



KENT Headquarters in Douliou City



Jiangdong Factory-Hangzhou



KENT Factory-Jiangsu



Company in Chicago, USA



Taiwan KENT Industrial Group
Zhejiang KENT Machinery Co., Ltd. / Jiangsu KENT Precision Machinery Co., Ltd.
Dongguan KENTIND Electromechanical Co., Ltd.,
Tianjin KENTIND Electromechanical Sales Co., Ltd.

KENT Industrial Co., Ltd.
<http://www.kentind.com> E-mail: sales@kentind.com

Douliou Factory: No. 17, Dougong 9th Road,
Douliou Expanded Industrial Zone, Yunlin County, Taiwan
TEL: 886-5-557-5356 FAX: 886-5-557-5136
Service Line: 886-5-557-0168

(Chicago, IL): KENT INTERNATIONAL USA, INC
1630 Shanahan Dr. South Elgin IL 60177, USA
<http://www.kentind.com> TEL: 847-888-5525

Vietnam KENT Precision Machinery Co., Ltd
(Pingyang-Singapore Park)
VIETNAM KENT PRECISION MACHINERY CO., LTD

Zhejiang KENT Machinery Co., Ltd.: No. 685, Qingdong 1st Road,
Qiantang District, Hangzhou City, Zhejiang Province
TEL: 86-571-8283-1781 FAX: 86-571-8287-9967
<http://www.kentzj.com> E-mail: kentco@kentind.com

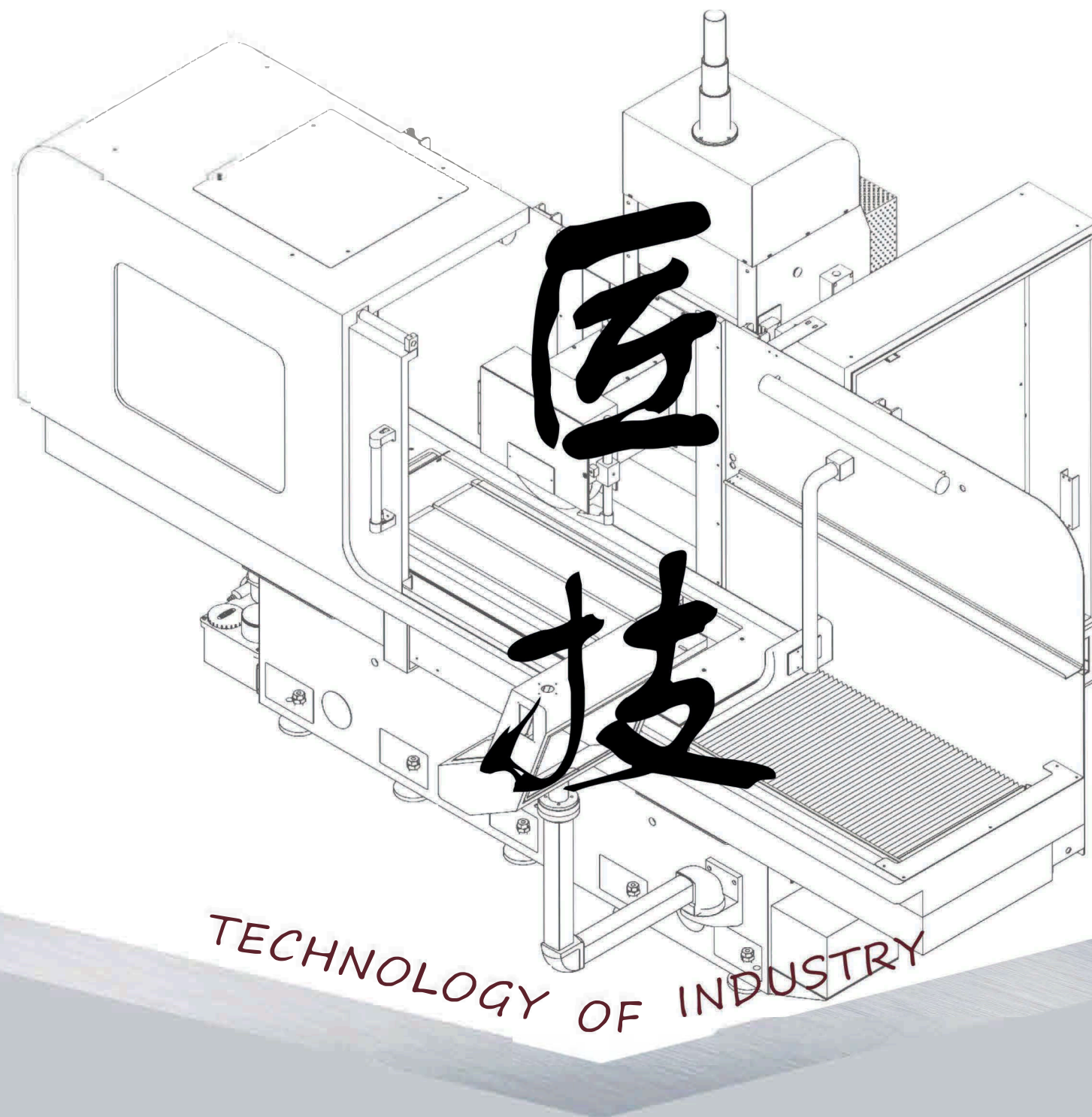
Jiangsu KENT Precision Machinery Co., Ltd.: 33 Xingyu Road, Economic
and Technological Development Zone, Nantong City, Jiangsu Province

Tianjin KENTIND Electromechanical Sales Co., Ltd.: 3-914, Xi Nian Plaza,
Intersection of Jiefang South Road and Wushui Road, Hexi District, Tianjin
TEL: 86-22-8823-2981 FAX: 86-22-8823-2982

Dongguan KENTIND Electromechanical Co., Ltd.: Room 103, Jinguo Business
Center, Xin'an Shangxin Road, Chang'an Town, Dongguan City, Guangdong Province
TEL: 86-769-8532-3345 FAX: 86-769-8532-3346

Ver.2024.04

KENT Product content



TECHNOLOGY OF INDUSTRY

Website1 : <https://www.kentind.com>
Website2: <https://www.kentzj.com>

COMPANY INTRODUCTION

KENT Industry

KENT Industry, the global leader of precision grinding machine, was founded in 1966, and always adheres to the business beliefs of 'technology', 'innovation' and 'reliability'. Over the years, continuous research and development, innovation and improvement have created a new era for the machinery industry of Taiwan. The main products include surface grinder, CNC surface grinder, gantry-type surface grinder, cylindrical grinder, disc grinder, vertical machining center, gantry-type machining centers, etc. The products are sold all over the world. So far, more than 150,000 machine tools have been sold all over the world and applied by various enterprises. KENT Industry adheres to the spirit of carrying on the past heritage and opening up the future, forging ahead into the future with ingenious precision design and increasingly better craftsmanship, as well as the introduction of digital technology management to become a happiness enterprise with an intelligent factory.

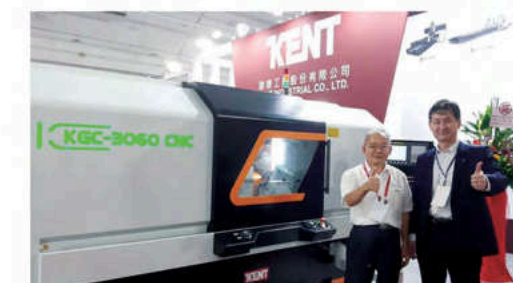
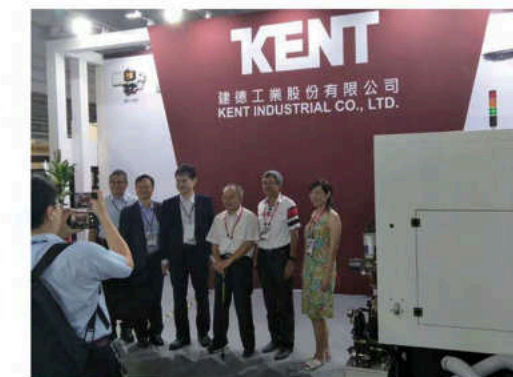
Zhejiang KENT

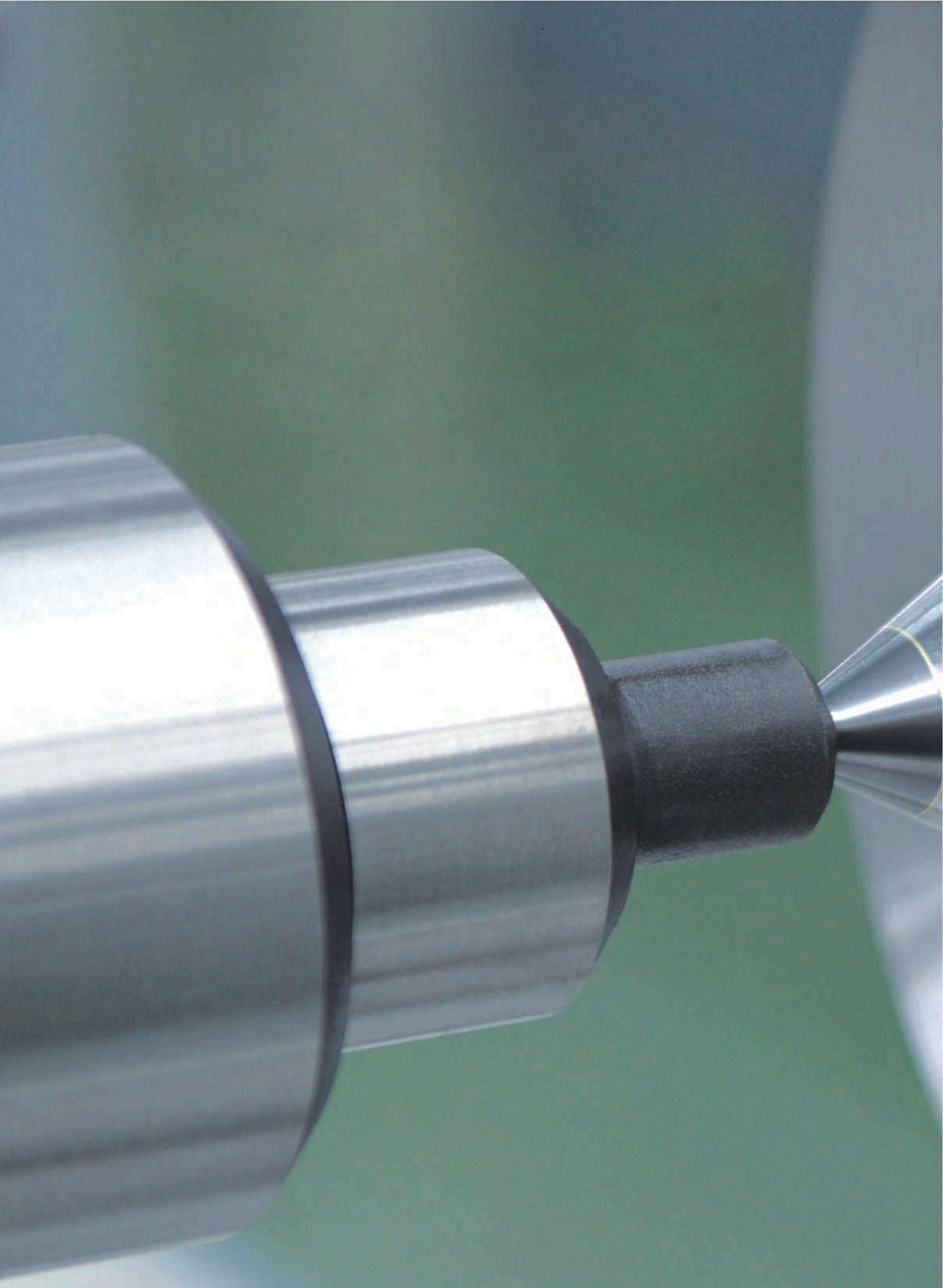
Date of Establishment: July 3, 1993
Company Address: No. 685, Qingdong 1st Road, Qiantang New District, Hangzhou City, Zhejiang Province

