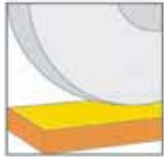
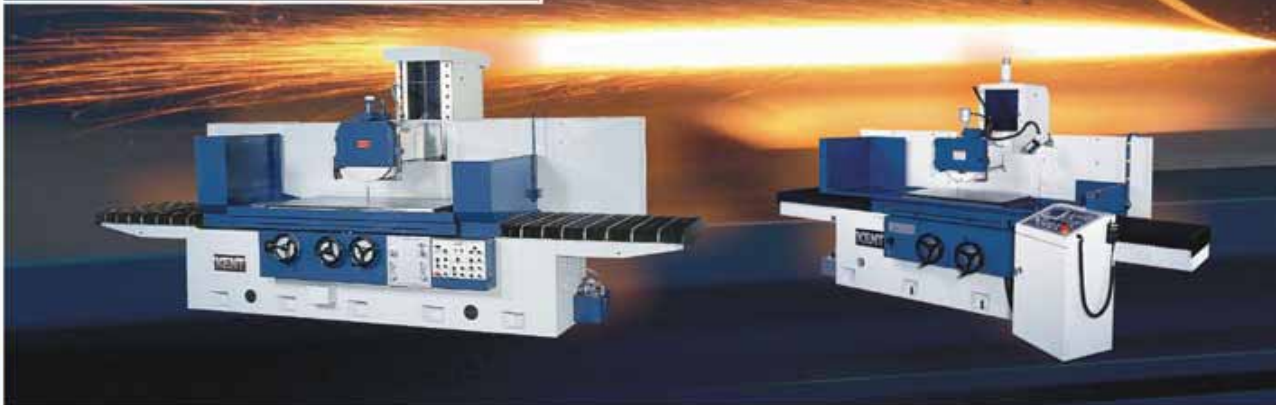


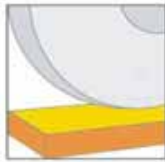


KENT INDUSTRIAL CO., LTD.



