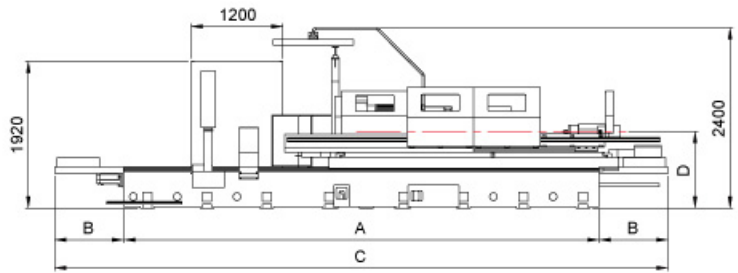
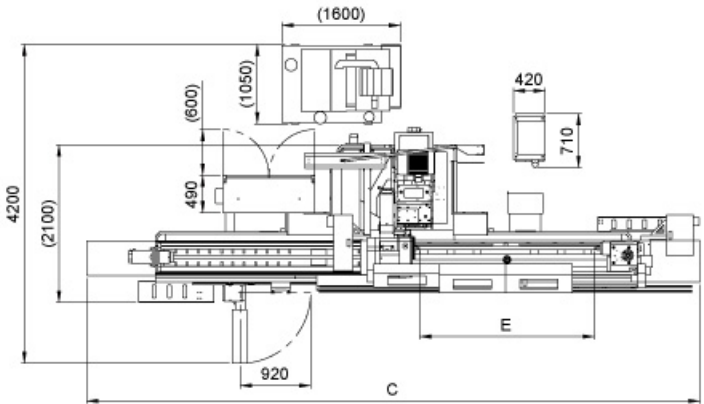


Standard Accessories

|                                                   |                                     |                                       |
|---------------------------------------------------|-------------------------------------|---------------------------------------|
| Linear Scale ( For X Axis ) × 1Set                | Tools and Tool Box × 1Set           | Hydraulic Tank with Oil Cooler × 1Set |
| Grinding Wheel and Grinding Wheel Flange × 1Set   | Carbide Tipped Work Centers × 2 Pcs | Work Lamp × 2 Sets                    |
| Diamond Tool Holder ( Table Mounted Type ) × 1Set | Coolant Equipment × 1Set            | Semi-Enclosed splash guard × 1Set     |
| G.W. Soft Starter × 1Set                          |                                     |                                       |

Optional Accessories

|                                     |                                                     |                            |                              |
|-------------------------------------|-----------------------------------------------------|----------------------------|------------------------------|
| Cam-Locked Type Driving Dog.        | Wheel Balancing Stand & Arbor                       | Touch Probe Gauge          | Spare Wheel Flange           |
| 2-Point Steady Rest x 2 sets        | Vibration Meter for manual grinding wheel balancing | Auto. In-process Gauge     | Heavy Duty Neck Rest         |
| Adjustable 4-Jaw Scroll Chuck       | Semi-Auto. Grinding Wheel Balancer.                 | Gap Control                | Live Center                  |
| Universal Joint                     | Auto. Grinding Wheel Balancer.                      | Magnetic Coolant Separator | Work Holder                  |
| Jib crane for grinding wheel change | G.W. Inverter                                       | Paper Filter               | Internal Grinding Attachment |



| Model | OCD-45(65) 150 | OCD-45(65) 220 | OCD-45(65) 300 |
|-------|----------------|----------------|----------------|
| A mm  | 4650           | 6210           | 7770           |
| B mm  | 700            | 900            | 1300           |
| C mm  | 6050           | 8010           | 10370          |
| D mm  |                | 1000 ( 1100 )  |                |
| E mm  | 1580           | 2280           | 3130           |



