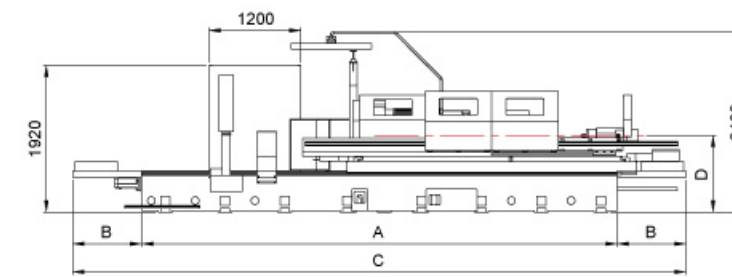
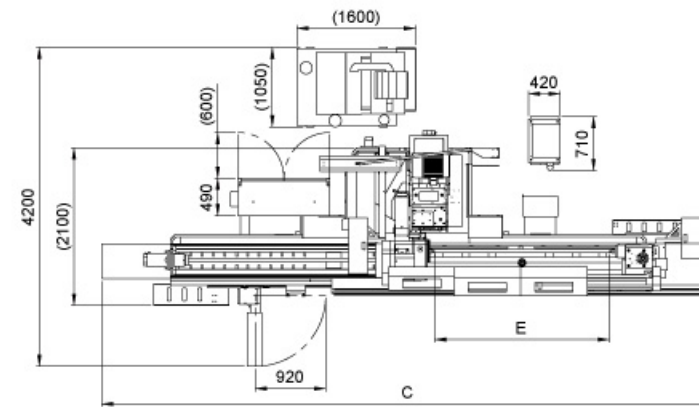


Standard Accessories

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



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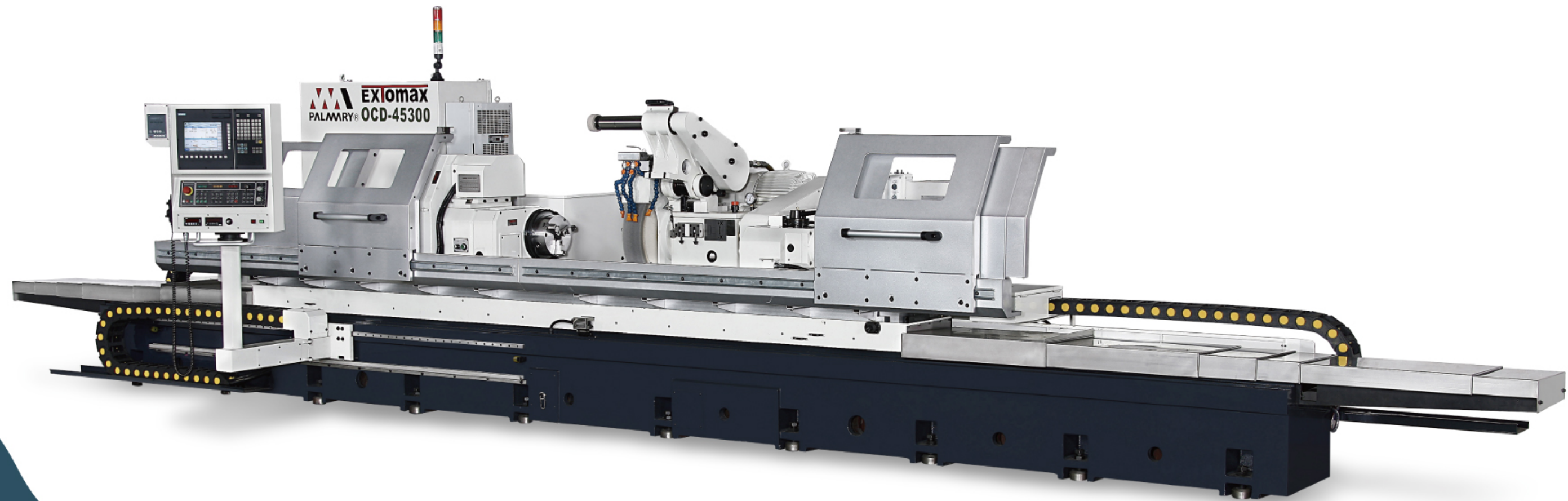


