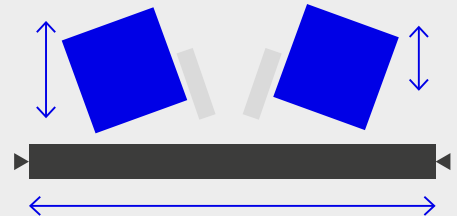
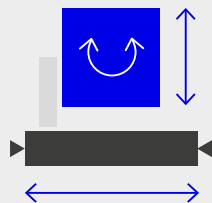


# UNIVERSAL HEAVY DUTY GRINDING WITH MOVING TABLE

## HG



### DESCRIPTION

These cylindrical grinding machines have been designed to fulfil the requirements of a wide range of applications from 1500 mm up to 5000 mm in length.

The most demanding industries can benefit from tailor-made configurations for turbine shafts, large transmissions, axles for rail units and landing gear components, among other examples.

Complex processes with in-process measuring, special dressing systems and custom enhancements have been developed accordingly. The structure of independent axes is ideal for a single or double wheelhead, to optimise versatility with sequential grinding operations.

## HG. UNIVERSAL HEAVY DUTY GRINDING WITH MOVING TABLE

### HG RANGE

	HG-62	HG-72	HG-92
Max. distance between centres	2000 mm	4000 mm	5000 mm
Max. diameter to be ground	500 mm	840 mm	1040 mm
Max. weight between centres	500 kg	1500 kg	5000 kg
Max. grinding wheel diameter	760 mm	915 mm	1060 mm
Max. wheelhead power	22 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-scraped 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.
- Repeatability on 650 mm radius  $\pm 1 \mu\text{m}$ .

#### 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 liquid-cooling system.

### VERSATILITY

