) 0.1 (x1) 0.001		(x5) 0.5 (x5) 0.005		(x10) 1 (x10) 0.01			
Motor	Auto down feed	mm/time	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		0.001-0.999					
	Spindle motor	HP	2		5		10 [Option: 15]			10 [Option: 15]				20 [Option: 30]							
	Hydraulic pump motor	HP	1		1		3			5		7.5		10		15		20		25	
	Auto Cross feed motor	HP	30W (for AH)		1/5		1/5			1/5				1KW AC servo motor							
	Rapid head elevation motor	HP	1/5 [Option]		1/5 [Option]		1KW AC servo motor			1KW AC servo motor				1KW AC servo motor							
Wheel	Coolant pump [Option]	HP	1/8		1/8		1/4			1/2				1/2							
	Wheel speed	rpm	3500 [60HZ] / 2900 [50HZ]		1750 [60HZ] / 1450 [50HZ]		1750 [60HZ] / 1450 [50HZ]			1750 [60HZ] / 1450 [50HZ]				1100							
Weight	Wheel dimension	mm	180 X 13 X 31.75		355 X 38 X 127		405 X 50 X 127			405 X 50 X 127 [Max. 405 X 75 X 127]				508 X 76 X 203							
	Machine net weight	Kg	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			
Dimension	Packing gross weight	Kg	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)	mm	2080 x 1200 x 1700	2340 x 1500 x 1800	2630 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	6600x3700x4000 6600x4100x4000	8800x3700x4000 8800x4100x4000	11000x3700x4000 11000x4100x4000	13200x3700x4000 13200x4100x4000	15400x3700x4000 15400x4100x4000			
Dimension	Packing dimension (L X W X H)	cm	230 x 146 x 196	230 x 158 x 220	230 x 179 x 220	290 x 228 x 223	388 X 230 X 228	388 X 230 X 228	485 X 230 X 228	439 X 230 X 297 439 X 276 X 297	546 X 230 X 297 546 X 276 X 297	750 X 230 X 297 750 X 276 X 297	850 X 230 X 297 850 X 276 X 297	40'HQ X 1 + 20' 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			
						* 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			230 X 167 X 206 (NW: 950kgs / GW: 1100kgs) * Shipping by 40' Flat rack or 40' HQ when dismounting column												

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

AXIS	X	Z	Y
H	Auto	Manual	Manual
AH	Auto	Auto	Manual
AHR	Auto	Auto	Rapid
AHD	Auto	Auto	Auto

X : Longitudinal  
Z : Cross feed  
Y : Vertical feed

MODEL	CL3060AH	DL3060AH	D4080AH
	CL3060AH	DL3060AH	D4080AH
Auto crossing Stroke adjustment	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
X axis by Sensor & solenoid valve	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Continuous Lubrication	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Back water splash shield	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

