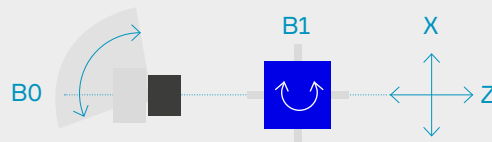


# INTERNAL, EXTERNAL AND RADIUS GRINDING MACHINE

## IRD



### DESCRIPTION

IRD series machines are ideal for high-precision internal, external, face, non-round and radius grinding applications for a wide range of materials (e.g. carbide, steel or ceramics).

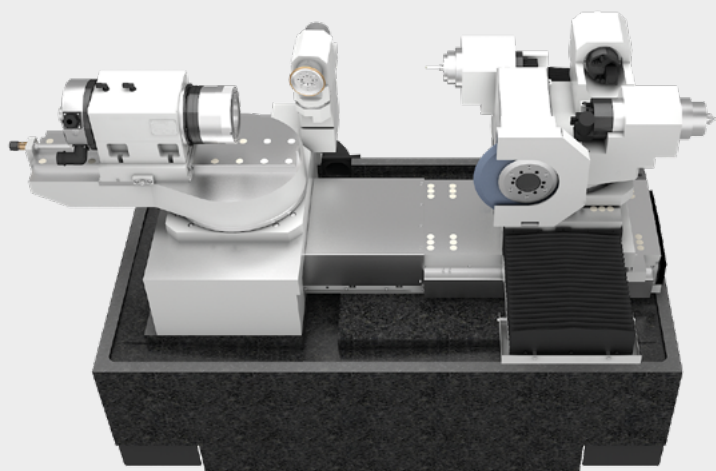
The integration of a swivelling B0-axis for  $+91^{\circ}/-15^{\circ}$  axis and the X and Z axes (3 axis interpolation) enables

different radius and contours to be ground with excellent surface quality.

The flexibility of this grinding machine enables it not only to grind forming tools and dies but also to machine workpieces for various industries such as bearings, ball valves, implants and much more.

## IRD. INTERNAL, EXTERNAL AND RADIUS GRINDING MACHINE

IRD RANGE	IRD-200	IRD-400
Max. internal grinding diameter	100 mm	200 mm
Max. internal grinding length	100 mm	200 mm
Max. workpiece swing diameter	215 mm	360 mm
Max. workpiece length incl. clamping system	200 mm	400 mm
Max. workpiece weight incl. clamping system	40/45 kg/Nm	80/100//180/300 kg/Nm
B0-axis swivelling angle	+91°/-15°	+91°/-15°
X and Z axis stroke	400/200 mm	425/475 mm



### CORE TECHNOLOGY

#### Natural granite machine bed

- Machine bed made of natural granite, the optimal material for achieving the highest accuracy and the best surface quality.
- Natural granite offers considerable advantages over cast iron or polymer composites in terms of precision for many grinding applications.

#### Linear motors

- Linear motors ensure highly dynamic transmission of power. This means, for example, that precise results can be obtained in non-round grinding.
- Fast, precise movements assure the highest productivity and quality.
- No wear parts, maintenance-free.
- High precision through active cooling.

#### Workheads

- Danobat-Overbeck design, built in house components for highest precision and a long life.
- Modular designs for best application.
- Selected materials and designs for stable temperature performance.
- Easy integration of clamping cylinders.

#### Grinding spindles

- Top quality spindles.
- High-precision bearings with oil-air lubrication or constant lifetime grease lubrication.
- Selected materials for stable temperature performance, driven by a built-in motor.
- Cutting speeds automatically controlled with frequency drives.
- Independent temperature control and efficient liquid-cooling system.