Precision Surface Grinder

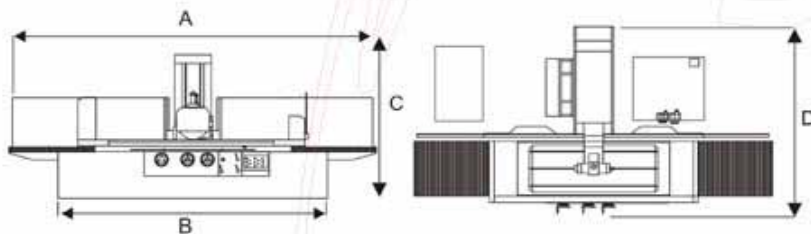




Specification		Unit	KGS-510AH/AHD	KGS-515AH/D	KGS-615AH/D	KGS-620AH/D	KGS-715AH/D	KGS-820/825/830AH/D			KGS-920/925/930AH/D		
Capacity	Overall table working area	mm	1000 * 500	1500 * 500	1500 * 600	2000 * 600	1500 * 700	2000 * 800	2500 * 800	3000 * 800	2000 * 900	2500 * 900	2500 * 900
	Longitudinal table travel	mm	1140	1600	1600	2230	1600	2250	2750	3250	2250	2750	2750
	Cross feed table travel	mm	540	570	660	660	760	885	885	960	880	960	960
	Distance spindle center to table	mm	575	600	600	600	600	880	880	880	880	880	880
	Table load including magnetic chuck	kgs	1000	1200	1300	1500	1400	2300	2800	3000	2500	2500	2500
Table & cross feed	T-slot	mm * N	16 * 3	16 * 3	16 * 3	16 * 3	16 * 3	18 * 3	18 * 3	18 * 3	18 * 3	18 * 3	
	Longitudinal table speed	m/min	7-25	7-25	7-25	7-25	7-25	10-28	10-28	10-28	10-28	10-28	
	Cross feed on hand wheel	1gra.	mm	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	
		1rev.	mm	5	5	5	5	5	2	2	2	2	
	Auto cross feed per stroke	mm	0.1-12	0.1-12	0.1-12	0.1-12	0.1-12	5-20	5-20	5-20	5-20	5-20	
	Power cross feed	50 Hz	mm/min	1250	1250	1250	1250	1250	1500	1500	1500	1500	
60 Hz		mm/min	1500	1500	1500	1500	1500						
Grinding wheel	Wheel dimension	mm	355 * 38 * 127	355 * 50 * 127	355 * 50 * 127	355 * 50 * 127	355 * 50 * 127	508 * 50 * 127	508 * 50 * 127	508 * 50 * 127	508 * 50 * 127	508 * 50 * 127	
	Spindle speed	50 Hz	r.p.m.	1450	1450	1450	1450	1450	950	950	950	950	
		60 Hz	r.p.m.	1740	1740	1740	1740	1740	1150	1150	1150	1150	
Vertical movement	Vertical on handwheel	1gra.	mm	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
		1rev.	mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
	Auto down feed increment	mm	0.005-0.04/AHD	0.005-0.04	0.005-0.04	0.005-0.04	0.005-0.04	0.005-0.04	0.005-0.04	0.005-0.04	0.005-0.04		
Power head elevation	50 Hz	mm/min	230	230	230	230	230	230	230	230	230		
	60 Hz	mm/min	280	280	280	280	280	280	280	280			
Motor	Spindle motor	KW * P	5.6 * 4	7.5 * 4	7.5 * 4	7.5 * 4	7.5 * 4	11.2 * 6	11.2 * 6	11.2 * 6	11.2 * 6		
	Power elevation motor	KW * P	0.19 * 4	0.375 * 4	0.375 * 4	0.375 * 4	0.375 * 4	0.375 * 4	0.375 * 4	0.375 * 4			
	Hydraulic motor	KW * P	2.2 * 6	3.7 * 6	3.7 * 6	3.7 * 6	3.7 * 6	7.5 * 6	11 * 6	7.5 * 6	11 * 6		
	Dust collection motor	W * P	375 * 2	375 * 2	375 * 2	375 * 2	375 * 2	375 * 2	375 * 2	375 * 2			
	Coolant motor	W * P	190 * 2	190 * 2	190 * 2	190 * 2	190 * 2	190 * 2	190 * 2	190 * 2			
	Cross feed motor	W * P	190 * 6	190 * 6	190 * 6	190 * 6	190 * 6	HYDRAULIC	HYDRAULIC	HYDRAULIC			
Dimension & weight	Machine height	mm	2400	2445	2445	2470	2470	2850	2850	2850	2850		
	Floor space	mm	4445 * 2100	5810 * 2445	5810 * 2545	6200 * 2700	5810 * 2800	6000 * 3360	7300 * 3360	8700 * 3360	6000 * 3400		
	Net weight	kgs	5000	6000	6250	8500	7000	15500	15600	17500	15800		
	Gross weight	kgs	6000	7000	7250	9700	8000	17500	17600	19500	17800		

Specifications subject to change without prior notice.

PRINCIPAL DIMENSIONS



Model	A	B	C	D
KGS-510	4,445	2,100	2,100	2,100
KGS-515	5,810	3,050	3,050	2,445
KGS-615	5,810	3,050	3,050	2,645
KGS-620	6,200	4,400	4,400	2,700
KGS-715	5,810	3,800	3,800	2,800
KGS-820/825/830	6,000	4,400	5,800	3,360
KGS-920/925/930	6,000	5,800	5,800	3,400

Standard Accessories



1. Grinding wheel / 1 pc
2. Wheel balancing stand / 1 pc
3. Wheel balancing arbor / 1 pc
4. Wheel flange & extractor / 1 set
5. Tool box & tools / 1 set
6. Levelling pad & bolt / 1 set
7. Wheel dressing diamond tip & holder / 1 set

Optional Accessories



Flange



Grinding wheel



Quartz halogen light



Sine bar



Radius forming



Angle forming



Demagnetize



Electro inclination chuck



KGS-510AHD

KGS-515/615AH/AHD

KGS-620AHD

KGS-715AHD

KGS-820/825/830/920AHD

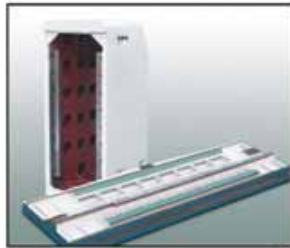
AH 2 Axes Automatic manual downfeed

AHD 3 Axes Automatic

Column Traveling Series Features



Box type and double walled structure for excellent dampening



Designed for a highly precise, smooth elevation of the wheel head



The flanged cartridge type is spindle sealed and greased for life.



Friendly and easily operated as a standard attachment.



Box type and double walled structure for excellent dampening



Separate hydraulic tank prevents heat and vibrations from being transferred to the machine



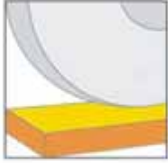
It's excellent design and packing permits easy maintenance



Automatic down feed cycle: plunge-cut and surface grinding modes.