EXTOMAX **SERIES**  
CNC CYLINDRICAL GRINDING MACHINE **HEAVY DUTY GRINDING**



| Model                    |                          | OCD-45(65) 150                                           | OCD-45(65) 220 | OCD-45(65) 300 |
|--------------------------|--------------------------|----------------------------------------------------------|----------------|----------------|
| Swing Over Table         |                          | ø 450 / 650 mm                                           |                |                |
| Distance Between Centers |                          | 1500 mm                                                  | 2200 mm        | 3000 mm        |
| Max. Grinding Diameter   |                          | ø 420 / 620 mm                                           |                |                |
| Max. Workpiece Load      |                          | 800 kg by between centers / 2000 kg by heavy steady rest |                |                |
| Wheel                    | OD x Width x ID          | ø 510 X 50 ~ 125 mm x ø152.4 mm                          |                |                |
|                          | Speed                    | 33 m/sec                                                 |                |                |
|                          | Max. Movable Distance    | 350 mm                                                   |                |                |
| Wheelhead - X Axis       | Feedrate                 | 0.001 - 2000 mm/min                                      |                |                |
|                          | Rapid Feedrate           | 4000 mm/min                                              |                |                |
|                          | Max. Movable Distance    | 1970 mm                                                  | 2750 mm        | 3620 mm        |
| Wheelhead - Z Axis       | Feedrate                 | 0.001 - 2000 mm/min                                      |                |                |
|                          | Rapid Feedrate           | 4000 mm/min                                              |                |                |
|                          | Center                   | MT . No. 6                                               |                |                |
| Workhead                 | Speed ( variable speed ) | 0 -250 RPM                                               |                |                |
|                          | Center                   | MT . No. 6                                               |                |                |
|                          | Moveable Mode of Centers | Manual For standard / Hydraulic for optional             |                |                |
| Tailstock                | Max. Distance of Centers | 60 mm                                                    |                |                |
|                          | Wheel Spindle            | 11KW (15HP)                                              |                |                |
|                          | Workhead                 | 2.9 KW / 5.5 kw                                          |                |                |
| Motor                    | Wheelhead - X Axis       | 2.8 KW ( AC Servo Motor )                                |                |                |
|                          | Wheelhead - Z Axis       | 4.4 KW ( AC Servo Motor )                                |                |                |
|                          | Center height of Machine | From ground                                              | 1000 mm        |                |
|                          | Machine Weight           | 12000 kg                                                 | 14000 kg       | 16000 kg       |



AFFORDABLE GRINDERS (U.S.A.)  
T: 830-469-7347  
affordablegrinders.com





# EXTOMAX SERIES

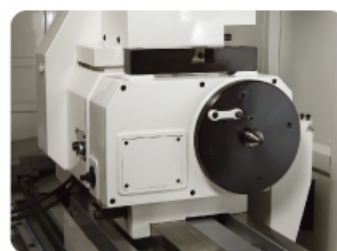
## CNC CYLINDRICAL GRINDING MACHINE HEAVY DUTY GRINDING

### Application

- Oversized gear shaft
- Oversized motor shaft
- Oversized printing shaft
- Rubber rolling shaft
- Rolling shaft
- Oversized roller etc.

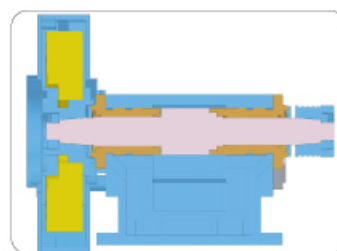
### Feature

- Newly developed EXTOMAX breaks through the original limited design of medium- and small-sized machine tools.
- Re-enforced structure, low gravity and high rigidity machine base, made of Meehanite cast iron through annealing and aging treatment, incorporated into a no-deformation and precise machine body.
- Longitudinal and traverse sliding tables, with enlarged overall stride and rail way width, precision scrapping made on both horizontal and vertical sides, coupling with hydrostatic structure, light and steady movement of sliding table, repeated precision reaching up to  $\mu$  level.
- Grinding wheel spindle designed with hydrostatic bearing, free of metal friction and thermal deformation, allowing smooth within the oil film operation of spindle.
- Workhead and tailstock specially designed for heavy duty work, high rigidity structure, increasing overall loading capacity. Workhead is driven by servo motor, providing step-less variable speed change. Supported by precision bevel bearing, attains vibration free transmission ability. Tailstock equipped with hydraulic and stopper for easy operation, horizontal air bearing designed for easy displacement, reducing friction and increasing longevity.



