



GREAT

STANDARD ACCESSORIES

1. Grinding wheel	1 Pc.
2. Wheel flange	1 set.
3. Coolant system	1 set.
4. Tools with box	1 set.
5. Balancing arbor	1 Pc.
6. Wheel extractor	1 set.
7. Cooler for hydraulic oil	1 set.
8. Hydro static system	1 set.

OPTIONAL ACCESSORIES

1. Electro-magnetic chuck (Includes rectifier with automatic demagnetizing.)
2. Spare wheel flange
3. Balancing stand
4. Halogen machine lamp
5. Coolant system with paper filter
6. Magnetic dust separator
7. DRO 1 or 2 Axis
8. Inverter for spindle motor
9. Air conditioner for electric box
10. Vertical spindle grinding equipment (GSBH type only)

- PNC is three axis automatic and auto-stop,
Y & Z axis are driven by servo motor with touch screen panel NC control.
- Manufacturer reserves the right to change or improve specifications without notice.
- Column type grinding area 600x1200mm-800x4000mm
- Over arm type grinding area 800x1500mm-1000x4000mm
- Double column type grinding area 1200x2000mm-2200x6000mm

Surface Grinding Machine

GSC series ○ Column Type
GSBH series ○ Over Arm Type



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GSC series

Column Type Precision and Heavy Duty Surface Grinding Machine



GSC Type Base For Cross Feed



FEATURES AND CONSTRUCTION

- Both V-ways of the table are precision ground and hand scraped, they are lubricated by hydrostatic lubrication system for smoother movement and longer machine life. The table moves in the longitudinal axis only while the machines column moves in the cross feed axes. The table is fully supported by the base casting even when at either end position.
- All of the major cast iron components such as the base, table, column, wheel head and saddle are honey comb ribbed and are annealed to relieve stress improving the machine performance and life expectancy.
- The vertical travel of the wheel head is driven by a precision ground ball screw and A.C Servo Motor with encoder. The slide ways are lubricated by an automatic lube system to insure smooth movements.
- Easy setting of the cross travel, for automatic cross feed is on the control panel setting distance and reversal points via the push buttons on the control panel.

POWERFUL PLC TOUCH SCREEN CONTROL

- A precision ballscrew, and A.C. servo motor with encoder, coupled with the PLC touch screen control allows the operator a wide range of grinding programs and control features. Grinding cycles include: Surface, Plunge, and Crisscross modes.
- A color touch screen is easy to read and simple to operate. Both rough and fine feed rates can be set on the touch screen. The wheelhead can be jogged up or down with use of two push button switches.

GSBH series

Over Arm Type Surface Grinding Machine

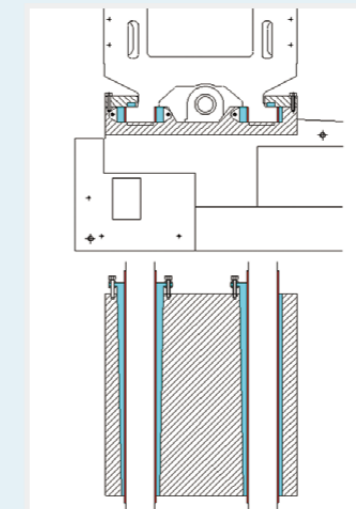


GSBH type over arm ways



Column

Rigid column structure
Honey comb type (Left/Right)
Double layer type (Front / Rear)



Needle Roller Bearings Slideways



Vertical Spindle Grinding Head

(Optional Accessories)

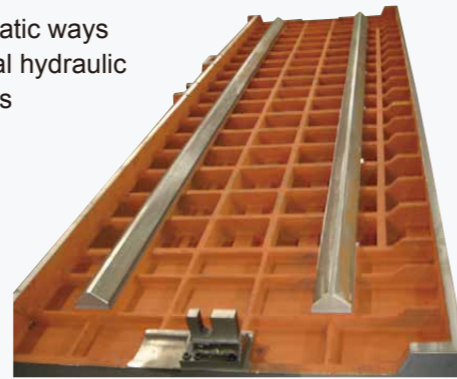


ELECTRIC CONTROL AND TOUCH SCREEN CONTROL PANEL

- Ergonomically designed electrical cabinet or easy maintenance
- State of the art electrical components
- Easy Access to the inverter drive
- Sealed electric cabinet to prevent coolant from entering

Table

Hydrostatic ways with dual hydraulic cylinders



Touch screen panel

TOUCH SCREEN CONTROL PANEL

- The machine is equipped with the PLC touch screen control with easy to learn conversational shop floor language.
- The control has a safety feature that prevents the Hydraulic system from being started without the electromagnetic chuck engaged. This feature will not allow the wheel head to rapid down while the Hydraulic system is in operation.
- Original workpiece zero position is stored in the control memory even if power to the machine is lost.



