



Cylindrical Grinders

GU400S / GU600S / GU1000S



GU400S

- Distance between centers 400mm (15.75")
- Swing over table 200mm (7.87")
- Max. grinding diameter 160mm (6.3")
- Variable spindle speed 16 ~ 450 rpm
- Variable speed frequency drive
- Semi-auto feed. Hydraulic powered traverse movement
- Hydrostatic bearing wheel spindle
- Wheel head provides rapid feed and manual feed for grinding

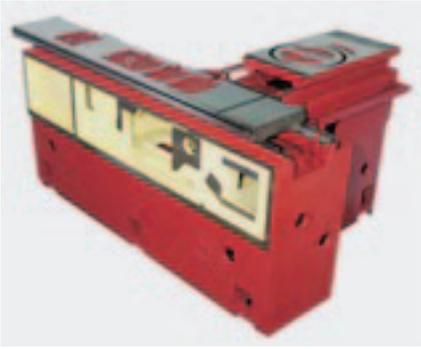
GU600S

- Distance between centers 600mm (23.62")
- Swing over table 320mm (12.6")
- Max grinding diameter 280mm (11")
- Variable spindle speed 16 ~ 450 rpm.
- Variable speed frequency drive.
- Semi-auto feed. Hydraulic powered traverse movement
- Hydrostatic bearing wheel spindle
- Wheel head provides rapid feed and manual feed for grinding

GU1000S

- Distance between centers 1000mm (39.37")
- Swing over table 320mm (12.6")
- Max grinding diameter 280mm (11")
- Variable spindle speed 16 ~ 450 rpm.
- Variable speed frequency drive.
- Semi-auto feed. Hydraulic powered traverse movement
- Hydrostatic bearing wheel spindle
- Wheel head provides rapid feed and manual feed for grinding





Rigid Machine Structure

The machine structure is manufactured from high-quality Meehanite cast iron, heat treated and stress relieved before machining.

Slideways are high frequency hardened and precision ground.

Maximum material stability for deformation-free and outstanding wear resistance.

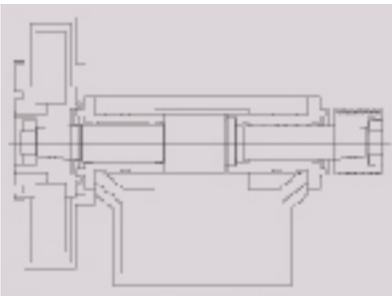


Stable and Rigid Spindle Head

The spindle runs on precision bearings, ensuring maximum spindle stability. The design guarantees outstanding accuracy for ID/OD and face grinding.

The spindle head swivels $+90^{\circ} \sim -30^{\circ}$

The spindle head on GU400S provides variable speed changed by variable speed frequency drive. The spindle head on GU600S uses servo motor.

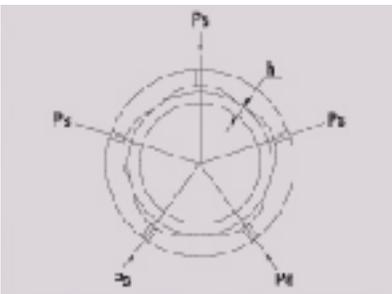


Precision Wheel Head

The grinding wheel spindle is precision machined from high quality alloy steel SNCM-220, normalized, tempered, carburized and cryogenically treated, precision ground and polished to mirror finish.

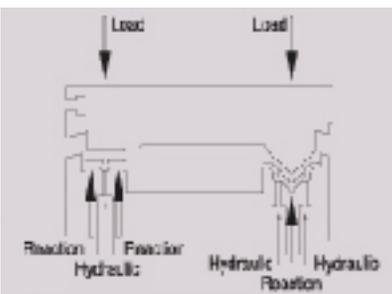
Hardness exceeds HRC 62

No deformation, maximum wear resistance and lifetime accuracy are assured.



Special Hydrostatic Bearing

The wheel spindle uses a special hydrostatic bearing and is especially ideal for precision grinding work. Benefits include high speed, no friction between metals, no heat generation, no deformation, extra high accuracy rating and durability.



Advanced Hydrostatic Lubrication System

The slideways of the table and the wheel head are lubricated by an advanced automatic hydrostatic lubrication system. This provides various features, such as extremely smooth movement, added feed accuracy and superior grinding accuracy.



Straight Plunge Grinding

For small lot production, use automatic feed combined with spark-out timer to achieve superior grinding quality. For mass production, use 2-step automatic feed and 2-step automatic measurement device (optional) for upgrading productivity and grinding quality.



Shoulder Grinding

Provides workpiece outside diameter and shoulder grinding accomplished at a time.

Easy to set up. Simply clamp the workpiece between two centers, mount the grinding wheel on the right side of wheel head and swivel the head to a degree for performing grinding.



Traverse Grinding

Use automatically intermittent feed combined with hydraulic drive of table for the most effective traverse grinding operations.



End Surface Grinding

Take off the spindle head cover. Mount a 3-jaw or 4-jaw chuck. Change position of the pin for chuck rotation. Position the pin at a 90° angle for end surface grinding.



