



UNIVERSAL HEAVY DUTY GRINDING WITH CROSS SLIDES



DESCRIPTION

With capacity for components of up to 15 tonnes in weight and 10000 mm in length, the WT machine range can grind even the heaviest cylindrical workpieces.

Special grinding needs with high-end solutions are the key value for the largest manufacturers of parts such as extrusion screws, printing rolls, machine tool components and electric motor shafts.

The cross-slide configuration keeps the heavy parts stable while also optimising the machine's footprint. The structure can be used for a single or double wheelhead to maximize productivity with simultaneous grinding operations such as our WT-72 for mass production of axles for rolling stock and rear axles for trucks.

WT. UNIVERSAL HEAVY DUTY GRINDING WITH CROSS SLIDES

WT RANGE	WT-72	WT-92	WT-100	
Max. distance between centres	6000 mm	8000 mm	10000 mm	
Max. diameter to be ground	840 mm	1040 mm	1250/1600 mm	
Max. weight between centres	1500 kg	5000 kg	8000/15000 kg	
Max. grinding wheel diameter	1060 mm	1250 mm	1250 mm	
Max. wheelhead power	45 kW	45 kW	45 kW	
Max. wheel peripheral speed	60/100 m/s	60/100 m/s	60/100 m/s	

CORE TECHNOLOGY

Machine structure

- Made of stress-relieved pearlitic cast iron.
- Optimised with finite element calculation.
- Stability and rigidity required for optimum grinding accuracy.
- Coolant channels especially designed to guarantee maximum thermal stability.

X and Z axes

- Axes architecture design through the centre of gravity for eliminating vibration.
- Moving slides with ground and hand-scrapped V and flat slideways, including antifriction coating to avoid thermal expansion and stick slip effects.
- Driven by a ballscrew with direct coupling to CNC servomotor.
- High resolution linear scale to control the positioning.

Swivelling B-axis

- Automatic wide range swivelling.
- Torque motor driven for zero backlash and lower maintenance.

- High resolution rotary scale to control perfect angular positioning.
- Continuous positioning with mechanical locking and pneumatic unlocking system.
- Repeatiblity on 650 mm radius ±1 μm.

Workheads & tailstock

- Modular designs for best application adaptability.
- Selected materials and designs for stable temperature performance.
- Compressed air lifting systems for comfortable set ups.

Grinding spindles

- First-class quality spindles customised for application.
- High-precision bearings with lifetime constant grease lubrication.
- Selected materials for stable temperature performance, driven by built-in motor.
- Cutting speeds automatically controlled with frequency drives.
- Independent temperature control and efficient liquidcooling system.

VERSATILITY

