







Flexibility, Dynamism and Digitalisation

efficient and reliable in defined edge honing, polishing, deburring



The BP Motion for flexibility, dynamism and digitalisation in defined edge honing, reproducible polishing, and deburring

The **BP Motion** smoothens sharp edges and takes care of burrs, brushes precisely defined radii and contours onto edges and simultaneously polishes the surface to the very finest finishes. The new axis dynamics and innovative control logic allows to treat edges of parts with different definitions while delivering reproducible and constant accuracy. This means that, e.g., one side of a 3-sided part can be explicitly brushed more, i.e., machined differently than the two other sides.

MAXIMUM PRODUCTIVITY

- Reproducibly defined edge geometry
- Differentiated processing of edges possible.
- Accurate brush measurement & automatic brush wear compensation
- Highest process stability for small, medium, and large series
- Wet and dry machining possible
- New design with large ergonomically placed touch screen for easy operation
- Plug & Play function on compact footprint with facilitated accessibility

APPLICATION

- Flat and patterned components are simultaneously brushed on a planetary polishing table. The rotary motions of table, workpiece and brush can deburr- or produce a specific radius along workpiece edges. As an additional added value, the entire top surface is polished at the same time which does not affect the dimensions of the parts.
- Various rotary tables available for round tools
- Extended field of application through Industry 4.0 connectivity
- From small series with manual assembly to large series with full automation

CHARACTERISTICS OF THE MACHINE

- Three process steps in one program (memory for 300 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 is optionally available
- Machine communication OPC-UA, full connectivity
- Tables from 2 up to 12 positions for workpiece carriers (with defined angle from 0° to 20° and 45°)
- All axes are servocontrolled for maximum precision and minimum noise level

APPLICATION AREAS:



Inserts



Inserts in a cage



Drill clamping drum



Coated insert



Mint punch



Boneplate



Technical Data

Machine

Dimension Width/Depth/Heightmm1300 / 1020 /Stroke Z-axismm300Electrical connectionVAC; Hz3 x 230 / PE ;Main drive powerkW2.2 - 4.0	2000
Electrical connection VAC; Hz 3 x 230 / PE ;	
Main drive power kW 2.2 – 4.0	60 / 3 x 400 / N / PE ; 50 / 3 x 480 / PE ; 60
Coolant Air or liquid	
Programs Storage / exp	rt (300 machining programmes)
Housing Painted or sta	

Brush-/Polishing process

Brush diameter	mm	380 / 500	
Speed of planetary brush head	1/min	0 - 1000	
Brush drive power	kW	2.2 – 4.0	
Table speed	1 / min	0 - 10	
Planetary table with workpiece carrier	mm	from 2 x Ø 250 to 12 x Ø 75	
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

Workpiece carrier handling	1	Manual loading/automated
Coolant device	1	Emulsion/Oil/Air
Extraction	1	Emulsion/Oil/Dust
Industry 4.0	1	OPC-UA / remote maintenance
Further options	Ι	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









René Gerber AG Werkstrasse 35 3250 Lyss Schweiz

T +41 32 387 88 00 E info@gerber-maschinen.ch

www.gerber-maschinen.ch



