

## 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. Chiller 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. Variable speed spindle
9. Air conditioner for electric box
10. Vertical spindle grinding equipment (OA type only)

☆ 3A 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.

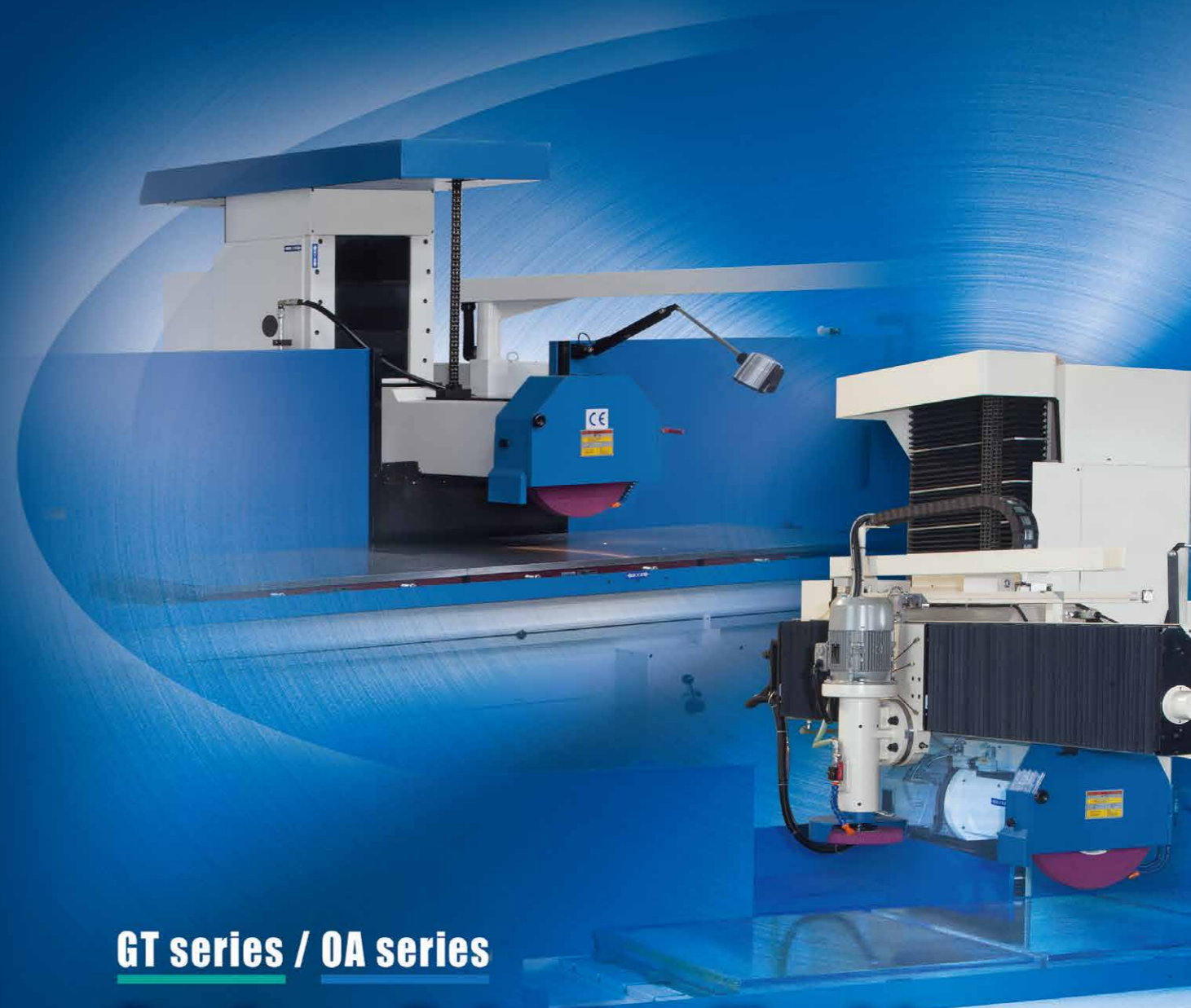
☆ Double column type grinding area: 48" x 80" ~ 80" x 240"

☆ Arm movement type grinding area: 32" x 48" ~ 40" x 220"