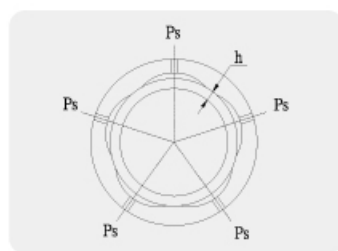
#### Rigid Spindle Head

- The rigid constructed spindle head employs high precision bearings assuring maximum spindle stability it guarantees outstanding accuracy for external and internal diameter grinding and face grinding.
- The spindle head on the EXTOMAX series cylindrical grinding is driven by servomotor, providing variable speed change.
- The spindle head allows for swiveling positive 90° and negative 30°



#### Wheel Spindle with Hydro-static Bearing Absolutely No Metal-to-Metal Contact

Hybrid Palmary hydro-static Bearings are used for the wheel spindle bearings. Metal-to-metal contact will never occur with these highly rigid bearings which have a damping effect and make 0.5 $\mu$ m the new definition of wheel spindle rotational accuracy.



#### Special hydro-static Bearing

The wheel spindle runs by using a special hydro-static bearing and is especially ideal for precision grinding work. It feature high speed, no friction between metals, no heat generation, deformation-free, extra high accuracy and continual use.



#### CNC Controller

( Could choose FANUC, SIEMENS, MITSUBISHI )



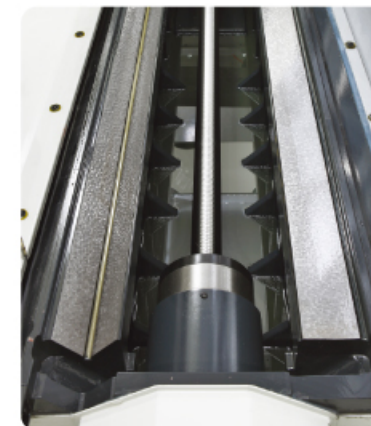
#### Rotary-type Internal Grinding Attachment (Optional Accessory)

- Easy to change over from O.D. grinding to I.D. grinding. The attachment is fixed by the rotary support for convenient workpiece loading.
- To position the internal grinding attachment, simply turn it downward and fix it in the grinding position.
- Allows for external and internal grinding operations in one process.
- Tapered workpieces can be ground by swiveling on the workhead and table.



