

PHENIX

HIGH PRECISION

SURFACE GRINDERS

**SADDLE TYPE
COLUMN TYPE**

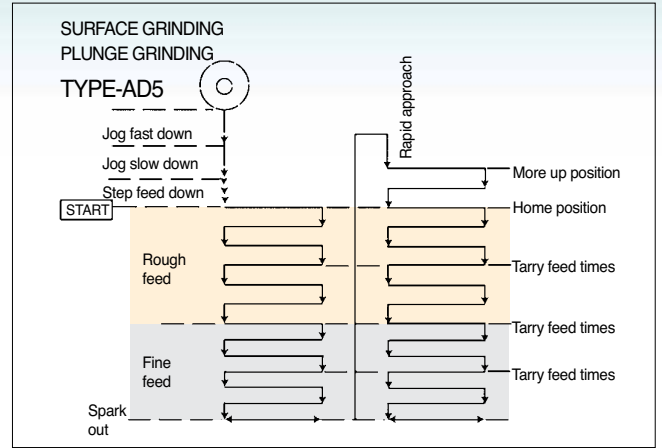


CE

HIGH PRECISION SURFACE GRINDERS



■ Type AD5 Automatic Downfeed Control Panel (Opt.)



FSG-2550AH ▲



FSG-DL3060AH ▲
 ■ w / Type AD5 Auto Down Feed Control (Opt.)



FSG-CL3060AH ▲



FSG-D4080AH ▲

SPECIFICATIONS

unit:mm
():inch

MODEL	Unit	FSG-1545M FSG-2045M	FSG-1545H/AH FSG-2045H/AH	FSG-2550H FSG-2550AH	FSG-CS3060AH FSG-CL3060AH
Table size	mm (inch)	150 x 450 (6" x 18") (for 1545) 200 x 450 (8" x 18") (for 2045)		250 x 500 (10" x 20")	300 x 600 (12" x 24")
Max. grinding surface	mm (inch)	150 x 450 (6" x 18") (for 1545) 200 x 450 (8" x 18") (for 2045)		250 x 500 (10" x 20")	300 x 600 (12" x 24")
Max. distance center of spindle to table	mm (inch)	450 mm (18")		500 mm (20")	500 mm (20") 〔600 mm (24"), Opt.〕
Table speed	m/min ("/min)	Manual	5 ~ 25 M/min		5 ~ 25 M/min (200" ~ 1000"/min)
Table guideway		Ball rolling way		V & Flat way	
Auto. cross feed increment	approx. mm (inch)	Manual	Manual (for H) 0.1mm ~ 12mm		0.5 mm ~ 20mm (0.02" ~ 0.8")
Rapid power cross feed approx.	mm/min ("/min)	Manual	Manual (for H) 1100 mm/min (60Hz) / 900 mm/min (50Hz)		1100 mm/min (44"/min) (60Hz) 900 mm/min (36"/min) (50Hz)
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") (Std.) / 0.005mm (0.0001") (w/AD5, Opt.)			2 mm (0.05") 0.01 mm (0.0002")
Vertical feed with M. P. G.	1 rev 1 gra				
Auto. down feed	(Option)	0.001 mm ~ 0.999 mm/Time (0.0001" ~ 0.0999"/Time, Opt.)			
Wheel speed	60Hz/50Hz	3500 R.P.M. (60Hz) / 2900 R.P.M. (50Hz)			S:3500 R.P.M. (60Hz) / 2900 R.P.M. (50Hz) L:1750 R.P.M. (60Hz) / 1450 R.P.M. (50Hz)
Wheel dimension	mm (inch)	180 x 13 x 31.75 mm (max. 200 x 20 x 31.75 mm) (7" x 0.5" x 1.25") (max. 8" x 0.75" x 1.25")			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")
Spindle motor	HP	2 HP			2 HP (S type) / 5 HP (L type)
Hydraulic pump motor	HP	None	1 HP		
Auto. cross feed motor	W or HP	None	25W	1/5 HP	
Rapid head elevation motor	HP	1/5 HP (Opt.)			
Machine net weight	kgs (Lbs)	870 (1914 Lbs) 920 (2024 Lbs)	900 (1980 Lbs) 950 (2090 Lbs)	1350 (2970 Lbs)	1700 (3740 Lbs)
Packing gross weight	kgs (Lbs)	970 (2134 Lbs) 1020 (2244 Lbs)	1100 (2424 Lbs) 1150 (2530 Lbs)	1550 (3410 Lbs)	1950 (4290 Lbs)
Machine floor space	mm (inch)	1900 x 1200 (75" x 47")	2100 x 1200 (83" x 47")	2250 x 1400 (89" x 55")	2650 x 1550 (104" x 61")
Packing dimensions (L x W x H)	cm (inch)	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")	228 x 179 x 210 (90" x 71" x 83")

The manufacturer reserves the right to modify the design, specifications, mechanisms...etc. to improve the performance of the machine without prior notice.
All the specifications shown above are just for reference.