Zhejiang KENT Machinery Co., Ltd. is a wholly-owned company established in the National Hangzhou Xiaoshan Economic and Technological Development Zone by KENT Industrial Group, a world-renowned brand KENT with more than 50 years of professional machine tools manufacturing in Taiwan.

Zhejiang KENT adheres to the business philosophy 'technology, innovation, and reliability' of the parent company, the quality policy of 'customer benefit', and the mission of 'providing high-quality products and participating in the economic construction of China' for the industrial development of China. Zhejiang KENT Inherits the ingenious precision design and increasingly refined manufacturing process of the parent company, more than 30,000 KENT machine tools have played an important role in the Chinese industrial market and successfully won the trust of customers.

Grinder Aristocratic Family
Technology/Innovation/Reliability





Product Contents

1-1 KGS PRECISION SURFACE GRINDER	01
1-2 KGS EUROPEAN SERIES SURFACE GRINDING MACHINE ...	03
1-3 KGS-52 HIGH PRECISION SURFACE GRINDER	05
1-4 KGS-WM PROGRAMMABLE PRECISION SURFACE GRINDER	09
1-5 KGS-HT HIGH PRECISION SURFACE GRINDER ...	13
1-6 KGS-CNC2/CNC3 PRECISION CNC SURFACE GRINDER ...	17
1-7 KGP DOUBLE COLUMN SURFACE GRINDER	21
2 KGC-CNC UNIVERSAL CYLINDRICAL GRINDER	25
3KMV GANTRY PROCESSING CENTER	29
4 KTM MILLING MACHING	31
5 KGR ROUND TABLE SURFACE GRINDER	33

1-1 KGS PRECISION SURFACE GRINDER



• KGS-618M/618H Series

Item	Unit	KGS-618M/618H
Work Surface Size(Length X Width)	mm	460 x 150
Maximum Movement	Left and Right	mm 475
	Back and Forth	mm 185
Maximum Distance from Work Surface to Spindle Center	mm	380



• KGS-200/200S Series

Item	Unit	KGS-200/200S
Work Surface Size(Length X Width)	mm	410 x 160
Maximum Movement	Left and Right	mm 445
	Back and Forth	mm 220
Maximum Distance from Work Surface to Spindle Center	mm	445



• KGS-250 Series

Item	Unit	KGS-250M/H/AH/AHD	KGS-818AH/AHD	KGS-1020AH/AHD
Work Surface Size(Length X Width)	mm	460 x 200	460 x 200	500 x 250
Maximum Movement	Left and Right	mm 540	540	560
	Back and Forth	mm 260	260	275
Maximum Distance from Work Surface to Spindle Center	mm	475	470	475



• KGS-818/1020 Series



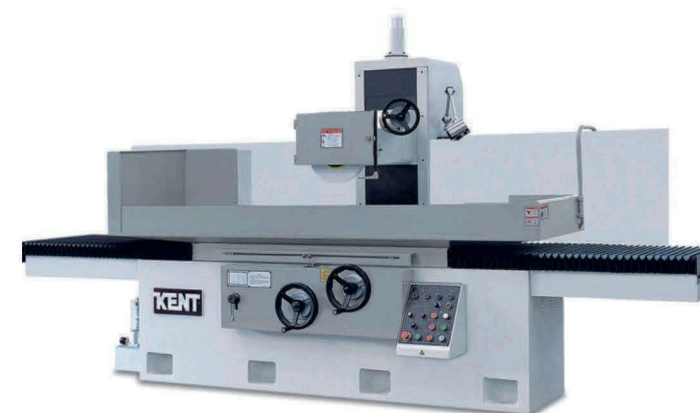
• KGS-306AH/AHD Series

Item	Unit	KGS-306AH/AHD
Work Surface Size(Length X Width)	mm	600 x 300
Maximum Movement	Left and Right	mm 660
	Back and Forth	mm 330
Maximum Distance from Work Surface to Spindle Center	mm	540



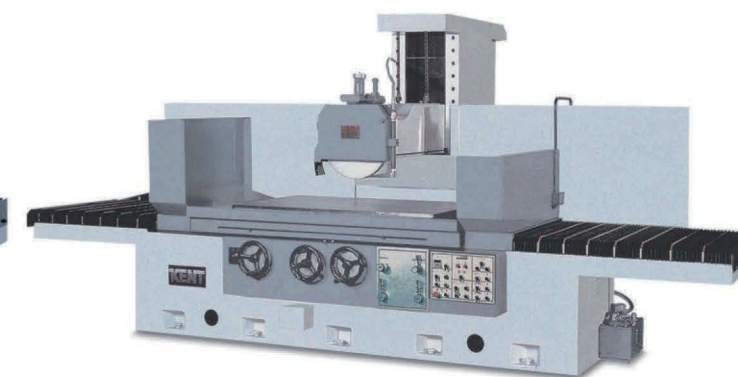
• KGS-84AH/AHD Series

Item	Unit	KGS-84AH/AHD
Work Surface Size(Length X Width)	mm	800 x 400
Maximum Movement	Left and Right	mm 910
	Back and Forth	mm 450
Maximum Distance from Work Surface to Spindle Center	mm	600



• KGS-510/512/615/620/630/715AH(AHD) Series
KGS-820RD Series

Item	Unit	KGS-510AH/AHD	KGS-512AH/AHD	KGS-615AH/AHD	KGS-620AH/AHD	KGS-630AH/AHD	KGS-715AH/AHD
Work Surface Size(Length X Width)	mm	1000 x 500	1200 x 500	1500 x 600	2000 x 600	3000 x 600	1500 x 700
Maximum Movement	Left and Right	mm 1140	1300	1600	2230	3230	1600
	Back and Forth	mm 540	540	660	660	660	760
Maximum Distance from Work Surface to Spindle Center	mm	575	600	600	600	600	600



• KGS-820/830/920/930AHD Series

Item	Unit	KGS-820RD	KGS-830RD	KGS-820AHD	KGS-830AHD	KGS-920AHD	KGS-930AHD
Work Surface Size(Length X Width)	mm	2000 x 800	3000 x 800	2000 x 800	3000 x 800	2000 x 900	3000 x 900
Maximum Movement	Left and Right	mm 2200	3300	2250	3250	2250	3250
	Back and Forth	mm 870	870	885	885	960	960
Maximum Distance from Work Surface to Spindle Center	mm	600	600	850	850	850	850