☆ Column movement type grinding area: 24" x 48" ~ 32" x 220"

GT series / OA series

## Surface Grinding Machine



## SUPERTEC MACHINERY, INC.

6435 ALONDRA BLVD, CA 90723

(562)220-1675 PH

(562)220-1677 FAX

www.supertecusa.com

E-MAIL:info@supertecusa.com



# GT series

## Column Type series Precision and Heavy Duty Surface Grinding Machine



Gt Type Base For Cross Feed

結構有雙面壁



### FEATURES AND CONSTRUCTION

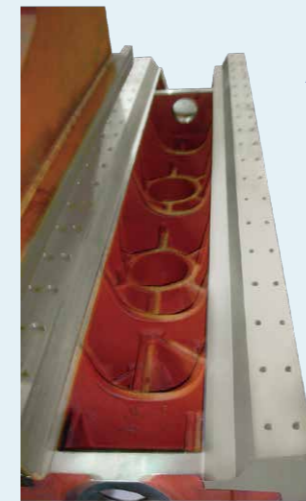
- Both V-ways of the table are precision ground and hand scraped, they are lubricated by hydrostatic lubrication system for smoother movement and longer machine life. The table moves in the longitude axes only while the machines column moves in the cross feed axes. The table is fully supported by the 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 viz 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.

# OA series

## Over Arm Surface Grinder

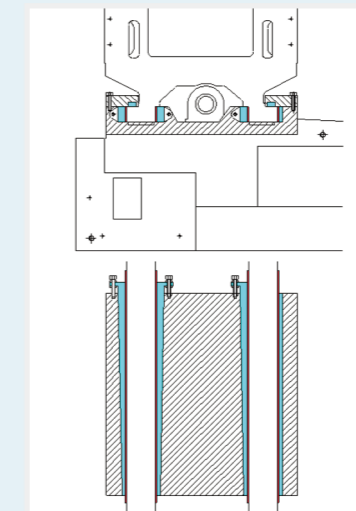


Arm



Column

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



Needle Roller Bearings Slideways



Vertical Spindle Grinding Equipment  
(Optional Accessories)

## STRUCTURE



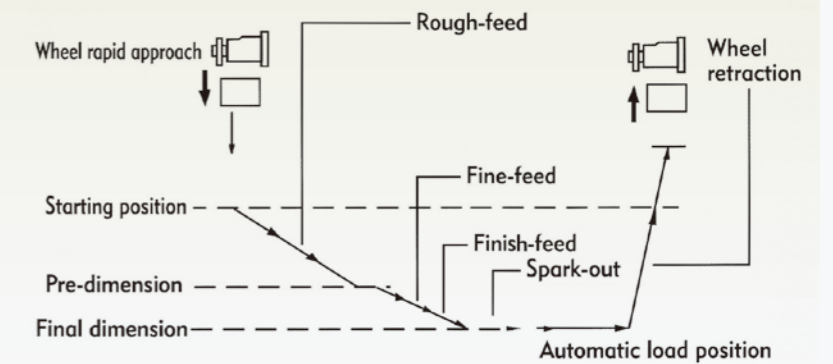
### 24 VOLT ELECTRIC CONTROL AND TOUCH SCREEN CONTROL PANEL

- 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 hydraulics system from being started with out 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 SILDE WAYS AND TWO CYCLINDERS FOR TABLE