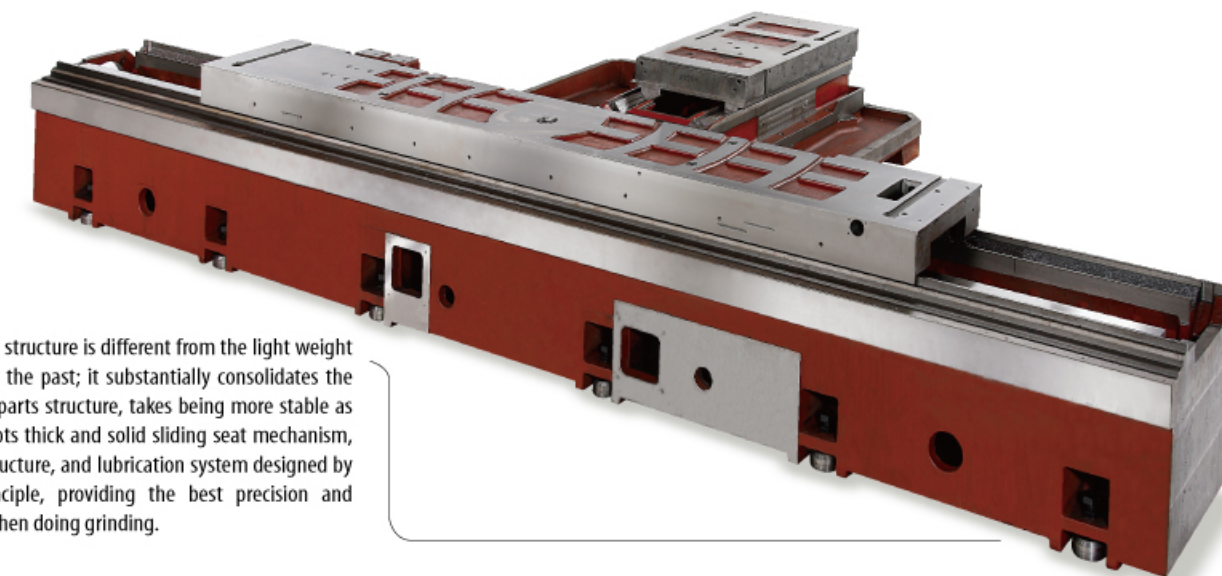
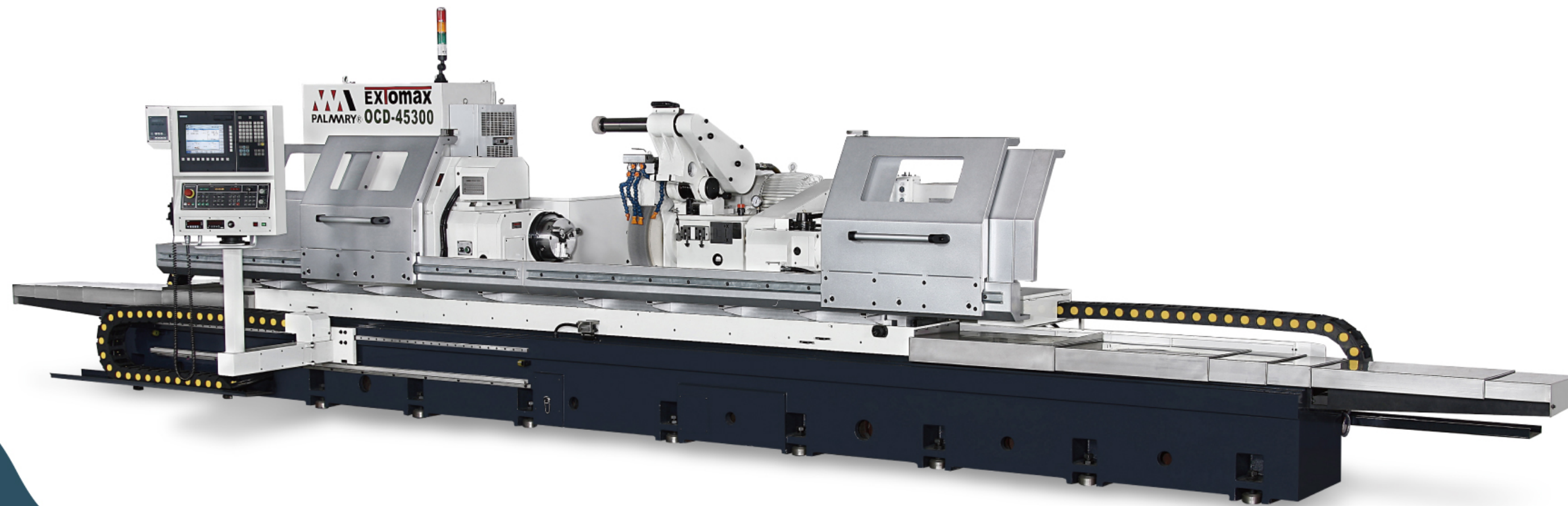
#### Tailstock

The rigid tailstock is locked on the slide firmly. The tailstock quill movement is driven by hydraulic power for convenient and fast workpiece clamping and unclamping.



#### Advanced Hydro-static Lubrication System

The slideways of the table and of the wheel head are lubrication by an advanced automatic hydro-static lubrication system. This provides various features such as extremely smooth movement, added feeding accuracy and superior frinding accuracy.



The machine's design structure is different from the light weight design philosophy in the past; it substantially consolidates the rigidity of body and parts structure, takes being more stable as the appeal, and adopts thick and solid sliding seat mechanism, slide way TV1 flat structure, and lubrication system designed by the hydrostatic principle, providing the best precision and stability of moving when doing grinding.



#### Laser alignment

The slide way adopts scraping technics processing, inherits traditional techniques, cooperates with precise measuring equipment, and ensures the smoothness and straightness on the slide way with rigorous demand.