1-2 KGS EUROPEAN SERIES SURFACE GRINDING MACHINE



- Column moving type
- KGS-AH&AHD Series

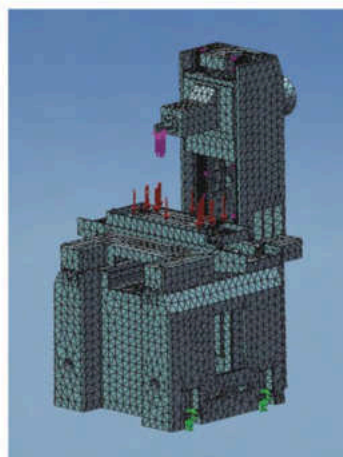


- Saddle travelling
- KGS-AH&AHD Series

SPECIFICATIONS 規格			Unit 單位	鞍座移動式 Saddle Traveling Type				立柱移動式 Column Traveling Type									
				250 AH/AHD	1020 AH/AHD	63 AH/AHD	84 AH/AHD	510 AH/AHD	615 AH/AHD	620 AH/AHD	715 AH/AHD	820 AHD	825 AHD	830 AHD	920 AHD	925 AHD	930 AHD
能力 Capacity	工作台面積 Table working area		mm	460x200	500x250	600x300	800x400	1000x500	1500x600	2000x600	1500x700	2000x800	2500x800	3000x800	2000x900	2500x900	3000x900
	左右最大移動量 Longitudinal travel		mm	540	560	710	910	1140	1600	2230	1600	2250	2750	3250	2250	2750	3250
	前後最大移動量 Cross feed travel		mm	260	275	340	450	540	660	660	760	885	885	885	960	960	960
	工作台面至主軸中心最大距離 Distance from spindle center to table		mm	475		600		575	600			850					
	工作台面最大承受重量 (含電夾) Table load including magnetic chuck		kg	100	250	420	700	1000	1300	1500	1400	2300	2800	3000	2300	2800	3000
工作台&前後 進給 Table & Cross feed	工作台T型槽 T-slot		mm x N	14x1			14x3				18x3						
	工作台速度 Longitudinal table speed		m/ min	5~28				7~28				10~28					
	前後手輪進刀 Cross feed on hand wheel	1格 (1 gra.)	mm	0.02								0.01					
		1圈 (1 rev.)	mm	4			5				2						
	前後自動進給 Auto cross feed per stroke		mm/ time	0.1~12			0.1~15				2~30						
	前後快速移動 Power cross feed	50HZ	mm/ min	800			1000	1200				1500					
		60HZ	mm/ min	1000			1200	1500									
砂輪主軸 Grinding Wheel	砂輪尺寸 Wheel dimension		mm	ψ180x13 xψ31.75	ψ180x25 xψ31.75	ψ355x38xψ127			ψ355x50xψ127			ψ508x50xψ127					
	主軸轉速 Spindle speed	50HZ	rpm	3000		1500				1000							
		60HZ	rpm	3600		1800				1200							
上下進給 Vertical movement	上下手輪進刀 Vertical on hand wheel	1格 (1 gra.)	mm	0.01		AH:0.01/ AHD:0.001		0.002			0.002						
		1圈 (1 rev.)	mm	2		AH:2/AHD:0.5		0.5									
	自動進刀量 Auto down feed increment		mm/ time	AH:無(none) AHD:0.002-0.02		AH:無(none) AHD:0.005-0.025		AH:無(none) AHD:0.005-0.04									
	上下快速進給 Power head elevation	50HZ	mm/ min	-		240		240									
		60HZ	mm/ min			300		300									
馬達 Motor	主軸馬達 Spindle motor		hp	2	3	5	7.5		10			15					
	上下驅動馬達 Power elevation motor		W	-		80		375									
	油壓馬達 Hydraulic motor		hp	1	2	2	3		5			10	15		10	15	
	前後驅動馬達 Cross feed motor		W	40			80		190			油壓(Hydraulic)					
尺寸/重量 Dimension & Weight	機器高度 Machine height		mm	1775		1830	1875	2400	2445	2470		2850					
	佔地面積 Floor space		mm	1800x1400	2100x1800	2600x2500	3600x2600	4445x2100	5810x2445	6200x2700	6200x2700	6000x3360	7300x3360	8700x3360	6000x3700	7300x3700	8700x3700
	淨重 Net weight		kg	1300	1430	1750	2800	5000	6250	8500	8500	15500	16500	17500	15800	16800	17800
	毛重 Cross weight		kg	1500	1650	1950	3000	6000	7250	9700	9700	17500	19600	19500	17800	18800	19800

This information is for reference only.The manufacturer reserves the right to change the design,specifications and construction at any time.

1-3 KGS-52 HIGH PRECISION SURFACE GRINDER



Main structure

All main structure including machine base, column, saddle, slides, etc are made of high quality casts iron, applied finite element method to the analysis of casting optimization, to achieve high stability, rigidity and avoid deformation.



Spindle

All spindles are completed designed, developed and tested by our experienced and skilled engineers over years in laboratory environment.

Conducted with preloading treatment, flange type spindle is supported by high precision class angular contact ball bearings #CP4, to provide a consistent preload during operation, and minimize spindle runout error of 2 micro. Providing low noise and vibration, the most stability and long, trouble - free service.

X axis mechanism

M1: Adopted double ball guides to ensure simple operation

WM1: Supported by guide-ways that are laminated with Turcite - B hand scrapped, to ensure the smoothest movement and reduce frictional resistance under heavy duty load.

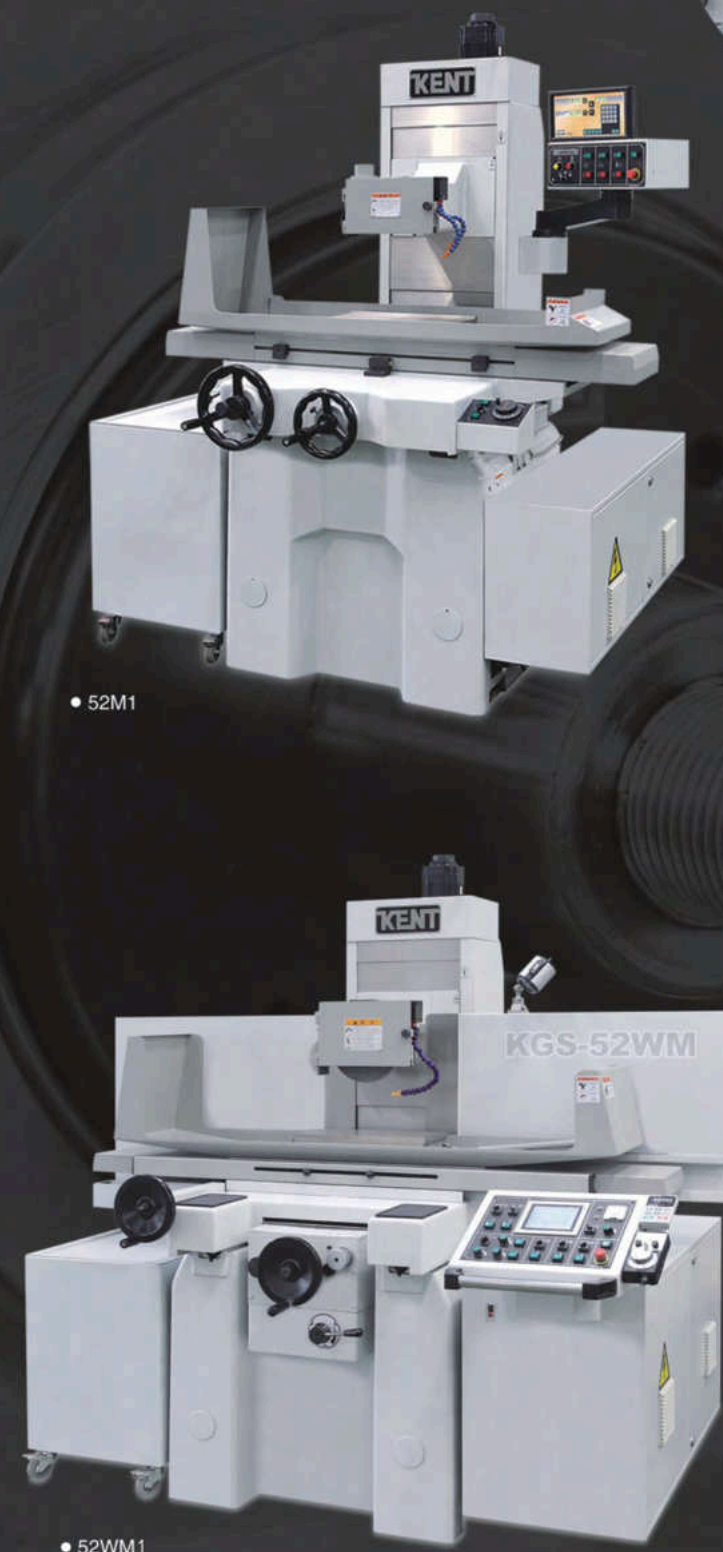


Micro down-feed mechanism

Perfect combination of SP - class super precision slides, C3-grade ball screw, driven by servo motor allows micro - feed of 1 micro.

Optical linear scales and handy manual pulse generator provide accurate movement; easy to learn and operate; suitable for high - precision cutting request.

Machining Accuracy
Minimum vertical micro-feed: 1μ
Depth of Parallelism: 0.002/500×200 mm



• 52M1

• 52WM1



MACHINE COLUMN

In a sturdy structure, double layers type for higher rigidity and torsion resistance that ensures machine stability and accurate movement.



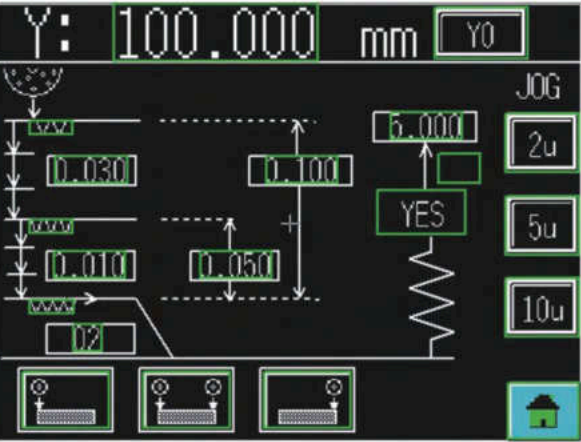
SAFETY PROTECTION DEVICE (OPTIONAL)

Safety guard assemble is available with semi enclosure cover and sliding door to protect the operator against direct contact with machinery during operation.

Simple Graphical Human Machine Interface(WM1)

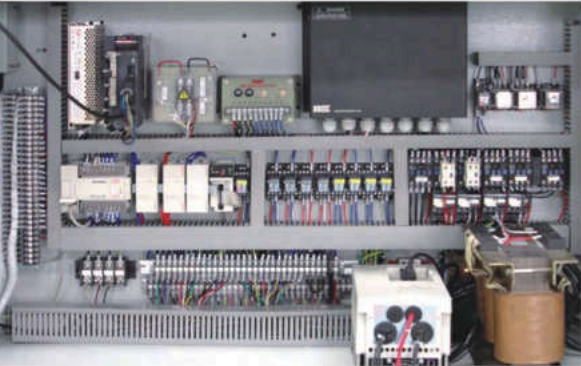
The operation mode adopts a simple interactive human machine interface design, the operation function is clear at a glance. Equipped with high-quality, high-efficiency touch screen, it is possessed with excellent tactility and long service life. The grinding variables can be set by simply touching the screen, and can be applied as a grinding cycle in the basic mode, which is easy to learn and understand.

The control system will store the last grinding cycle. It is easy to achieve repeating the previous operation for cycle grinding by simply pressing the cycle start button to improve production efficiency.



CONTROL UNITS

- Mitsubishi PLC Control system – Japan's well-known brand in electronic machinery; to provide years of reliable and trouble-free operation.
- After-sales service is promptly offered and supported by an extensive Mitsubishi service center network located all over the world
- Independent main electrical cabinet in ergonomic design with every components are well arranged inside, easy to operate and maintenance.



OPERATING PANEL

Operating cabinet in a mobile design that allows operator easily to adjust cabinet's position. Operating panel in an ergonomic design, provides user a friendly and convenient operating environment.