Taper Grinding

Hold the workpiece by a chuck or two centers. The table and the wheel head can be easily adjusted and swiveled.



Internal Grinding

To proceed with internal grinding with a hinge-type internal grinding attachment (optional accessory), simply pull down the internal grinding spindle and fix it in place.

Model		GU400S	GU600S	GU1000S
Capacity	Distance between centers	15.75"	23.62"	39.37"
	Swivel over table	7 7/8"	12.6"	
	Max. load of centers	132 lbs	220 lbs	
	Max. external grinding diameter	6 1/4"	11"	
Wheel Head	Swivel angle	±30°		
	Manual distance	5.31"	6.3"	
	Auto rapid advance	0.98"	1.57"	
	Sliding seat supplementary displacement	3.74" (10" total)		
	Min. setting unit	0.0001"		
	One turn of hand wheel (graduation)	0.079" (0.00020")		
	Hand wheel straight infeed	0 ~ 0.014"		
Grinding Wheel	OD x Width x ID	12" x 1.5" x 5"	14" x 2" x 5"	
	Speed (belt type)	2085 (2496) rpm	1783 (1940) rpm	
Spindle Head	Swivel angle	120° (+ 90°, - 30°)		
	Center slope	MT3	MT4	
	Spindle speed (variable)	16 ~ 450		
	Max load of spindle (tool holder included)	33 lbs	77 lbs	
Tailstock	Taper center	MT3	MT4	
	Stroke	0.79"	0.98"	
Table	Swivel angle	12.5°	12°	10°
	Traverse speed	1.97" ~ 157.48" / min		
	Auto reciprocate min. stroke	0.12"		
	Feed of one turn of hand wheel (2-step)	0.79" (0.08")		
Motor	Wheel spindle	3 hp	5 hp	
	Workhead spindle	1 hp (inverter)	1 hp (servo)	1.74 hp (servo)
	Hydraulic pump	1 hp		
	Wheel spindle lubrication pump	1/4 hp		
	Coolant pump	1/4 hp		
	Internal grinding spindle	1/4 hp	1 hp	
Tank Capacity	Wheel spindle lubricating tank	3.17 gallon		
	Hydraulic fluid tank	17.17 gallon		
	Coolant tank	26.42 gallon		
Weight	Machine weight	4409 lbs	6613 lbs	8376 lbs

The above specifications are subject to change without prior notice.

Standard Accessories



Grinding Wheel & Flange



Diamond Tool Holder
(Table mounted type)



Tools and kits



Carbide Tipped Work Centers



Coolant Equipment



Hydraulic Pump & Tank



Work Lamp

Optional Accessories



Internal grinding attachment



Diamond tool holder
(Table mounted type)



Diamond tool holder
(Tailstock mounted type)



Diamond tool holder
(Side opened type)



Angle trimming device



Radius trimming device



Cam-Locked driving dogs



Work steady rest (2/set)



2-point steady rest



3-point steady rest



Adjustable 3-jaw scroll chuck



Adjustable 3-jaw scroll chuck



Magnetic coolant separator



Magnetic with paper filter



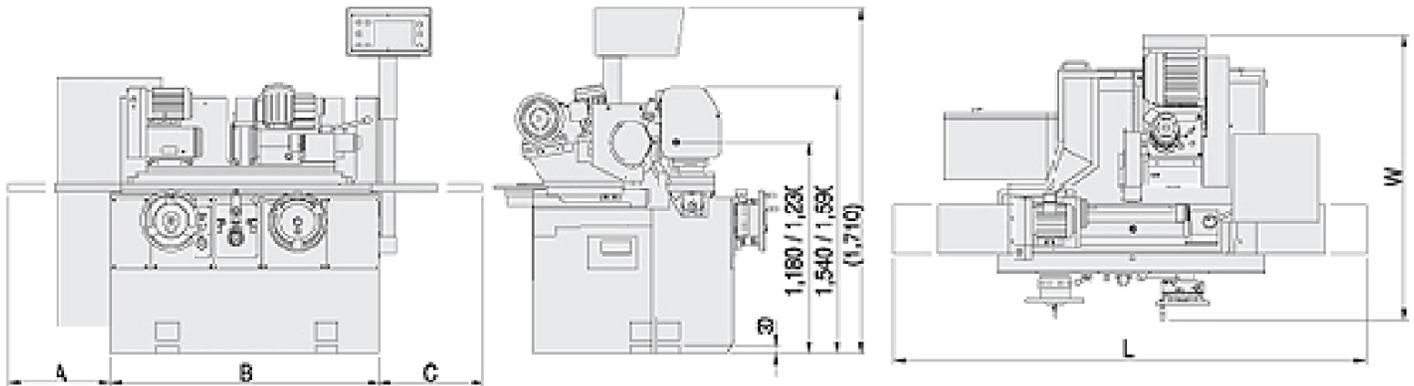
Wheel forming device
(Manual. No auto compensation)



Wheel forming device



Wheel balancing stand & arbor



Model	A	B	C	L	W
GU400S	20	52	20	89	70
GU600S	30	80	30	141	70
GU1000S	40	97	40	177	70
Unit: Inches					