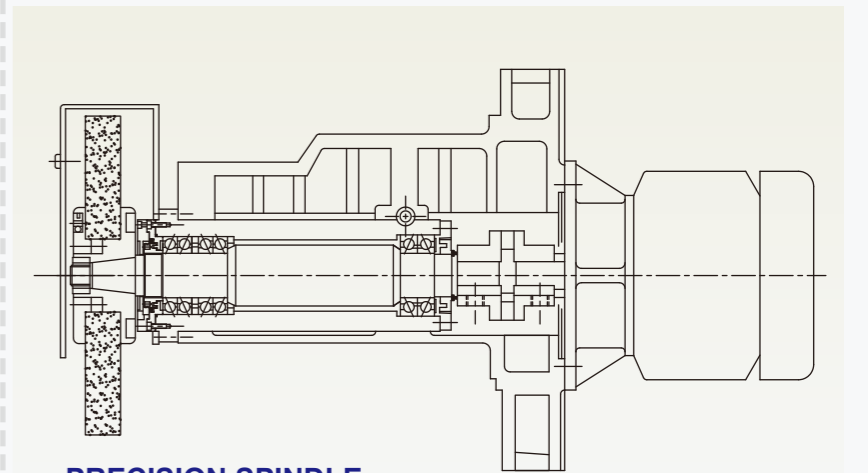
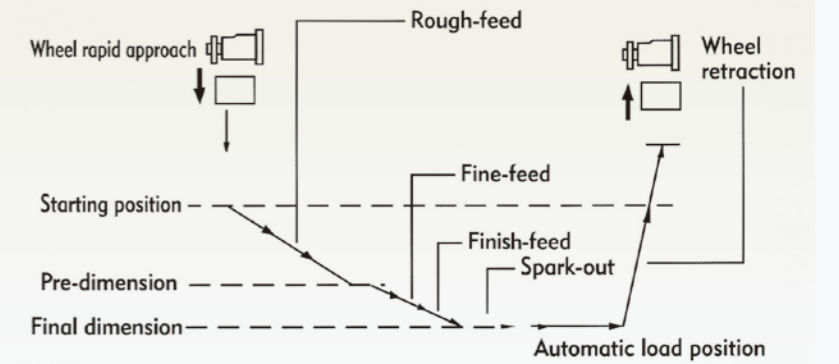
TWO V SLIDE WAYS AND TWO CYLINDERS FOR TABLE



ELECTRIC CABINET WITH HEAT EXCHANGER



AUTOMATIC GRINDING CYCLE



PRECISION SPINDLE

6 Bearings P4 Class (NSK or FAG)
Tristar Coupling

SPINDLE AND WHEELHEAD

The extra rigid designed spindle is suitable for heavy duty grinding. The grinding spindle is supported by six pieces of super precision angular contact, preloaded bearings with permanent lifetime grease lubrication (as shown). The interchangeable spindle is mounted in the rigid wheelhead. It is driven by a dynamically balanced motor via a flexible coupling to eliminate deflection and vibration. This permits an exceptional quality grinding finish.

LUBRICATION SYSTEM

A fully automatic hydrostatic lubrication system is employed on the sideways. An alarm alerts the operator when the oil gets low preventing damage to the machine.



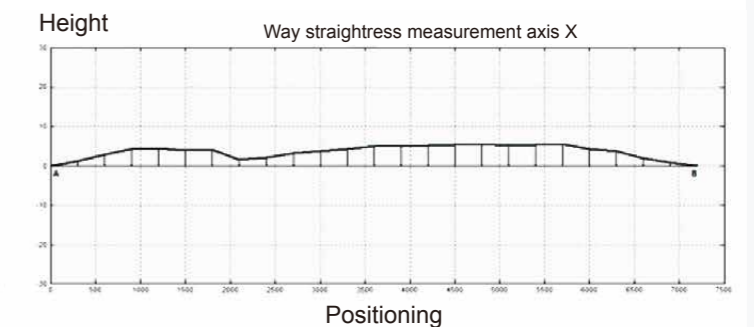
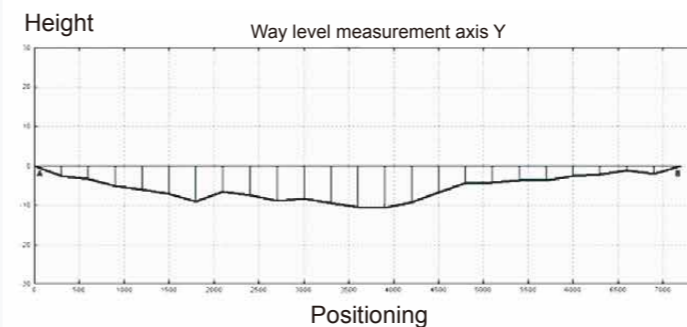
HYDRAULIC TANK SYSTEM

COOLER FOR HYDRAULIC OIL

A separate hydraulic unit is equipped with a cooler system to avoid transference of heat and vibration from hydraulic system to the machine.