● 52M1



● 52WM1

Item	Specification		Unit	KGS-52M1	KGS-52WM1
Capability	Work Surface Size(Length X Width)		mm	500 x 200	500 x 200
	Maximum Workbench Movement	Left and Right	mm	550	550
		Back and Forth	mm	220	220
	Maximum Distance from Work Surface to Spindle Center		mm	450 (575 OP.)	450 (575 OP.)
	Maximum Weight Capacity of Workbench(Including Disk)		kgs	150	150
Workbench and Dielectial Feed	Speed of Workbench		m/min	Manual operation	5 – 25
	Dielectial Handwheel Feed	1 Grid	mm	0.02	0.02
		1 Turn	mm	5	5
	Automatic Dielectial Feed		mm	–	0.1 – 10
	Dielectial Fine-Tuning Feed	1 Grid	mm	–	0.002
		1 Turn	mm	–	0.2
Vertical Feed	Vertical MPG Handwheel Feed	1 Grid	mm	0.001 / 0.01 / 0.1	0.001 / 0.01 / 0.1
		1 Turn	mm	0.1 / 1 / 10	0.1 / 1 / 10
	Automatic Vertical Feed Rate		mm	–	0.001 – 0.099
	Fast Vertical Movement		mm/min	300	300
Grinding Wheel Spindle	Grinding Wheel Size		mm	φ 205 x 18 x φ 31.75	φ 250 x 25 x φ 50.8
	Rotate Speed of Spindle		r.p.m	2850	2850
Motor	Spindle Motor		HP	3	5
	Vertical Drive Motor		kW	1(AC Servo)	1(AC Servo)
	Dielectial Drive Motor		W	–	40
	Hydraulic Motor		HP	–	2
Dimension & Weight	Machine Height		mm	1920	1920
	Floor Space		mm	2450 x 1800	2450 x 1800
	Net Weight/Gross Weight		kgs	1400 / 1500	1600 / 1750

This information is for reference only.

The manufacturer reserves the right to change the design, specifications and construction at any time.

1-4 KGS-WM PROGRAMMABLE PRECISION SURFACE GRINDER



• KGS-510WMA1



• KGS-1020WMA2

CONTROL UNITS

Adopted Japan's well-known brand in electronic machinery-Mitsubishi: PLC Control system, powered by AC servo motor

MICRO DOWNFEED MECHANISM

Perfect combination of C5- grade high precision ball screw, driven by Mitsubishi servo motor and handy manual pulse generator (MPG) allows micro - feed of 1 micro.

OPERATING PANEL

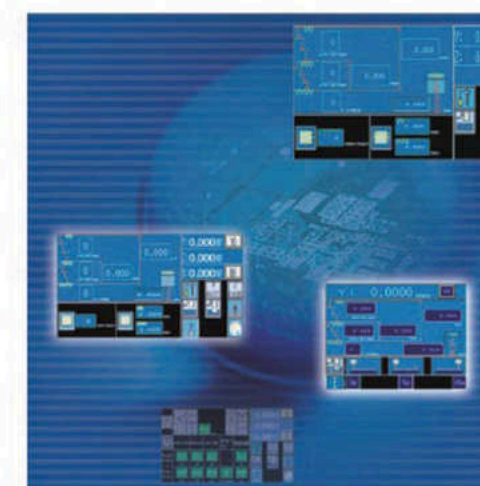
Operating cabinet in a mobile design that allows operator easily to adjust cabinet's position. Operating panel in an ergonomic design, provides user a friendly and convenient operating environment.



• KGS-510WM1

HUMAN MACHINE INTERFACE

Color 6 -inch touch screen LCD with intuitive icons and menu - driven interface, easy to read and simple to operate



• KGS-52WM1

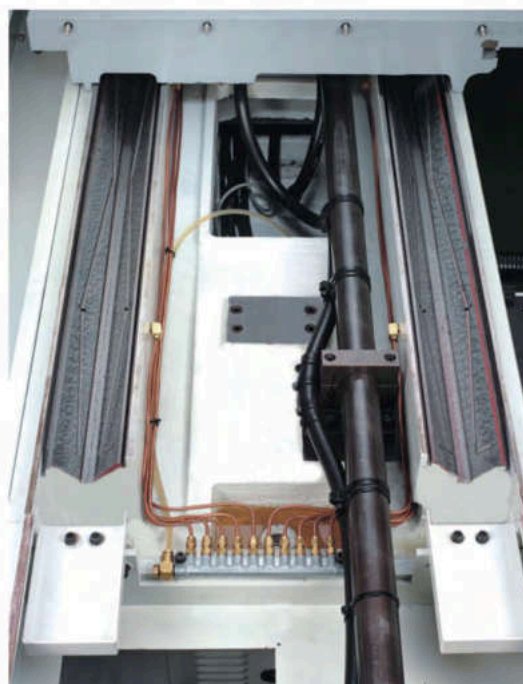


1-5 KGS-HT HIGH PRECISION SURFACE GRINDER



FLANGE TYPE SPINDLE

- All spindles are completed designed, developed and tested by our experienced and skilled engineers over years in laboratory environment.
- Conducted with preloading treatment, flange type spindle is supported by high precision class angular contact ball bearings #CP4, to provide a consistent preload during operation, and minimize spindle runout error of 2 micro.
- Providing low noise and vibration, the most stability and long, trouble - free service.



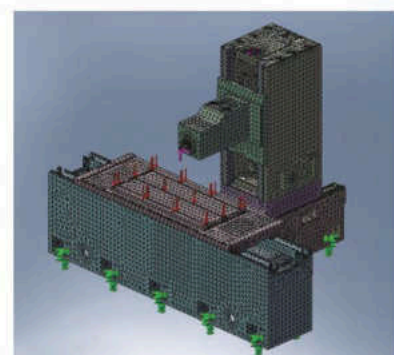
Full-Supported Workbench and Double-V Structure

A full-supported double-V structure design is adopted to the workbench. When performing side-to-side movement, even in the extreme position of the workbench, it is capable to ensure the full contact and support of the bed to the workbench. Equipped with Turcite-B and manual scraper, the damping coefficient of the workbench is reduced under the load condition to ensure the stable operation and grinding accuracy of the workbench.



HYDRAULIC UNIT

Independent hydraulic unit to eliminate influence of temperature raise and vibration on the machine. The special design of hydraulic flow valve to guarantee machine stable operation with speed range of 3-25 m/min.

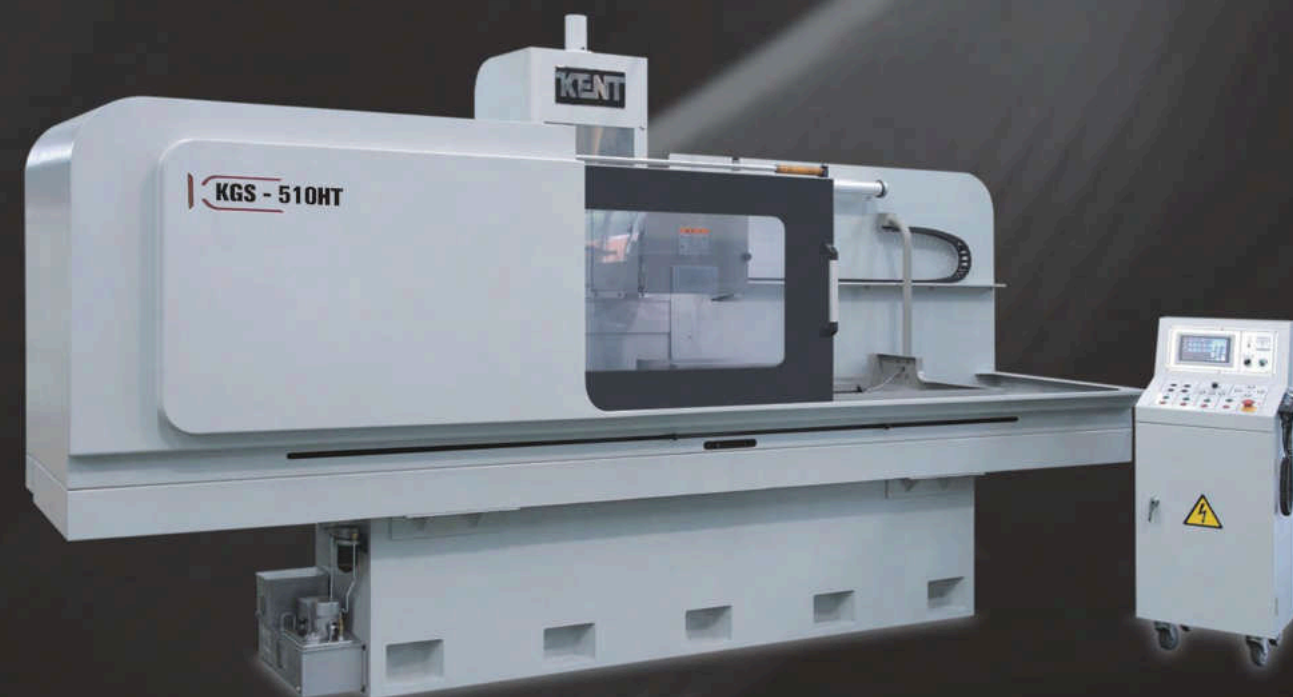


MAIN STRUCTURE

All main structure including machine base, column, saddle, slides, etc are made of high quality cast iron, applied finite element method to the analysis of casting optimization, to achieve high stability, rigidity and avoid deformation.



• KGS-715HT



• KGS-510HT



MACHINE COLUMN

In a sturdy structure, double layers type for higher rigidity and torsion resistance that ensures machine stability and accurate movement.



OPERATING PANEL

Operating cabinet in a mobile design that allows operator easily to adjust cabinet’s position. Operating panel in an ergonomic design, provides user a friendly and convenient operating environment.



CONTROL UNIT

- Mitsubishi PLC Control system – Japan’s well-known brand in electronic machinery; to provide years of reliable and trouble – free operation.
- After – sales service is promptly offered and supported by an extensive Mitsubishi service center network located all over the world
- Independent main electrical cabinet in ergonomic design with every components are well arranged inside, easy to operate and maintenance.



LUBRICATION SYSTEM

Automatic lubrication system guarantees to properly supply lubricant to guide ways, screws, and other key parts on time.

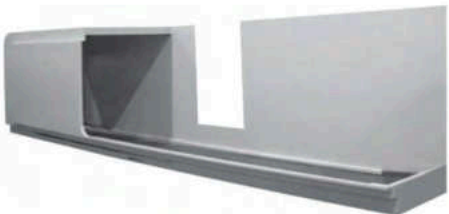


TABLE DRESSER

Automatic wheel dresser is mounted on right side of table; driven by servo motor; able to manually operate by MPG or programmably operate.