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EXTOMAX SERIES

CNC CYLINDRICAL GRINDING MACHINE HEAVY DUTY GRINDING

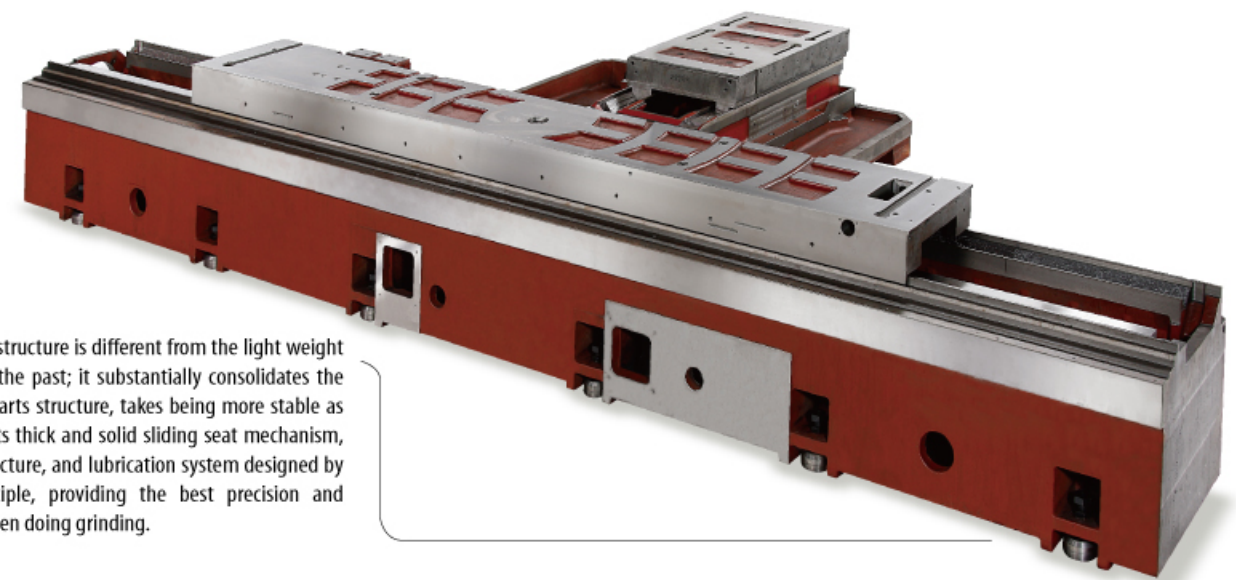


Application

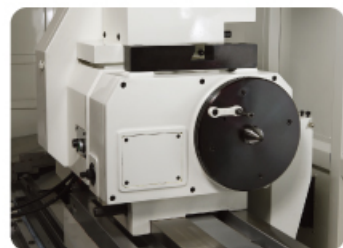
- Oversized gear shaft
- Oversized motor shaft
- Oversized printing shaft
- Rubber rolling shaft
- Rolling shaft
- Oversized roller etc.

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 μ 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.

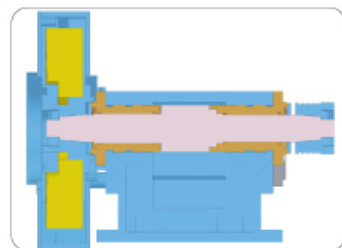


The machine's design structure is different from the light weight design philosophy in the past; it substantially consolidates the rigidity of body and parts structure, takes being more stable as the appeal, and adopts thick and solid sliding seat mechanism, slide way 1V1 flat structure, and lubrication system designed by the hydrostatic principle, providing the best precision and stability of moving when doing grinding.



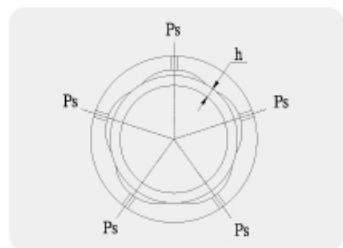
Rigid Spindle Head

- 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 μ 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)



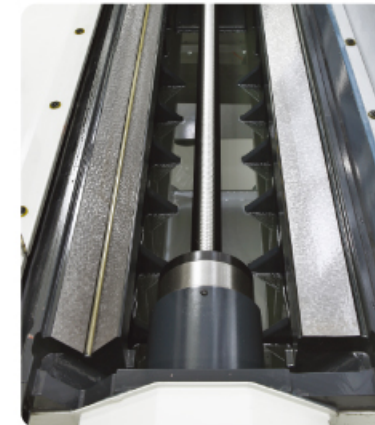
Rotary-type Internal Grinding Attachment (Optional Accessory)

- 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-statical lubrication system. This provides various features such as extremely smooth movement, added feeding accuracy and superior grinding accuracy.



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.