



**DANOBAT
OVERBECK**

INTERNAL & EXTERNAL GRINDING MACHINE

ID

ID INTERNAL AND EXTERNAL GRINDING MACHINE

The internal and external grinding machines of the ID series provide high precision machining during internal, external and face grinding of workpieces such as bearing rings, gear wheels, cutting tools, injection elements, non-round discs and hydraulic parts.

Depending on the requirements, the ID machines can be equipped with up to four grinding spindles and a measuring probe.

Individual workpieces or high volume production can be machined with great efficiency without compromising versatility.

Linear motors ensure a highly dynamic transmission of power. Through this, precise results are obtained during non-round grinding for example.

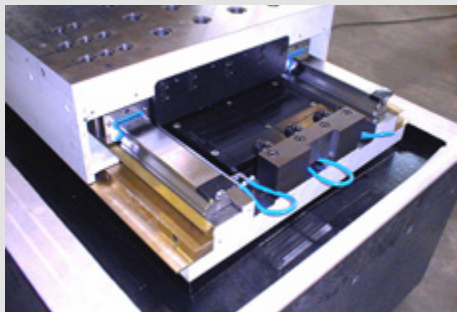
The user-friendly grinding software with high performance program templates facilitates quick and easy workpiece changeover. The meticulously engineered ergonomic machine design completes the machine package.



ID TECHNICAL DESCRIPTION

TECHNICAL CHARACTERISTICS (*)		ID-200	ID-400
Internal grinding diameter	mm	100	200
Workpiece length incl. clamping system	mm	100	400
Work swing	mm	200	400
Workpiece weight incl. clamping system	kg	30	70/170
X and Z axis stroke	mm	400/200	425/475

(*) Based on customers requirements, other machine capacities & configurations could be taken into account.



High precision internal and external grinding machine with up to four grinding spindles

Precision as a basis: all DANOBAT-OVERBECK grinding machines have basic equipment which provides a perfect platform for high-precision applications

Rigidity, stability and precision

- Assembly groups such as motor spindles, axes etc. are pre-assembled in the factory in our temperature controlled assembly room.
- The natural granite machine base guarantees the highest thermal and dynamic stability.
- All axes as well as the spindle revolver are direct drive designs.

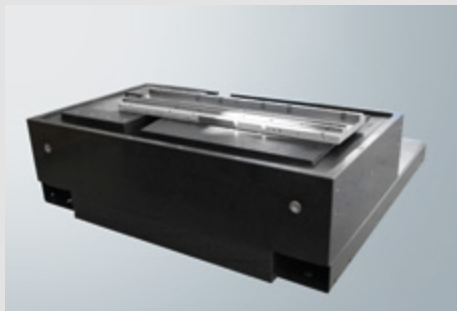
Expansion of the machine concept for demanding grinding tasks

- Grinding spindle revolver: The positioning of the grinding spindles takes place via an integrated and maintenance-free torque motor and with a high-precision encoder.
- Rotating dresser with monitoring during the dressing process.
- Fluid sensor with contact detection for an ideal grinding process.
- Measuring probe for axial and radial measurements.
- C axis for high-precision non-round machining.
- DANOBAT-OVERBECK operator software with 2D / 3D simulation.
- Optionally the machine package can also be expanded with automatic loading and unloading systems, including solutions with robot, gantry, etc.

2,5D Form grinding

- Grinding of f. e. bores/contours complete out of the rotation center or forms that require a non-continues circulation of the workhead spindle.
- Undercut, precise reference hole.
- HSK – T grinding / milling.

Grinding trials for workpieces with special requirements or for demonstration purposes can be performed in our state of the art test centre and inspection laboratory. Here, high precision grinding machines, tools, workpieces, high precision measuring devices and experienced machine operators come together to develop the most effective processes.

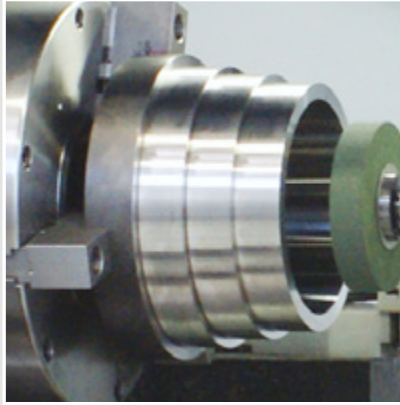


ID APPLICATION

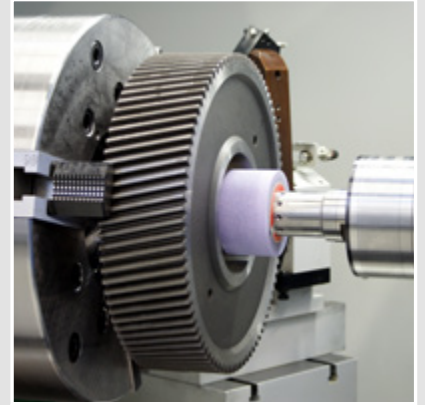
BEARING



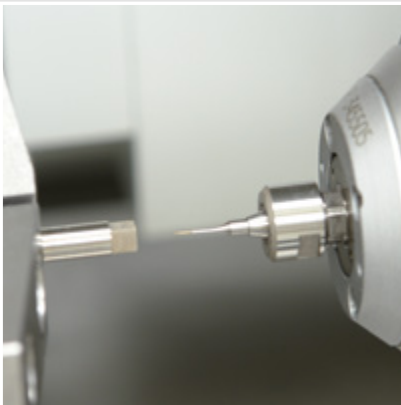
FLANGE



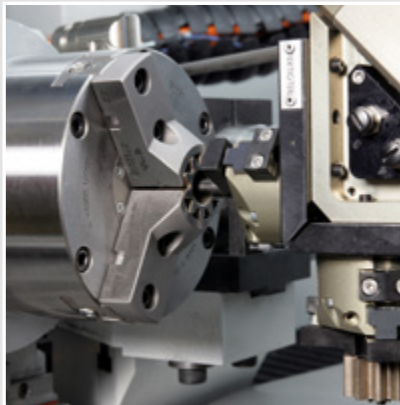
GEAR



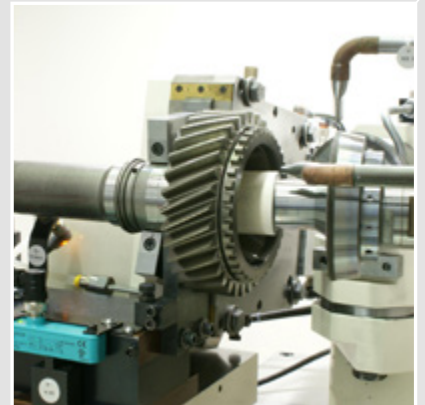
PUNCH



GEAR



INPUT SHAFT



HIGH PRESSURE PUMP



CAM