SAFETY PROTECTION DEVICE

Safety guard assemble is available with semi enclosure cover and sliding door to protect the operator against direct contact with machinery during operation. Full enclosure cover is optional.



7.MICRO DOWN FEED MECHANISM

Perfect combination of SP – class super precision slides, C3- grade ball screw, driven by servo motor allows micro – feed of 1 micro.



HUMAN MACHINE INTERFACE

- Color 10.4 –inch touch screen LCD with intuitive icons and menu – driven interface, easy to read and simple to operate that allows the operator a wide range of grinding programs and control features. Grinding cycles include: Plane, Flank, and Gully modes.
- The last parameter settings are always retained in the memory that allows user easily to repeat cycle by only one simple pressing.

規格 SPECIFICATIONS			單位 Unit	24-HT	408-HT	510-HT	612-HT	715-HT	820-HT
能力 Capacity	工作台面積 Table working area		mm	400x200	800x400	1000x500	1200x600	1500x700	2000x800
	左右最大移動量 Longitudinal travel		mm	550	1200	1400	1600	1900	2400
	前後最大移動量 Cross feed travel		mm	230	440	540	640	740	840
	工作台面至主軸中心最大距離 Distance from spindle center to table		mm	540	600				850
	工作台最大承受重量 (含電夾) Table load including magnetic chuck		kgs	250	800	1000	1200	1400	2300
工作台& 前後進給 Table & Cross feed	工作台T型槽 T-slot		mm x N	14x1	16x3	16x3	16x3	16x3	18x3
	工作台速度 Longitudinal table speed		m/min	2~30					3~30
	前後手輪進刀設定	1格(1 gra.)	mm	0.001/0.01					
	Cross feed on hand wheel	1圈(1 rev.)	mm	0.1/1					
	前後快速移動 Power cross feed		mm/min	2000					
砂輪主軸 Grinding Wheel	砂輪尺寸 Wheel dimension		mm	ψ255x25xψ50.8	ψ406x50xψ127				ψ508x80xψ203.2
	主軸轉速 Spindle speed		rpm	2500	1500	1500	1500	1500	1200
上下進給 Vertical movement	上下手輪進刀 Vertical on hand wheel	1格(1 gra.)	mm	0.001/0.01					
		1圈(1 rev.)	mm	0.1/1					
	上下快速移動 Power head feed		mm/min	750					
馬達 Motor	主軸馬達 Spindle motor		hp(kW)	5(3.75)	10(7.5)	15(11.25)			30(22.5)
	上下驅動馬達 Power elevation motor		kW	1					1.5
	油壓馬達 Hydraulic motor		hp(kW)	2(1.5)	3(2.25)	5(3.75)	7.5(5.5)		10(7.5)
	前後驅動馬達 Cross feed motor		kW	1					1.5
尺寸/重量 Dimension & Weight	機器高度 Mechine height		mm	2100	2700				2900
	佔地面積 Floor space		mm	2540x2400	3800x3000	4320x3100	4720x3310	5320x3410	7000x4200
	淨重/毛重 Net weight/Cross weight		kgs	2000/2200	4500/5500	5500/6000	6750/7750	9700/10700	13000/14000

This information is for reference only.The manufacturer reserves the right to change the design,specifications and construction at any time.

1-6 KGS-CNC2/CNC3 PRECISION CNC SURFACE GRINDER

MAIN STRUCTURE

All main structure including machine base, column, saddle, slides, etc are made of high quality cast iron, applied finite element method to the analysis of casting optimization, to achieve high stability, rigidity and avoid deformation. Machine column is double layers type for higher rigidity and torsion resistance that ensures machine stability and accurate movement.



CNC2 : MECHANISM OF THREE AXES

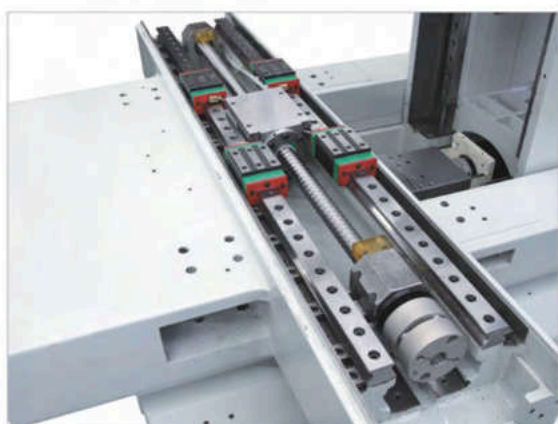
Y, Z axes adopt a perfect combination of Precision Heavy – Duty Linear Guides, C3- grade high precision ball screw, driven by FANUC servo motor that allows micro – feed of 1 micro. High stiffness, high precision accuracy, and excellent responsiveness. X axis driven by hydraulic.

SPINDLES

Spindles are completed designed, developed and tested by our experienced and skilled engineers over years in laboratory environment by materials selected from well – known suppliers in machinery industry. In a sturdy rigid – design and waterproof labyrinth mechanism, column adopts flange type spindle, V3-grade spindle motor and double layer type column that ensures accurate movement, high precision and high efficiency.

CNC3 : MECHANISM OF THREE AXES

Three axes mechanism adopt a perfect combination of Precision Heavy – Duty Linear Guides, C3- grade high precision ball screw, driven by FANUC servo motor that allows micro – feed of 1 micro. High stiffness, high precision accuracy, and excellent responsiveness.



HYDRAULIC PROPORTIONAL VALVE (CNC2)

Hydraulic system equipped proportional valve is standardly designed with air cooled type oil chiller in order to dissipate heat and maintain normal temperature of hydraulic oil; ensure machine service stability and accuracy. Hydraulic unit standardly equipped dust cover in order to prevent dust, oil mist, sludge, in order to keep oil always clean.



• KGS-24CNC2



• KGS-24CNC3

LUBRICATION SYSTEM.

Lubrication system is separated into thin oil supply unit and grease supply unit. Thin oil supply unit provides continuous lubrication at X axis sliding guide ways, in order to minimize friction and wear as well as optimize bearing and machinery service life. The unit is also defines as an environmentally friendly and cost – effective solution as having the ability to filter dirt out of oil and circulate lubrication oil. Besides, the lubrication unit is connected with alarm system that able to generate an alarm when oil amount is under low level (CNC2).



Grease supply unit in simple design provide appropriate lubrication quantity at linear guide ways, ball-screw that ensures machinery service life (CNC 3).

FANUC CONTROLLER.

Adopted FANUC 0i-MD controller with more simplify circuit diagram. Equipped with standard cycle presets: Plane grinding, Flank grinding, Gully grinding, automatic dressing, compensation cycles, etc. Easy to learn and simple to operate.

NEW – GENERATION CONTROLLER.

Adopted new – generation controller, powered by Mitsubishi servo motor; more simplify circuit diagram. Equipped with standard cycle presets: Plane grinding, Flank grinding, Gully grinding, automatic dressing, compensation cycles, etc. Easy to learn and simple to operate.

SAFETY PROTECTION GUARD.

Semi enclosure guard cover is equipped with anti – splash protective sheet metal for CNC2 series, in order to protect operators against direct contact with machinery during operation.

TOUCH SCREEN LCD

Color 8 –inch touch screen LCD with intuitive icons and useful menu – driven interface that allows operators quickly learn and easily operate at firs time. Parameters are always retainedin the Flash memory storage system RAM then no worries of data loss due to power failure.



TYPICAL PROCESSING MODE

Applied Microsoft WinCE interface. Typical processing modes such as Plane grinding, Gully grinding, unequal – depth grooving, etc are available with intuitive icons. Users could easily start cycles by key – in parameters. Automatic dressing and compensations could generate during cutting process.

OPERATION CABINET.

Centralized operation system in only one mobile cabinet that allows operator easily to adjust cabinet’ s position upon to operation demand. Ergonomic operating panel provides user a friendly and convenient operating environment.