Descriptions

- The working table executes only longitudinal Movements. This ensures full contact and support from the machine bed, even in the table limit position. V and flat guide-ways are laminated with Turcite B, to guarantee smooth table movement regardless of the load on the table.
- The column carries out only cross feed movements. This guarantees uniform contact between the column Slide and machine bed in any column position. The column slide is guided by V and flat Turcite B laminated ways, hand scraped to obtain smooth stick slip free Movements.
- The spindle housing carries out only vertical Movements. This provides a constant distance between the vertical slideways and the grinding wheel, creating a perfectly perpendicular movement of the spindle in relation to the working table. The housing construction is also designed for better rigidity.
- The flanged cartridge type spindle is supported by class 7 super precision angular contact ball bearings, preloaded and select-fitted into spindle cartridge. This will guarantee a maximum run out of 0.00008 for stable and accurate grinding. All the spindles are assembled at Kent by skilled and experienced technicians in temperature-controlled clean room. The result is a spindle that will provide years of trouble-free service with minimum temperature changes, noise or vibration.
- A hydraulic overhead dresser is employed for all column-traveling models, and is mounted on the spindle head to allow the wheel to be dressed independent of the grinding height or column position. The dresser device provides a minimum 0.0004 graduation for productivity and ease of operation.
- The automatic lubrication system supplies lubricant to all of the guide ways and lead screws as the machine operates. This system ensures all the critical components are lubricated with the right amount of oil at all times.
- The external independent hydraulic tank is located outside the machine to be easily accessible for maintenance. A specially-designed valve and proximity switches enable smooth table reversing with a 1-28 meters per minute table speed. This is also to prevent heat and vibrations from being transferred to the machine base.
- Electric components and functional modules are well arranged and packed in a separate electric cabinet to be easily accessible for maintenance. An independent control box with an ergonomically designed panel offers a comfortable and convenient operation environment.
- The control operates with preset increment and spark-out times grinding cycle for Plunge-cut and Surface grinding both with sequences of fine grinding ~ spark-out ~ retraction.



KGS-616S

KGS-250AH

KGS-250AHD

KGS-1020AHD

KGS-63AH

KGS-63AHD

KGS-84AHD

H X Axis Automatic (by hydraulic) manual downfeed & crossfeed

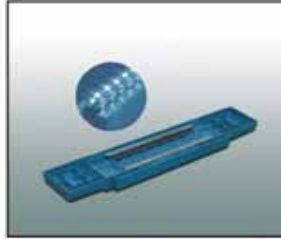
AH 2 Axes Automatic manual downfeed

AHD 3 Axes Automatic

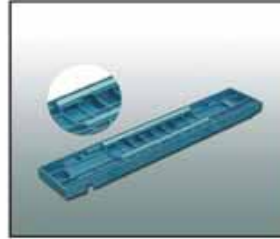
Saddle Traveling Series Features



Well designed cast iron structure provides excellent dampening



The ball bearing slide ways ensure smooth and easy operation.
(For KGS-616/250AHD only)



Hand-scraped Turcite ways guarantee long lasting performance.
(For KGS-1020/306/63/84AHD only)



Automatic lubrication pump for all guide ways and lead-screws



Automatic down-feed gearbox for accurate down-feed increments.



Low voltage safety control panel with a separate electric cabinet.



Cartridge type spindle with high precision, preloaded angular contact ball bearings.



Separate hydraulic tank prevents heat and vibrations from being transferred to the machine.

Descriptions

1. Compound table design with column fixed to the bed provides versatile operation.

Alcast iron components are well designed and heavily ribbed for the best rigidity and dampening capacity.

2. 616 and 250AHD feature ball bearing table and D-2 slide ways that are hardened and precision ground to ensure smooth and easy operation.

3. All models other than the 616/250 have Turcite B lining for both the cross-feed double V guide-ways and the table V and Flat ways. They are also hand-scraped, with sufficient lubrication to guarantee easy maintenance and long lasting performance.

4. The timed automatic lubrication system supplies oil to guide-ways and lead-screws as the machine operates. This system ensures all the critical components are lubricated with the right amount of oil at all times.

5. The automatic down-feed gearbox is designed to achieve fine and accurate down-feed increments and avoid worn out parts.

6. Electric components and functional modules are well-arranged and packed in the electric cabinet, making maintenance and trouble-shooting easily accessible.

