

# Deburring and chamfering of gear wheels

*RGC 350*



# Radial Gear Chamfering

## *A new technology offers new possibilities*

The chamfering machine *RGC 350* has been developed along with the process of *Radial Gear Chamfering* and tailored exactly to its needs. With the *RGC process*, defined, reproducible chamfers can be produced on the tooth front edges, even on workpieces with interfering contours, such as multiple toothings and/or shaft heels/shoulders, etc.

The chamfering process takes place in continuous intervention with high cutting speeds in environmentally friendly and economical dry cutting – in this way you achieve short cycle times and maximum efficiency at minimum footprint and maximum working space at the same time.

## *Facts about the RGC 350*

- Changeover times < 15 minutes
- Convenient and simple operation due to the intuitive user interface specially developed for the process
- Short peak times, thus relieving bottlenecks during deburring
- Extremely compact machine, installation area approx. 2 m<sup>2</sup>
- Easy transport and installation
- Automatic tooth gap position detection



## Machine bed

- Base body made of mineral casting for optimum vibration damping and maximum tool life
- Positive-locking mounting surfaces for screwing on the generously dimensioned linear guides, manufactured in a single clamping operation for high geometric accuracy
- Thermostable during dry machining due to free chip fall in cable-free working area. All moving parts are mounted behind covers protected from chips

## Workpiece spindle

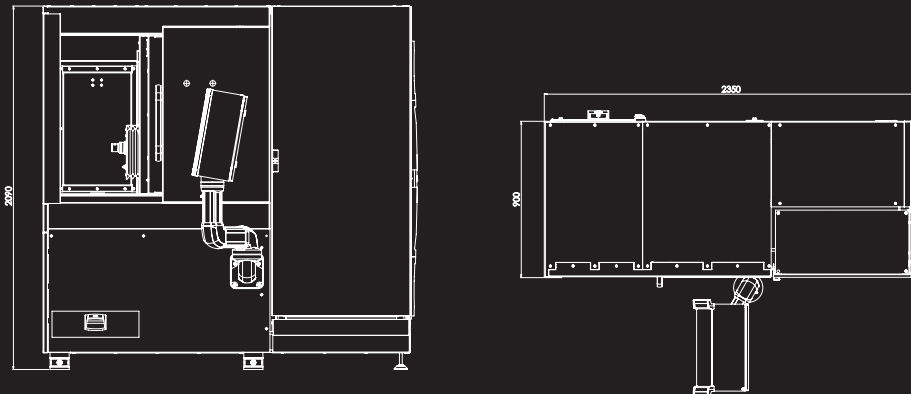
- Direct drive with high torques
- Short taper interface, size 5
- Liquid-cooled spindle for high continuous availability
- High resolution angle sensor

## Tool spindle

- Direct drive with high torques
- HSK-F63 tool interface with angular position alignment
- Air-cooled spindle with high power density
- High torques

## X-Z slide

- Generously dimensioned linear guides
- Non-contact measuring system integrated in the linear guides



## Technical data RGC 350

### Workpiece

Outside diameter	[mm]	350
Length	[mm]	350
Module from to	[mm]	8

### Tool

Cutter arbor adapter	<i>adapted HSK-F63 Interface</i>
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### Machine

Tool spindle drive power	[kW]	11
Tool spindle speed max.	[1/min]	17.000
Workpiece spindle drive power	[kW]	1,8
Workpiece spindle speed max.	[1/min]	1.000
x-axis travel	[mm]	180
z-axis travel	[mm]	355
Distance x-axis min/max	[mm]	5 ... 185
Distance z-axis min/max	[mm]	97,5 ... 452,5
Max. feed rate	X [m/min]	24
Rapid traverse speed	Z [m/min]	24
Control	Beckhoff	

### Electrics

Total connected load machine approx.	[kW]	19
Air consumption approx. (must be determined separately for each part)	[NI/min]	12,5

### Installation area

Machine RGC350 (without automation)	[m]	<i>approx. 0,9 x 2,35</i>
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### Weight

Machine RGC350 (without automation)	[kg]	<i>approx. 3.250</i>
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Short cycle times for the chamfering and deburring process,  
also for workpieces with interfering contours



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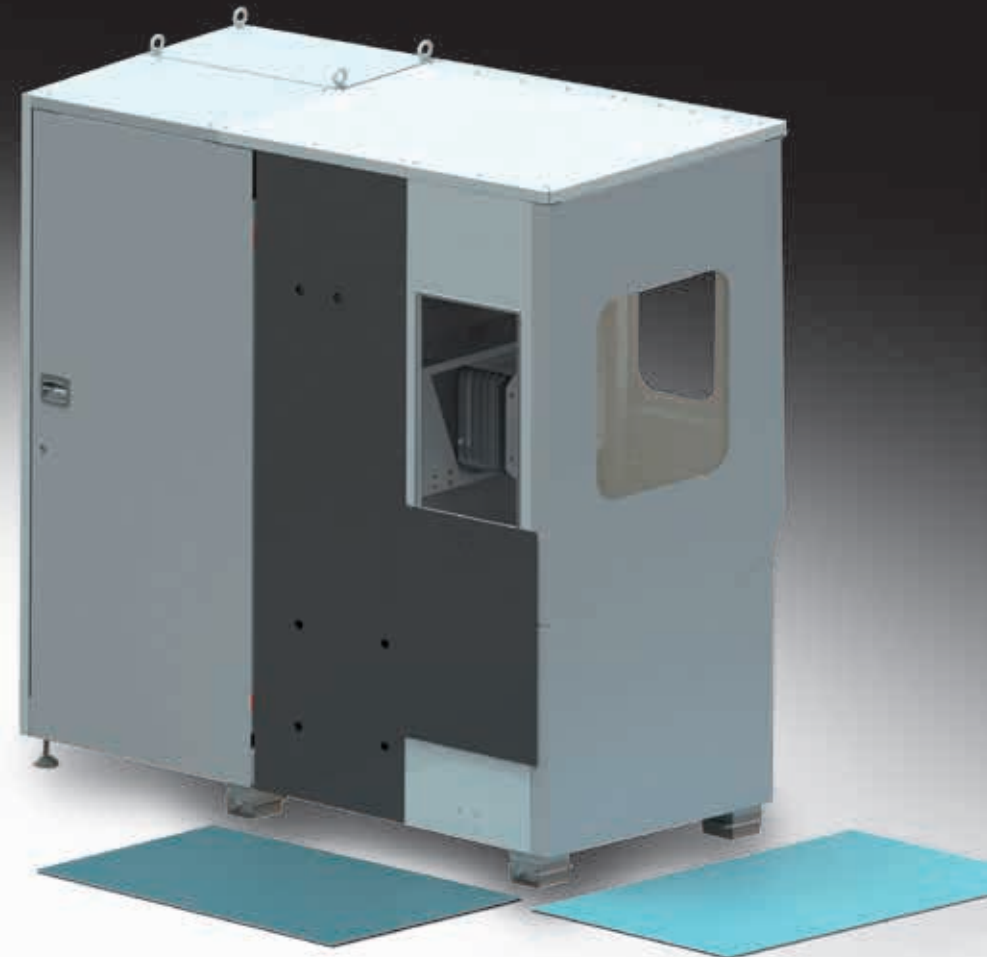
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Development of the automation  
solution matching your require-  
ments