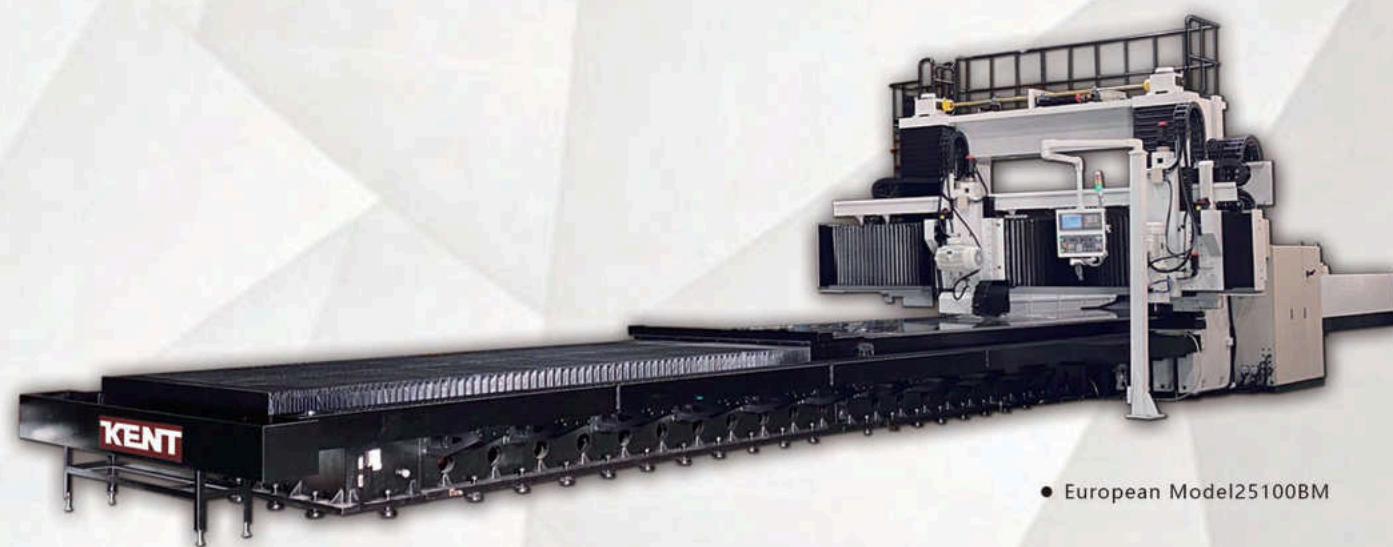


Cutting Shape Selection

Graph Dialog

Grinding Processing Track														
		Face Grinding			Side Grinding			Groove Grinding						
		Unidirectional feed Z-type feed Bidirectional feed			Unidirectional feed Bidirectional feed			Unidirectional feed Bidirectional feed						
能力 Capacity	規格SPECIFICATIONS	单位 Unit	24CNC2	24CNC3	408CNC2	408CNC3	510CNC2	510CNC3	612CNC2	612CNC3	715CNC2	715CNC3	820CNC2	820CNC3
	工作台面積 Table working area	mm	400x200		800x400		1000x500		1200x600		1500x700		2000x800	
	左右最大移動量 Longitudinal travel	mm	550		1200		1400		1600		1900		2400	
	前後最大移動量 Crossfeed travel	mm	230		440		540		640		740		840	
	工作台面至主軸中心最大距離 Distance from spindle center to table	mm	540	450	600								850	
工作臺& 前後進給 Table & Cross feed	工作臺最大承受重量 (含電夾) Table load including magnetic chuck	kgs	250		800		1000		1200		1400		2300	
	工作臺T型槽 T-slot	mm x N	14x1				16x3						18x3	
	工作臺速度 Longitudinal table speed	m/min	2~30	G00:25 G01:0.01~20	2~30	G00:25 G01:0.01~20	2~30	G00:25 G01:0.01~20	2~30	G00:25 G01:0.01~20	2~30	G00:25 G01:0.01~20	3~30	G00:25 G01:0.01~20
	左右手輪進刀設定 Cross feed on hand wheel	1格(1 gra) mm	0.001/ 0.01		0.001/ 0.01		0.001/ 0.01		0.001/ 0.01		0.001/ 0.01		0.001/ 0.01	
	前後快速移動 Power cross feed	1圈(1 rev) mm	0.1/1		0.1/1		0.1/1		0.1/1		0.1/1		0.1/1	
砂輪主軸 Grinding Wheel	前後快速移動 Power cross feed	mm/time	2000											
	前後手輪進刀設定 Cross feed on hand wheel	1格(1 gra) mm	0.001/0.01/0.1											
	上下手輪進刀設定 Vertical on hand wheel	1圈(1 rev) mm	0.1/1/10											
	上下快速進給 Power head elevation	mm/min	750											
	砂輪尺寸 Wheel dimension	mm	φ255x25xφ50.8				φ406x50xφ127						φ508x80xφ203.2	
上下進給 Vertical movement	主軸轉速 Spindle speed	rpm	1000~4500						1000~3000					
	上下手輪進刀設定 刀設定 Vertical on hand wheel	1格(1 gra) m	0.001/0.01/0.1											
	前後快速移動 Power cross feed	mm/time	2000											
	前後手輪進刀設定 Cross feed on hand wheel	1圈(1 rev) mm	0.1/1/10											
	砂輪主軸 Grinding Wheel	mm	φ255x25xφ50.8				φ406x50xφ127						φ508x80xφ203.2	
馬達 Motor	主軸馬達 Spindle motor	hp (kW)	5 (3.75)		10 (7.5)		15 (11.25)		30 (22.5)					
	上下驅動馬達 Power elevation motor	hp (kW)	2 (1.5)		3 (2.25)		5 (3.75)		7.5 (5.5)		10 (7.5)			
	前後驅動馬達 Cross feed motor	hp (kW)	2 (1.5)		3 (2.25)		5 (3.75)		7.5 (5.5)		10 (7.5)			
	左右驅動馬達 Cross feed motor	hp (kW)	2 (1.5)		3 (2.25)		5 (3.75)		7.5 (5.5)		10 (7.5)			
	油壓馬達 Hydraulic motor	hp (kW)	2 (1.5)		3 (2.25)		5 (3.75)		7.5 (5.5)		10 (7.5)			
尺寸/重量 Dimension &Weight	機器高度 Machine height	mm	2100		2700		2700		2700		2900			
	占地面積 Floor Space	mm	2540x2400		3800x3000		4320x3100		4720x3310		5320x3410		7000x4200	
	淨重/毛重 Net weight/ Cross weight	kgs	2000/2200		4500/5500		5500/6000		6750/7750		9700/10700		13000/14000	
	砂輪主軸 Grinding Wheel	mm	φ255x25xφ50.8				φ406x50xφ127						φ508x80xφ203.2	
	主軸轉速 Spindle speed	rpm	1000~4500						1000~3000					
馬達 Motor	上下手輪進刀設定 刀設定 Vertical on hand													

1-7 KGP DOUBLE COLUMN SURFACE GRINDER



• European Model25100BM



• European Model1020HT



TABLE GUIDEWAYS.

In a sturdy rigid structure, table guideways are Turcite – B coated and precisely hand scrapped to provide a smooth movement, ensure operation consistence and accuracy.



CONTROLLER

Adopted servo motor and Mitsubishi PLC controller with more simplify circuit diagram that allows users easier for operating and maintenance.

Human machine interface in simple design with intuitive icons and useful menu – driven interface that allows operators quickly learn and easily operate.

Automatic grinding cycle able to pre-set parameters for rough, semi-fine and fine grinding. Parameters: cutting amount, infeed times, spark-out time, etc.

tion consistence and accuracy.

FINITE ELEMENT ANALYSIS

All major structures such as table, sliding guideways, main blocks, column, etc are made of high quality grade casts iron, applied finite element method to the analysis of casting optimization, to achieve high stability, rigidity and avoid deformation. With outstanding rigidity, machine able to deliver high accuracy and smooth even in heavy cutting.

Horizontal and Vertical Drive Design of the Hard Rail Structure(D, LB series)

The horizontal and vertical guide rails of the horizontal and vertical grinding adopt hard rails, and the surface hardness is above HRC50, which is suitable for heavy cutting. The up-down of horizontal axis and up-down of vertical axis are driven by precision ball screws and AC servo motors, with large torque to ensure the accuracy of the feed.



Horizontal and Vertical Drive Design of Linear Guide Rail structure(L, HT series)

High-precision ultra-loaded linear slides are applied for the horizontal and vertical shafts. Its high load and low wear can ensure the minimum amount of movement and ensure the accuracy of long-term application.



規格 SPECIFICATIONS		單位 Unit	KGP - 1224L	KGP - 1232L	KGP - 1524L	KGP - 1532L	KGP - 1542L	KGP - 2032L	KGP - 2042L	KGP - 2052L	
能力 Capacity	工作台面積 Table working area	mm	1200 x 2400	1200 x 3200	1500 x 2400	1500 x 3200	1500 x 4200	2000 x 3200	2000 x 4200	2000 x 5200	
	工作台最大移動量 Longitudinal travel	mm	2600	3500	2500	3600	4600	3600	4600	5600	
	門柱最大距離 Distance between columns	mm	1400			2000			2500		
	工作台載重(含電夾) Table load including magnetic chuck	kgs	3000	4000	4500	6000	8000	9000	12000	15000	
工作台 Table	工作台移動速度 Table speed	mm/min	5~25								
	前後快速移動量 Rapid crossfeed	mm/min	10~2500								
	前後自動進給量 Automatic crossfeed	mm/次	0.002~50								
	前後自動連續進給量 Automatic continuous crossfeed	mm/min	10~2500								
橫磨頭 Horizontal head	工作台至主軸中心最大距離 Spindle center to table	mm	950			1150					
	上下快速移動量 Power head feed	mm/min	2~500								
	上下寸動量 Down feed momentum	mm/次	0.002~0.010								
	上下自動進刀量 Auto down feed increment	mm/次	0.002~0.099								
	上下自動設定次數 Auto down feed setting times	次	0~9999								
	砂輪尺寸(外徑x寬度x內徑) Wheel diameter	mm	φ510 x 100 x φ203.2								
	橫磨頭主軸馬達 Spindle motor	hp	30								
	主軸轉速 Spindle speed	50Hz	rpm	1200							
		60Hz	rpm	1440							
		前後行程 Cross travel	mm	1400			1600			2100	
尺寸/重量 Dimension & Weight	淨重 Net weight	kgs	24000	28000	32000	35000	38000	41000	44000	47000	
	毛重 Cross weight	kgs	28000	30000	36000	39000	42000	45000	48000	51000	
	佔地面積 Dimension	mm	8700 x 3400 x 4100	12300 x 3400 x 4100	10500 x 4600 x 4500	12500 x 4600 x 4500	14500 x 5375 x 4500	12500 x 5375 x 4500	14500 x 5375 x 4500	16100 x 5375 x 4500	

This information is for reference only. The manufacturer reserves the right to change the design, specifications and construction at any time.

規格 SPECIFICATIONS		單位 Unit	1524LB	1532LB	1542LB	1560LB
能力 Capacity	工作台面積 Table working area	mm	1500x2400	1500x3200	1500x4200	1500x6000
	工作台最大移動量 Longitudinal travel	mm	2500	3300	4300	6300
	門柱最大距離 Distance between columns	mm	1800			
	工作台承重(含電夾) Table load including magnetic chuck	kg	6000	8000	10000	14000
工作台 Table	工作台速度 Table speed	m/min	5~25			
	前後快速移動 Rapid crossfeed	mm/min	10-2500			
	前後最小進給設定值 Min. crossfeed increment	mm	0.001			
	工作台至主軸中心最大距離 Spindle center to table	mm	750			
橫軸 Horizontal head	上下速度 Elevation speed	mm/min	2~500			
	上下最小進給設定值 Min. downfeed increment	mm	0.001			
	砂輪尺寸 Wheel diameter	mm	ø510x100xø203			
	主軸轉速 Spindle speed	50HZ r.p.m	840			
		60HZ r.p.m	1008			
	主軸馬達(選配件) Spindle motor	hp(kW)	20(15)			
	前後行程 Cross travel	mm	1750			
尺寸/重量 Dimension & weight	淨重 Net weight	kg	32000	36000	41000	51000
	毛重 Gross weight	kg	36000	40000	45000	55000
	佔地面積 Space occupied	mm	9430x4800 x3800	11030x4800 x3800	13430x4800 x3800	16030x4800 x3800

This information is for reference only. The manufacturer reserves the right to change the design, specifications and construction at any time.