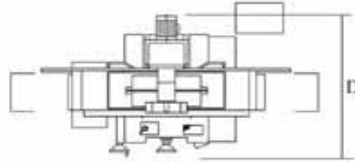
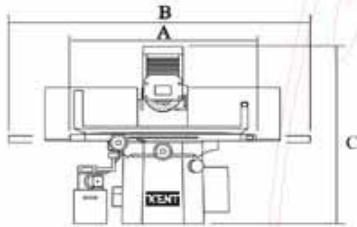
7. High precision Class 7 angular contact ball bearings are used on the cartridge spindle, integrated with a dynamically balanced shaft, sealed and lubricated for life. All the spindles are assembled at Kent by skilled and experienced technicians in temperature-controlled clean room. The result is a spindle that will provide years of trouble-free service with minimum temperature change, noise or vibrations.

8. The external and independent hydraulic unit eliminates the transfer of heat and vibration to the machine, which is essential for high precision machining. A specially designed valve and proximity switches (63 & 84 only) enable smooth table reversing with a 1-28 meters per minute table speed.

Specification		Unit	KGS-616S	KGS-250AH/AHD	KGS-1020AH/AHD	KGS-63AH/AHD	KGS-84AH/AHD	
Capacity	Overall table working area	mm	410 * 160	460 * 200	500 * 250	600 * 300	800 * 400	
	Longitudinal table travel	mm	430	540	590	710	910	
	Cross feed table travel	mm	200	260	275	340	450	
	Distance spindle center to table	mm	440	475	490	600	600	
	Table load including magnetic chuck	kgs	100	100	250	420	700	
Table & cross feed	T-slot	mm * N	14 * 1	14 * 1	14 * 1	14 * 1	14 * 3	
	Longitudinal table speed	m/min		5-25	5-25	5-25	5-25	
	Cross feed on hand wheel	l.gra.	mm	0.02	0.02	0.02	0.02	0.02
		I.rev.	mm	4	4	4	4	5
	Auto cross feed per stroke	mm		0.1-12	0.1-12	0.1-12	0.1-12	
	Power cross feed	50 Hz	mm/min		820	820	1000	1000
60 Hz		mm/min		980	980	1200	1200	
Grinding wheel	Wheel dimension	mm	180 * 13 * 31.75	180 * 13 * 31.75	180 * 25 * 31.75	355 * 38 * 127	355 * 38 * 127	
	Spindle speed	50 Hz	r.p.m.	2850	2850	2850	1450	1450
		60 Hz	r.p.m.	3480	3480	3480	1740	1740
Vertical movement	Vertical on handwheel	l.gra.	mm	0.005	0.01	0.01	0.01/0.001	0.01/0.001
		I.rev.	mm	2	2	2	2/0.5	2/0.5
	Auto down feed elevation	mm	—	0.002-0.02(AHD)	0.002-0.02(AHD)	0.005-0.025(AHD)	0.005-0.025(AHD)	
	Power head increment	50 Hz	mm/min	—	—	—	133	133
60 Hz		mm/min	—	—	—	160	160	
Motor	Spindle motor	KW * P	1.5 * 2	1.5 * 2	2.2 * 2	3.7 * 4	5.6 * 4	
	Power elevation motor	KW * P				0.08 * 6	0.08 * 6	
	Hydraulic motor	KW * P		0.75 * 4	0.75 * 4	1.5 * 6	2.2 * 6	
	Dust collection motor	W * P	375 * 2	375 * 2	375 * 2	375 * 2	375 * 2	
	Coolant motor	W * P	95 * 2	95 * 2	95 * 2	190 * 2	190 * 2	
	Cross feed motor	W * P		40 * 6	40 * 6	40 * 6	80 * 6	
Dimension & weight	Machine height	mm	1645	1775	1775	1830	1875	
	Floor space	mm	1610 * 1120	1800 * 1400	2100 * 1800	2600 * 2500	3600 * 2600	
	Net weight	kgs	630	1300	1430	1750	2800	
	Gross weight	kgs	750	1500	1650	1950	3000	

Specifications subject to change without prior notice.

PRINCIPAL DIMENSIONS



Model	A	B	C	D
KGS-616	1160	1590	1710	1270
KGS-250	1520	2020	1750	1400
KGS-1020	1540	2170	1750	1540
KGS-63	1920	2630	1900	1860
KGS-84	2540	3450	1900	2250



Vise



permanent magnetic chuck



Manual parallel dresser



Hydraulic parallel dresser



Micro feed on cross mechanism



Micro feed on vertical mechanism



Electromagnetic chuck



Digital read-out



Coolant system



Dust-suction coolant system



Coolant system with magnetic separator



Dust-suction coolant system



Coolant system with magnetic separator & paper filter



Coolant system with paper filter