





Deburring, edge honing and polishing

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efficient and reliable





## The BP Mx for reliable deburring, defined edge honing and reproducible polishing

The **BP Mx** brushes away sharp edges and burrs, brushes precisely defined radii and contours onto edges and simultaneously polishes the surface to the very finest finishes. It reproduces calculated results with consistent accuracy and used particularly for parts with a diameter of about 0.5 to 250 mm in medium to large series. Years of working with various end-users and the evolution of machining processes has led to the robust and future-oriented **BP Mx**. This generation of modular machines, in addition to known processes, allows precision deburring in wet and dry modes.

### **MAXIMUM PRODUCTIVITY**

- Reproducibly defined edge geometry
- Simple operation thanks to touch panel
- Highest process stability
- Automatic compensation of brush wear
- Wet and dry machining possible
- Fully enclosed work area
- Modular concept allows specific configuration to suit user application

### **APPLICATION**

- Flat and patterned components are simultaneously brushed on a planetary polishing table. The rotary motions of table, workpiece and brush can deburr the edges or produce a controlled radius along workpiece edges. The entire top surface is also polished during this process.
- For rotary parts we have developed various rotary tables. There are tables available with fixed or adjustable tilting spindles. This includes conventional cylindrical or HSK work holding.

### CHARACTERISTICS OF THE MACHINE

- Three process steps in one program (memory for 99 machining programmes)
- Easy cleaning (optional stainless-steel housing)
- Possibility for a fully integrated automatization
- Prepared for wet process (oil or emulsion)
- New brush measurement system to get an accuracy within 0.03 mm
- Blow-off station for the workpiece carriers
- Option for machine communication OPC-UA
- Option for automated workpiece carrier handling; Cooling system; Oil mist extractor
- Tables from 2 up to 12 positions for workpiece carriers (with defined angle from 0° to 20° and 45°)
- Table (star) for peripheral edge honing or polishing of rotationally symmetrical parts
- Workpiece carriers for a wide range of different parts















# **Technical Data**

Total weight	kg	670
Dimension Width/Depth/Height	mm	1130/950/1810
Stroke Z-axis	mm	300
Electrical connection	VAC; Hz	3 x 400/N/PE; 50/60
Main drive power	kW	2.2 – 4.0
Coolant		Air or liquid
Programs		Storage/export (99 machining programmes)
Housing		Painted or stainless steel

## **Brush-/Polishing process**

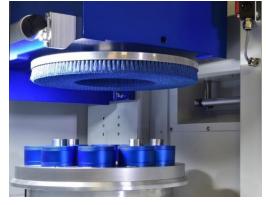
Brush diameter	mm	380
Speed of planetary brush head	1/min	60 - 600
Brush drive power	kW	2.2 – 4.0
Table speed	speed	2
Planetary table with workpiece carrier	mm	from 2xØ250 to 12xØ75
Brush types	1	SiC, ceramic or diamond-loaded synthetic bristles - straight or diagonally equipped
Control of the brush head infeed (incl. compensation for the wear of the brush)	1	automatic

## Options

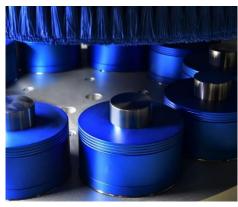
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Workpiece carrier handling	1	Manual loading/automated
Coolant device	1	Emulsion/Oil/Air
Extraction	1	Emulsion/Oil/Dust
Industry 4.0	1	OPC-UA
Further options	1	Measurement system to get an accuracy withing 0.03 mm, blow- off station for the workpiece carriers, automated workpiece carrier handling, network capability

## Workpieces and their dimensions

Typical parts	1	Indexable inserts, profile inserts, drilling and milling tools, pump parts, sapphire glass, ceramic
Size of parts (Ø), nominal to	mm	0.5 - 250
Part thickness	mm	0.1 250











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