BASE AND TABLE TWO V SLIDE WAYS GRINDING WITH LASER CHART



SPECIFICATIONS unit: mm

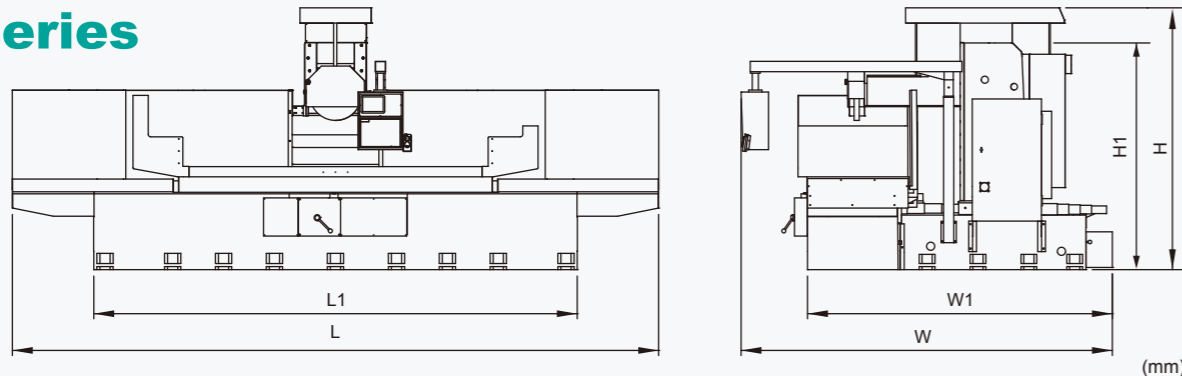
GSC column type surface grinder with PNC auto downfeed and auto stop

GSBH over arm type surface grinder with PNC auto downfeed and auto stop

MODEL		GSC-1260	GSC-1560	GSC-2060	GSC-2560	GSC-3060	GSC-1580	GSC-2080	GSC-2580	GSC-3080	GSC-4080	GSBH-815	GSBH-820	GSBH-825	GSBH-830	GSBH-840	GSBH-1015	GSBH-1020	GSBH-1025	GSBH-1030	GSBH-1040
Table clamping surface (WxL)	W	600					800					800					1000				
	L	1380	1680	2220	2760	3300	1680	2220	2760	3300	4300	1680	2220	2760	3300	4300	1680	2220	2760	3300	4300
Maximum longitudinal travel		1350	1650	2150	2650	3150	1650	2150	2650	3150	4150	1650	2150	2650	3150	4150	1650	2150	2650	3150	4150
Maximum cross travel		660					860					850					1050				
Maximum grinding area	W	600					800					800					1000				
	L	1200	1500	2000	2500	3000	1500	2000	2500	3000	4000	1500	2000	2500	3000	4000	1500	2000	2500	3000	4000
Max. distance between spindle center to table		800/1000 optional					800/1000 optional					800/1000 optional					800/1000 optional				
Down feed per division (MPG)		0.001, 0.005, 0.01					0.001, 0.005, 0.01					0.001, 0.005, 0.01					0.001, 0.005, 0.01				
Down feed per revolution (MPG)		0.1, 0.5, 1					0.1, 0.5, 1					0.1, 0.5, 1					0.1, 0.5, 1				
Auto downfeed by Servo motor		0.001-0.05					0.001-0.05					0.001-0.05					0.001-0.05				
Longitudinal table speed		0.5-32					0.5-32					0.5-32					0.5-32				
Crossfeed intermittent mm/feed		0.1-40					0.1-40					0.1-40					0.1-40				
Crossfeed continuous		0.3-1.5					0.3-1.5					0.3-1.5					0.3-1.5				
Crossfeed per division (MPG)		0.001, 0.005, 0.01					0.001, 0.005, 0.01					0.001, 0.005, 0.01					0.001, 0.005, 0.01				
Crossfeed per revolution (MPG)		0.1, 0.5, 1					0.1, 0.5, 1					0.1, 0.5, 1					0.1, 0.5, 1				
Grinding wheel dimension (ODxDxWidth)		510x127x50/510x127x75 optional					510x127x50/510x127x75 optional					406x127x50/406x127x75 optional					406x127x50/406x127x75 optional				
Spindle speed (50/60HZ) RPM		960/1150					960/1150					1450/1720					1450/1720				
Spindle motor (standard/optional) KW		11/15					11/15					11/18.6					11/18.6				
Hydraulic pump motor KW		5.6	5.6	5.6	5.6	7.46	5.6	5.6	5.6	7.46	7.46	5.6	5.6	5.6	7.46	7.46	5.6	5.6	5.6	7.46	7.46
Total power motor (standard/optional) KW		22.5/26.3	22.5/26.3	22.5/26.3	22.5/26.3	24.4/28.4	22.5/26.3	22.5/26.3	22.5/26.3	24.4/28.4	24.4/28.4	22.5/29.1	22.5/29.1	22.5/29.1	24.4/32	24.4/32	22.5/29.1	22.5/29.1	22.5/29.1	24.4/32	24.4/32
Floor space (HxWxL)	L	4660	5350	6350	7550	8550	5350	6350	7550	8550	11050	5350	6350	7550	8550	11050	5600	6600	7800	8800	11300
	W	3180					3650					2885					3085				
	H (standard/optional)	2460/2660					2610/2810					2800/3000					2800/3000				
Net weight(approx) KGS		9000	9800	10900	12000	13200	11300	12500	13700	15100	17700	12000	13200	14400	16000	19100	13500	14700	15900	17500	20500
Chuck weight KGS		430	540	730	910	1080	710	940	1180	1410	1900	710	940	1180	1410	1880	880	1180	1470	1750	2300
Maximum workpiece on chuck KGS		1200	1500	1700	1900	2100	1600	1800	2000	2200	2500	1500	1800	2000	2200	2500	1700	2000	2300	2600	2900