### AUTOMATIC GRINDING CYCLE

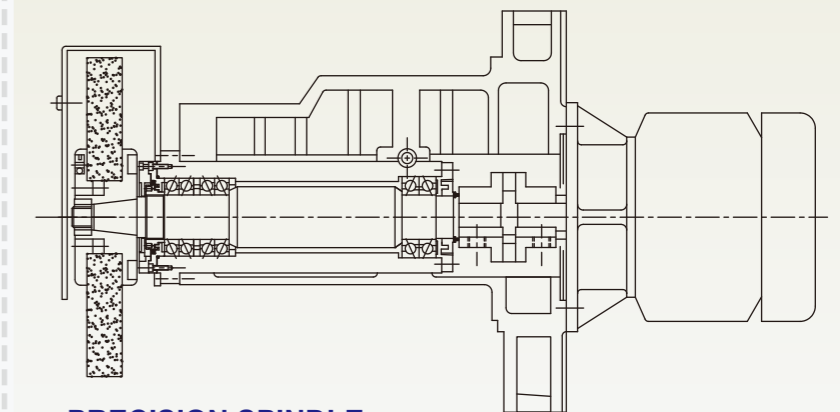


### Table

Hydrostatic ways with dual hydraulic cylinders



### ELECTRIC CABINET WITH HEAT EXCHANGER



### PRECISION SPINDLE

6 Bearings P4 Class (NSK or RHP)  
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 15 HP motor via a flexible coupling to eliminate deflection and vibration. This permits an exceptional quality grinding finish.



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 hydraulics system from being started with out 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.



### 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.



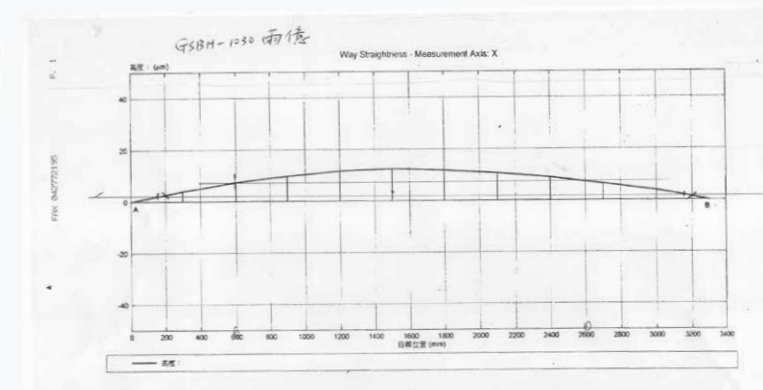
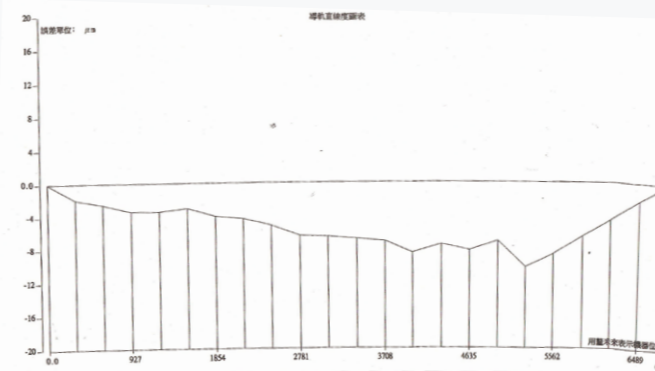
### HYDRAULIC TANK SYSTEM

### CHILLER FOR HYDRAULIC OIL

A separate hydraulic unit is equipped with a chiller 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