● Standard  
○ Option

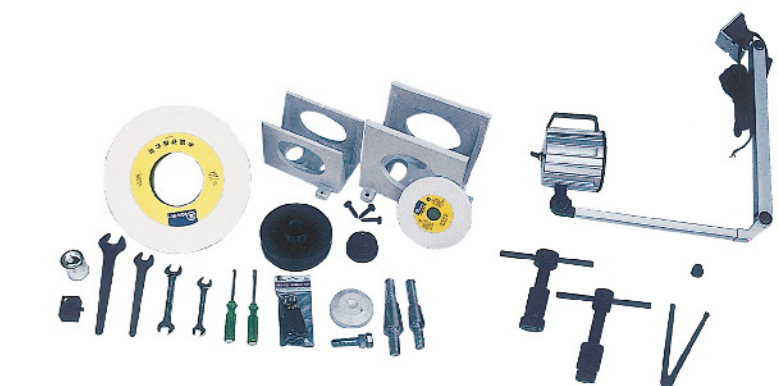
**OPTIONAL ACCESSORIES**

1. Electro magnetic chuck with chuck controller
2. Permanent magnetic chuck (For 1545 / 2045 series)
3. Micro feed for Cross / vertical feed (0.001mm/gra.) (For saddle type only)
4. Power Rapid up & down system
5. NC Auto down feed system (AD5 type)
6. Parallel dresser (Manual)
7. Coolant system
8. (Dust) Suction system
9. (Dust) Suction with coolant system
10. Magnetic separator with coolant system
11. Auto paper strip filter with coolant system
12. Auto paper strip filter and magnetic separator with coolant system
13. NC auto parallel dressing & compensating system
14. Automatic crossing stroke adjustment by control panel switch
15. Back water splash shield (Excluded 1545 / 2045 series)
16. Enclosed splash shield (Excluded 1545 / 2045 series)
17. Spindle motor inverter
18. Wheel flange
19. Tool makers vise
20. Auto balancing device
21. Digital readout unit
22. Crisscross grinding function



**STANDARD ACCESSORIES**

1. Grinding wheel
2. Wheel flange
3. Flange extractor
4. Wheel balancing arbor
5. Wheel balancing base
6. Wheel dresser with diamond
7. Leveling screw and plates
8. Tool box and tools
9. Working lamp (Saddle type only)
10. Parallel dresser (Manual)(Cantilever and Double column type only)
11. NC Automatic down feed system (Cantilever and Double column type only)



- |  |   |  |   |  |   |
|--|---|--|---|--|---|
| <p><b>PGF-1545H</b> / 150x450mm Table surface</p> <ul style="list-style-type: none"> <li>+ Micro feed for cross &amp; vertical feed (Option)</li> <li>• Hydraulic longitudinal feed</li> <li>• Manual cross &amp; vertical feed</li> </ul> | <p><b>PGF-D4080AH</b> / 400x800mm Table surface</p> <ul style="list-style-type: none"> <li>+NC Auto down feed system and Parallel dresser (Option)</li> <li>• Hydraulic longitudinal feed</li> <li>• Auto cross feed</li> <li>• Manual vertical feed</li> <li>• Table longitudinal travel is controlled by sensor and solenoid valve</li> <li>• Continuous lubrication</li> <li>• Back water splash shield</li> </ul> | <p><b>PGF-60100AHR</b> / 600x1000mm Table surface</p> <ul style="list-style-type: none"> <li>+NC Auto down feed system &amp; NC Auto parallel dressing and compensating system (Option)</li> <li>• Hydraulic longitudinal feed</li> <li>• Auto cross feed</li> <li>• Auto cross feed</li> <li>• Vertical feed is driven by AC servo motor</li> <li>• Table longitudinal travel is controlled by sensor and solenoid valve</li> </ul> | <p><b>PGF-60150AHR</b> / 600x1500mm Table surface</p> <ul style="list-style-type: none"> <li>+NC Auto down feed system (Option)</li> <li>• Hydraulic longitudinal feed</li> <li>• Auto cross feed</li> <li>• Vertical feed is driven by AC servo motor</li> <li>• Table longitudinal travel is controlled by sensor and solenoid valve</li> </ul> | <p><b>PGF-100200AHD</b> / 1000x2000mm Table surface</p> <ul style="list-style-type: none"> <li>+NC Auto parallel dressing and compensating system (Option)</li> <li>• Stepless variable proportional valve hydraulic system</li> <li>• Auto cross feed</li> <li>• Vertical feed is driven by AC servo motor</li> <li>• NC Auto down feed system</li> </ul> | <p><b>PGF-160300AHD</b> / 1600x3000mm Table surface</p> <ul style="list-style-type: none"> <li>+Vertical spindle head (Option)</li> <li>• Stepless variable proportional valve hydraulic system</li> <li>• Cross &amp; Vertical feed is driven by AC servo motor</li> <li>• NC Auto down feed system</li> </ul> |
|--|---|--|---|--|---|