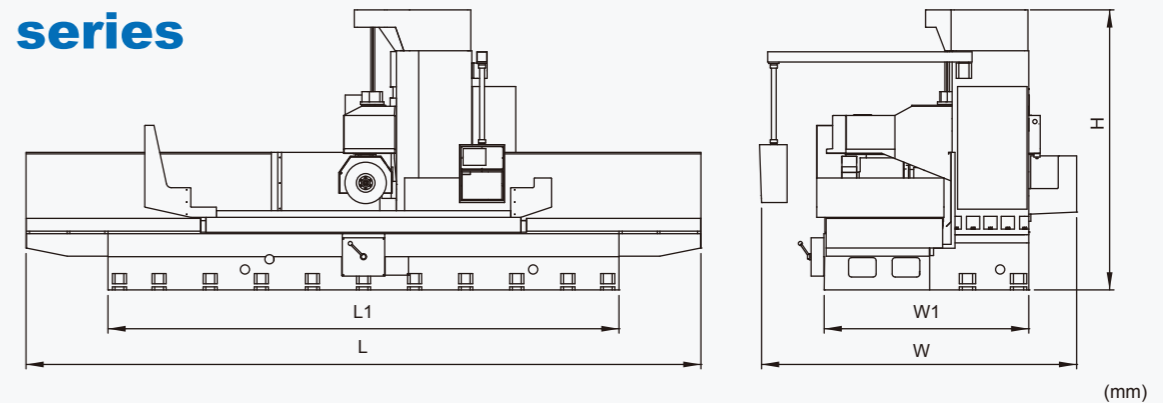
Dimension

GSC series



Model	GSC-1260	GSC-1560	GSC-2060	GSC-2560	GSC-3060	GSC-1580	GSC-2080	GSC-2580	GSC-3080	GSC-4080
L	4660	5350	6350	7550	8550	5350	6350	7550	8550	11050
L1	3750	4370	5370	6370	7370	4370	5370	6370	7370	9370
W	3180					3650				
W1	2515					2995				
H	2460/2660(optional)					2610/2810(optional)				
H1	2270/2470(optional)					2270/2470(optional)				

GSBH series



Model	GSBH-815	GSBH-820	GSBH-825	GSBH-830	GSBH-840	GSBH-1015	GSBH-1020	GSBH-1025	GSBH-1030	GSBH-1040
L	5350	6350	7550	8550	11050	5600	6600	7800	8800	11300
L1	4370	5370	6370	7370	9370	4250	5250	6250	7250	9250
W	2885					3085				
W1	1875					2000				
H	2800/3000(optional)					2800/3000(optional)				