## GT Column Surface Grinders 2A-2Axis Automatic, 3A-3Axis Automatic

## OA Over Arm Surface Grinders 2A-2Axis Automatic, 3A-3Axis Automatic

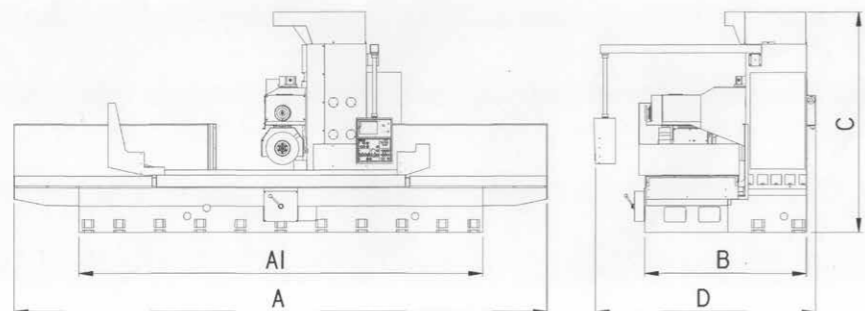
MODEL		GT-2448	GT-2460	GT-2480	GT-24100	GT-24120	GT-3248	GT-3260	GT-3280	GT-32100	GT-32120	OA-3260	OA-3280	OA-32100	OA-32120	OA-32160	OA-4060	OA-4080	OA-40100	OA-40120	OA-40160
Table clamping surface (WxL)	W	24					32					32					40				
	L	53	65	84	104	124	53	65	84	104	124	68.9	86.8	106.4	126	165.4	68.9	86.8	106.4	126	165.4
Maximum longitudinal travel	inch											65	84.6	104.3	124	163.4	65	84.6	104.3	124	163.4
Maximum cross travel	inch	26					33.86					33.86					41.73				
Maximum grinding area	W	24					31.89					31.5					39.4				
	L	49	61	80	100	120	49	61	80	100	120	59	78.7	98.4	118	157.5	59	78.7	98.4	118	157.5
Max. distance between spindle center to table		31.5/39.4(optional)					31.5/39.4(optional)					31.5/39.4(optional)					31.5/39.4(optional)				
Down feed per division (MPG)	inch	0.0001,0.0005,0.001					0.0001,0.0005,0.001					0.0001,0.0005,0.001					0.0001,0.0005,0.001				
Down feed per revolution (MPG)	inch	0.01,0.05,0.1					0.01,0.05,0.1					0.01,0.05,0.1					0.01,0.05,0.1				
Auto downfeed Servo motor	inch	0.0005-0.002					0.0005-0.002					0.0005-0.002					0.0005-0.002				
Longitudinal table speed	fpm	10-105					10-105					10-105					10-105				
Crossfeed intermittent	inch/feed	0.004-1.57					0.004-1.57					0.004-1.57					0.004-1.57				
Crossfeed continuous	fpm	0.9-5					0.9-5					0.9-5					0.9-5				
Crossfeed per division	inch	0.0001,0.001,0.005					0.0001,0.001,0.005					0.0001,0.001,0.005					0.0001,0.001,0.005				
Grinding wheel dimension (ODxDxWidth)		20x5x2 / (20x5x3 optional )					20x5x2 / (20x5x3 optional )					16x5x2 / (16x5x3 optional )					16x5x2 / (16x5x3 optional )				
Spindle speed(50/60HZ)	R.P.M.	1450/1720					1450/1720					1450/1720					1450/1720				
Spindle motor	H.P.	15/25(optional)					15/25(optional)					15/25(optional)					15/25(optional)				
Hydraulic pump motor	H.P.	7.5	7.5	7.5	7.5	10	7.5	7.5	7.5	10	10	7.5	7.5	7.5	7.5	10	7.5	7.5	7.5	10	10
Total power motor	H.P.	24/34	24/34	24/34	24/34	26.5/36.5	24/34	24/34	24/34	26.5/36.5	26.5/36.5	24/34	24/34	24/34	24/34	26.5/36.5	24/34	24/34	24/34	26.5/36.5	26.5/36.5
Floor space (HxWxL)	L	187	211	250	289	329	187	211	250	289	329	236	276	315	362	452	236	276	315	362	452
	W	117					135					122					130				
	H	96.8					102.7					110/118(optional)					110/118(optional)				
Net weight(approx)	lbs	14300	16060	18920	22000	24200	17380	19140	22220	25300	27940	26400	29040	31680	35200	42020	28380	31680	34980	38390	46200
Chuck weight	lbs	700	880	1190	1490	1790	1200	1310	2070	2590	3100	1550	2070	2590	3100	4140	1940	2600	3240	3170	4230
Maximum workpiece on chuck	lbs	2640	3300	3960	3960	4400	2640	3300	3960	3960	4400	3300	3960	4400	4400	5060	4400	4840	5280	5500	5500

## Dimension

## GT series

MODEL	OA-3260	OA-3280	OA-32100	OA-32120	OA-32160	OA-4060	OA-4080	OA-40100	OA-40120	OA-40160
A	211	250	298	337	435	221	260	308	347	445
A1	172	211	251	290	369	167	207	246	285	364
B	74					82				
C	108					108				
D	100					108				

(inch)



## OA series

MODEL	GT-2448	GT-2460	GT-2480	GT-24100	GT-24120	GT-3248	GT-3260	GT-3280	GT-32100	GT-32120
A	184	211	250	298	337	184	211	250	298	337
A1	148	172	211	251	290	148	172	211	251	290
B	99					118				
C	88					88				
D	125					144				
E	8					13.6				

(inch)