項目 Item		單位 Unit	1015HT	1020HT	1030HT	1520HT	1530HT	1540HT	2030HT	2040HT	2050HT
能力 Capacity	工作台面積 Table working area	mm	1000x1500	1000x2000	1000x3000	1500x2000	1500x3000	1500x4000	2000x3000	2000x4000	2000x5000
	工作台最大移動量 Longitudinal travel	mm	2100	2600	3600	2500	3600	4600	3600	4600	5600
	門柱最大距離 Distance between columns	mm	1250			2000			2500		
	工作台承重(含電夾) Table load including magnetic chuck	kgs	2500	3000	4500	4500	6000	8000	9000	12000	15000
工作台 Table	工作台速度 Table speed	m/min	5~30			5~25					
	前後快速移動 Rapid crossfeed	mm/min	4000								
	前後最小進給設定 Min. crossfeed increment	mm	0.001								
	工作台至主軸中心最大距離 Spindle center to table	mm	950			1150					
橫軸 Horizontal head	上下最小進給設定值 Min. downfeed increment	mm	0.001								
	上下快速移動 Power head feed	mm/min	2000								
	砂輪尺寸 Wheel diameter	mm	φ510x100xφ203.2								
	主軸轉速 Spindle speed	rpm	1000~3000								
	橫軸主軸馬達(選配件) Spindle motor	hp(kW)	30/140 (22.5/30)			30/140 (22.5/30)					
	前後行程 Cross travel	mm	1100			1600			2100		
重量 Weight	淨重 Net weight	kgs	18000	20000	23000	32000	35000	38000	41000	44000	47000
	毛重 Gross weight	kgs	21000	23000	26000	36000	39000	42000	45000	48000	51000
佔地面積 Dimrension	單軸(長x寬x高) Single (Length x Width x Height)	mm	9000x4200 x4050	10000x4200 x4050	12000x4200 x4050	10500x4600 x4500	12500x4600 x4500	14500x4600 x4500	12500x5375 x4500	14500x5375 x4500	16100x5375 x4500

This information is for reference only. The manufacturer reserves the right to change the design, specifications and construction at any time.

SPECIFICATIONS 規格			Unit 單位	1524D	1532D	1542D	2032D	2042D	2050D	25100BM	
能力 Capacity	工作台面積 Table working area		mm	1500x2400	1500x3200	1500x4200	2000x3200	2000x4200	2000x5000	2500x10000	
	工作台最大移動量 Longitudinal travel		mm	2500	3300	4300	3500	4500	5500	11000	
	門柱最大距離 Distance between columns		mm	2000			2500		3000		
	工作台承重(含電夾) Table load including magnetic chuck		kgs	4500	6000	8000	9000	12000	15000	40000	
工作台 Table	工作台速度 Table speed		m/min	5~25							
	前後快速移動 Cross feed on hand wheel		mm/min	2000						1800	
	前後最小進給設定值 Crossfeed increment		mm	0.001							
Horizontal head	工作台至主軸中心最大距離 Spindle center to table		mm	1150						1750	
	上下速度 Elevation speed		mm/min	2~500							
	上下最小進給設定值 Downfeed increment		mm	0.001							
	砂輪尺寸 Wheel diameter		mm	ø510x100xø203.2							ø610x100xø254
	主軸轉速 Spindle speed	50HZ	rpm	1000							
		60HZ	rpm	1200							
	主軸馬達 ⁽¹⁾ (選配件) Spindle motor		hp(kW)	20/ ¹ 30/ ¹ 40(15/ ¹ 22.5/ ¹ 30)							40(30)
	前後行程 Cross travel		mm	1600			2100			3300	
(選配)立軸 (Optional) Vertical head	工作台至主軸中心最大距離 Spindle center to table		mm	840						1750	
	上下速度 Elevation speed		mm/min	2~500							
	上下最小進給設定值 Downfeed increment		mm	0.001							
	旋轉角度(L/R) Swivel(L/R)		Deg	L60°/R60°							
	砂輪尺寸 Wheel diameter		mm	ø355x50xø127							ø405x50xø127
	主軸轉速 Spindle speed	50HZ	rpm	1500							
		60HZ	rpm	1800							
	主軸馬達 ⁽¹⁾ (選配件) Spindle motor		hp(kW)	10/ ¹ 15(7.5/ ¹ 11)							
尺寸/重量 Dimension & Weight	前後行程 Cross travel		mm	1600			2100			2900	
	淨重 Net weight		kgs	31000	33000	35000	42000	45000	48000	170000	
	毛重 Gross weight		kgs	35000	37000	39000	46000	49000	52000	200000	
Weight	單軸 Single		mm	10500x4600x4500 12100x4600x4500 14100x4600x4500 11500x5375x4500 13500x5375x4500 15500x5375x4500							
	雙軸 Double		mm	10500x5900x4500 12100x5900x4500 14100x5900x4500 11500x6775x4500 13500x6775x4500 15500x6775x4500 24000x7630x5700							

This information is for reference only. The manufacturer reserves the right to change the design, specifications and construction at any time.

2 KGC- CNC UNIVERSAL CYLINDRICAL GRINDER

MAIN STRUCTURES.

All major structure are made of high-grade cast iron. Machine main base is specially treated, made of a composite materials, Teflon coated, in order to ensure machinery stability, accurate and smooth movement, as well as avoid deformation.

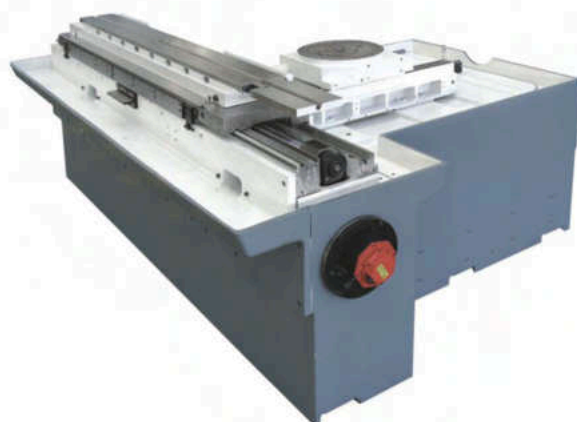


TABLE GUIDEWAYS

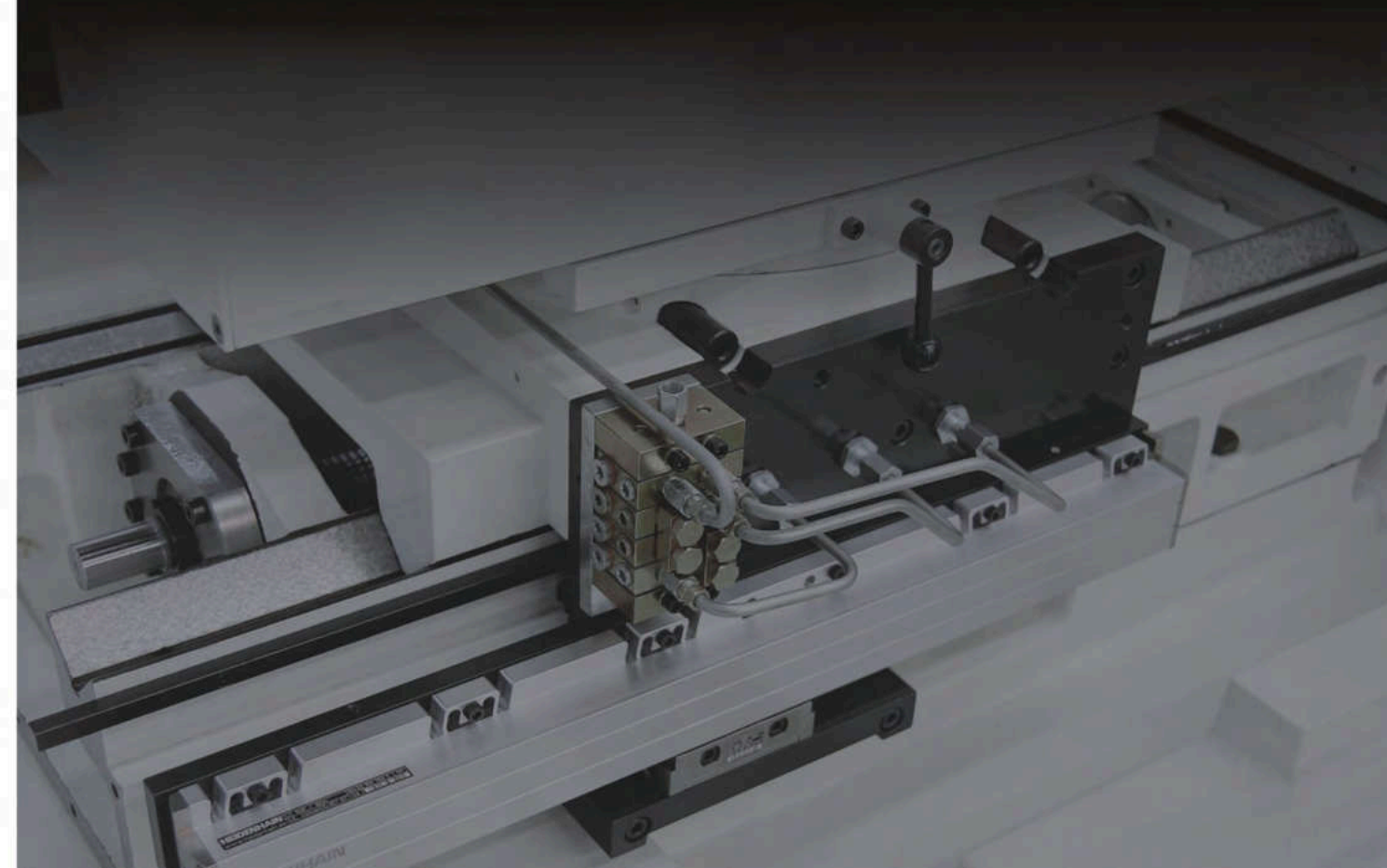
Table guideways are Turcite – B coated, precisely hand scrapped and applied laser inspection method to provide the most operation consistence and accuracy even under heavy duty load. The sturdy rigid design fully supports table load even when the table at the extreme positions.

OPERATION SYSTEM

Z, X and C axes are driven by servo motors powered by precision encoders which allow retained machining positions. Handy manual pulse generator MPG is standardly equipped that deliver accurate movement in X and Z axes. Useful menu – driven interface with variety of operating modes (cutting modes, and dressing mode), easy for operator learn and operate. Automatic wheel compensation is available in dressing function either in manually or automatic mode.