- 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 50100 AHR series are equipped with auto. cross feed, longitudinal by 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.

STANDARD ACCESSORIES

- Grinding wheel 1
- Wheel flange 1
- Flange extractor 1
- Wheel balancing arbor 1
- Wheel balancing base 1
- Wheel dresser with diamond 1
- Leveling screw and plates 1
- Tool box and tools 1
- Working lamp (FSG-50.60.70 not included) 1
- Coolant system (FSG-50.60.70 only) 1

SPECIFICATIONS

unit:mm
() :inch

MODEL	Unit	FSG-DS3060AH FSG-DL3060AH	FSG-D4080AH	FSG-50100AHR FSG-60100AHR FSG-70100AHR	FSG-50150AHR FSG-60150AHR FSG-70150AHR	FSG-50200AHR FSG-60200AHR FSG-70200AHR
Table size	mm (inch)	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")
Max. grinding surface	mm (inch)	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")
Max. distance center of spindle to table	mm (inch)	500 mm (20") [600 mm (24"), Opt.]	550 mm (22") [650 mm (25"), Opt.]	600 mm (24") [800 mm (32") /1000 mm (40"), Opt.]		
Table speed	m/min ("/min)	5 ~ 25 M/min (200" ~ 1000"/min)				
Table guideway		V & Flat way				
Auto.cross feed increment	approx. mm (inch)	0.5 mm ~ 20mm (0.02" ~ 0.8")				
Rapid power cross feed approx.	mm/min ("/min)	1100 mm/min (44"/min) (60Hz) 900 mm/min (36"/min) (50Hz)				
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)	300 mm/min (10"/min)			
Vertical feed on hand wheel	1 rev 1 gra	2 mm (0.05") 0.01 mm (0.0002")				
Vertical feed with M. P. G.	1 rev 1 gra			(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")		
Auto. down feed	(Option)	0.001 mm ~ 0.999 mm/Time (0.0001" ~ 0.0999"/Time, Opt.)		0.001 mm ~ 0.999 mm/Time (0.00001" ~ 0.00999"/Time, Opt.)		
Wheel speed	60Hz/50Hz	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)			
Wheel dimension	mm (inch)	S:180x13x31.75mm (7"x0.5"x1.25") L:355 x 38 x 127mm (14"x1.5"x5")	406 x 50 x 127 mm (16" x 2" x 5")			
Spindle motor	HP	2 HP (S type) / 5 HP (L type)	5 HP	10 HP (15 HP, Opt.)		
Hydraulic pump motor	HP	1 HP	2 HP	3 HP	5 HP	
Auto. cross feed motor	HP	1/5 HP				
Rapid head elevation motor	HP	1/5 HP (Opt.)		1KW AC servo motor		
Machine net weight	kgs (Lbs)	1700 (3740 Lbs)	3250 (7150 Lbs)	6000 (13200 Lbs) 6300 (13860 Lbs) 6600 (14520 Lbs)	7200 (15840 Lbs) 7500 (16500 Lbs) 7800 (17160 Lbs)	8400 (18480 Lbs) 8700 (19140 Lbs) 9000 (19800 Lbs)
Packing gross weight	kgs (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)
Machine floor space	mm (inch)	2650 x 1550 (104" x 61")	3000 x 2000 (118" x 79")	4600 x 2300 (180" x 91") 4600 x 2450 (180" x 96") 4600 x 2550 (180" x 100")	4800 x 2300 (189" x 91") 4800 x 2450 (189" x 96") 4800 x 2550 (189" x 100")	6000 x 2300 (236" x 91") 6000 x 2450 (236" x 96") 6000 x 2550 (236" x 100")
Packing dimensions (L x W x H)	cm (inch)	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") /gra.

The manufacturer reserves the right to modify the design, specifications, mechanisms...etc. to improve the performance of the machine without prior notice.
All the specifications shown above are just for reference.



**FRANK PHOENIX
INTERNATIONAL CORP.**
Machinery Mfg., Exporter & Importer

23, Ho-Li Street Sec. 1, Taiping 41144 Taichung Hsien, Taiwan
Mail Add: P.O. Box 484 Taichung 40099, Taiwan
E-Mail address: fphoenix@ms13.hinet.net ; sales@frankphoenix.com.tw
http: //www.frankphoenix.com.tw
Tel:886-4-2277-1391(Rep.) Fax:886-4-2277-5822

TOPFIT MACHINERY CO., LTD.

Jan.2009-2000.