• European 3080CNC

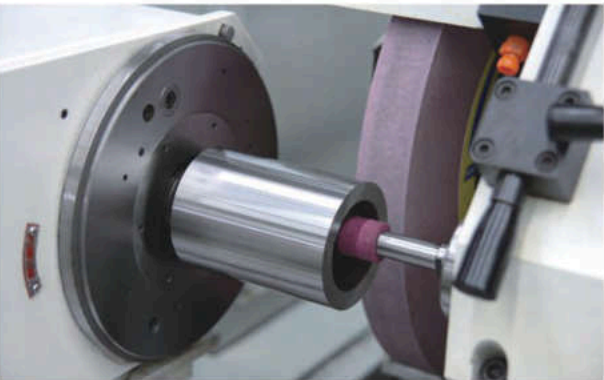


規格 SPECIFICATIONS		單位 Unit	KGC-3060	KGC-3080	KGC-30100
能力 Capacity	工作台最大旋徑 Swing over table	mm	310		
	兩頂心最長距離 Distance between centers	mm	600	800	1000
	研磨最大外徑 Max. grinding diameter	mm	300		
	兩頂心間最大承受重量 Max. work piece weight between centers	kgs	150		
	研磨最高線速度 Max. circumferential speed	m/s	35		
前後 Crossfeed	快速移動 Rapid feed	m/min	8		
	最小移動距離(直徑) Resolution/ in diameter	mm	0.001		
左右 Longitudinal	快速移動 Rapid feed	m/min	10		
	最小移動距離 Resolution	mm	0.001		
	旋轉角度 Swivel angle of table (ccw/cw)	Deg.	11°/ 6°	10°/ 5°	9°/ 5°
砂輪座 Grinding wheel seat	砂輪主軸馬達 Wheel spindle motor	kw	5.6		
	砂輪尺寸 Wheel diameter	mm	Ø405x50xØ127		
	砂輪最小外徑 Min. wheel diameter	mm	Ø290		
內孔研磨 Internal hole grinding (O.P)	砂輪主軸馬達 Wheel spindle m	kw	1.5		
	主軸直徑 Locating bore (spindle OD)	mm	Ø80		
	主軸轉速 Spindle speed	rpm	20000/30000/40000		
頭座 Headstock	主軸轉速 Spindle speed	rpm	0~600		
	頂針 Fitting taper	M.T.	5		
	旋轉角度 Swivel angle (ccw/cw)	Deg	90/30		
	馬達 Motor	kw	0.75		
尾座 Tailstock	伸縮行程 Travel	mm	25		
	頂針 Fitting taper	M.T.	4		
尺寸 Dimension & weight	佔地面積 Floor space	mm	3150x3200	3550x3200	3950x3200
	淨重/毛重 Net weight/Cross weight	kgs	4700/4900	5000/5200	5300/5500

This information is for reference only.
The manufacturer reserves the right to change the design, specifications and construction at any time.

MULTIPLE AXES DESIGN.

There are nine axes in total for various grinding applications. X, Z and C axes: servo axes. B1, B2, B3 and R axes: axial adjustable axes. Besides, axes for grinding wheel height extension and workpiece spindle.



SPINDLE, HEADSTOCK AND TAILSTOCK

All spindles, headstocks and tailstocks are completed designed, developed and assembled by our experienced and skilled engineers over years in laboratory environment, in order to deliver the most stability, accurate movement, as well as low noise and vibration.

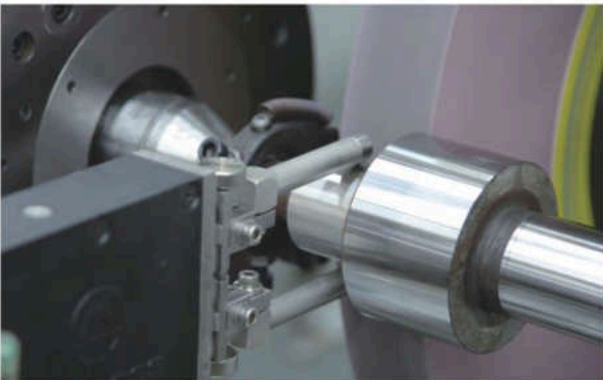
Spindle adopts super-high precision closed angular contact ball bearings with a three-point support design, surrounded by a pneumatic seal to provide machinery rigidity, as well as high vibration damping performance, enhance machine efficiency in micro cutting.

Headstock driven by servo motor that allows the most accurate movement. Tailstock is tailored with a hydraulic locking device to facilitate workpiece adjustment and clamping.



OPTIONAL ACCESSORIES

We offer common optional accessories for KGC series such as: internal spindle, spindle inverter for internal grinding, automatic grinding wheel balance system, outer diameter measurement device, longitudinal positioning measurement device, grinding wheel, flange, internal grinding attachments and spring collet,three - jaw chuck,etc.



PNEUMATIC SEAL

Pneumatic seal that equipped in spindle is from high – precision FESTO – an US leading supplier of pneumatic and electrical automation technology, deliver the most reliability.

SAFETY PROTECTION DEVICE.

Safety guard assemble is available with full enclosure covers that made of high – strength anti – collision. Sliding door connects to IP54 electrical cabinet that allows power failure once door opens.

3 KMV GANTRY PROCESSING CENTER



• European KMV

規格 SPECIFICATIONS			單位 Unit	KMV-22P	KMV-32P	KMV-42P	KMV-52P	KMV-4225	KMV-5225	KMV-6225
行程 Travel	X軸 X axis		m m	2200	3200	4200	5200	4200	5200	6200
	Y軸 Y axis		m m	2000				2700		
	Z軸 Z axis		m m	900				900		
	主軸鼻端至工作台距離 Spindle nose to table		m m	40-940				150-1050		
工作台 Table	工作台尺寸 Table size		m m	2200x1650	3200x1650	4200x1650	5200x1650	4000x2450	5000x2450	6000x2450
	工作台面高度 Table height		m m	850				950		
	T型槽 T slot		m m	22x9x170				22x11x 200+22X 2X150		
	最大荷重 Table Max. load		kgs	6000	8000	9000	12000	15000	18000	20000
主軸 Spindle	主軸轉速 Spindle speed		rpm	30-4500						
	主軸規格 Spindle taper		-	NO.50						
馬達 Motor			kw	18.5/22						
	伺服馬達 Servomotor	X軸 X axis	kw	4			6			
		Y軸 Y axis	kw	7						
		Z軸 Z axis	kw	7						
換刀裝置 A.T.C	刀具數 No. of tools		-	32						
	最大刀具長度 Max. tool length		m m	Ø125×L 350						
	最大刀具重量 Max. tool weight		kgs	15						
	刀具選擇 Tool select		-	Bi-Direction						
本體 achine	機器尺寸 Dimensions		m m	6260x4957x4501	8568x4957x4501	10443x4957x4501	12430x4957x4501	10739x6029x4736	12739x6029x4736	14669x6029x4736
	淨重 Weight		kgs	32500	37370	42500	44000	48000	54000	60000
	佔地面積 Floor space		m m	7000x 5500	9000x5500	11000x5500	13000x5500	11000x6500	13000x 6500	15000x6500
	控制器 Control system		-	FANUC						
	三軸進給率 Axes feed rate		m /m in	X: 10 / Y & Z: 12						
	切削進給率 Cutting feed		m m /m in	1-10000						

This information is for reference only. The manufacturer reserves the right to change the design, specifications and construction at any time.

4 KTM MILLING MACHINE

- - Well heat treatment on X, Y axes, to minimize wear as well as optimize machinery service life.
- - High – precision CP4 grade spindle bearings that ensure low noise and guarantee machinery stability during operation
- - Rigid structure with square-type slides that allows as much contact as possible.



KTM-3H/4H 1270 X 254mm (Dimension of work table)
X/Y/Z 740X350X390



KTM-5H 1370 X 305mm (Dimension of work table)
X/Y/Z 870X360X440



KTM-6H 1370 X 330mm (Dimension of work table)
X/Y/Z 830X330X420

5 KGR ROUND TABLE SURFACE GRINDER

ROLLER BEARING TYPE/HYDROSTATIC TABLE



• European KGR-600

規格 SPECIFICATIONS		單位 Unit	KGR-600(H)	KGR-600	KGR-800(H)	KGR-800	KGR-1000(H)	KGR-1000
能力 Capacity	工作台最大研磨直徑 Max. grinding diameter of table	m m	600		800		1000	
	前後最大移動量 Crossfeed travel	m m	500		600		600	
	工作台面至主軸中心最大距離 Distance from spindle center to table	m m	600		550		550	
	工作台最大承受重量 (含電夾) Table load including magnetic chuck	kgs	700		900		1100	
工作表& Table Cross feed	工作台轉速 Table speed	R.P.M	10~100		5~50		5~50	
	前後手輪進刀 MPG Cross feed on hand wheel	1格(1 gra)	m m		0.001/0.01		0.001/0.01	
		1圈(1 rev)	m m		0.1/1		0.1/1	
	前後自動進給 Auto cross feed per stroke	m m	0.01~25		0.01~25		0.01~25	
	前後快速移動 Power cross feed	mm/min	5~2000		5~2000		5~2000	
砂輪 Wheel	砂輪尺寸 Wheel dimension	m m	φ400x50xφ127		φ400x80x127		φ400x80x φ127	
上下結構 Vertical movement	上下手輪進刀或 MPG Vertical on hand wheel	1格(1 gra)	m m		0.001/0.01		0.001/0.01	
		1圈(1 rev)	m m		0.1/1		0.1/1	
	自動進刀量 Auto down feed increment	m m	0.001~0.099		0.001~0.099		0.001~0.099	
	上下快速進給 Power head elevation	mm/min	5~1500		5~1500		5~1500	
馬達 Motor	油壓馬達 Hydraulic motor	kw	3.7	-	3.7	-	3.7	-
	主軸馬達 Spindle motor	kw*P	11. 25x 4		11. 25x 4		11. 25x 4	
	上下驅動馬達 Power-elevation motor	kw	1		1		1	
	工作台驅動馬達 Table drive motor	kw	2		3.5		3.5	
尺寸/重量 Dimension & Weight	前後驅動馬達 Cross feed motor	kw	1		1		1	
	佔地面積 Floor space	m m	2300x 3 200x 2700		2800x 3500x 2700		2800x 3500x 2700	
	淨重/毛重 Net weight / Cross weight	kgs	5600/ 6100		6000/ 6500		6500/ 7000	

This information is for reference only.
The manufacturer reserves the right to change the design, specifications and construction at any time.