



CNC - Spezialmaschinen

[MTB System]

Fits any MAKA spindle – retrofittable, too!

[MTB System]

Innovation by MAKA: Clean milling with maximum efficiency

With the minimum quantity lubrication concept, MAKA has already set standards in milling. **The MAKA TOOL BLOWER SYSTEM takes machining technology to a new level: parts and chips remain almost dry, lubricant consumption is reduced, and tool service life is extended.**



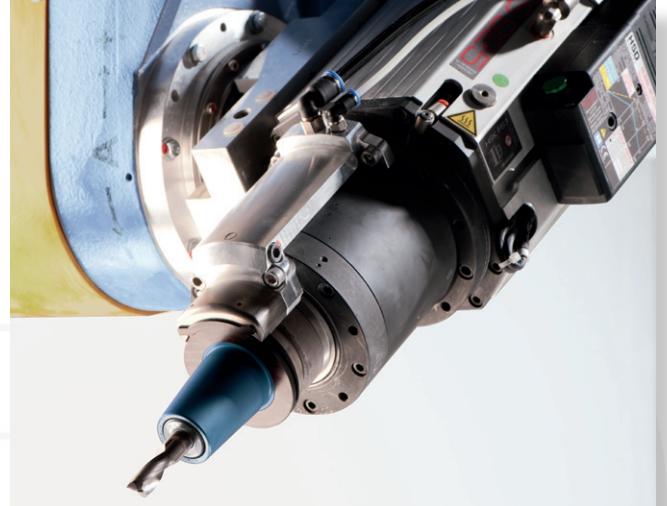
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MAKA TOOL BLOWER SYSTEM (MTB System)

The chip and oil issue...



... is a thing of the past!



NEW: No more sticky components and dirty machinery

The stationary nozzle body above and around the tool holder injects a mixture of water/oil and air directly onto the tool cutting edge. The cutting edge is completely surrounded by the cooling medium to ensure that all areas are lubricated. By using a 20:1 water/cooling medium mixture ratio and by directly wetting the cutting edge, no spray mist is generated which would normally be dispersed in the workshop. The workpieces and the machine remain almost dry and oil free.

The heat generated at the mill's cutting edges during machining is removed by the air flow. Thus, a longer tool service life can be reached, which also contributes to a higher quality milling result. The air flow removes chips from the milling cutter working area. "Chip accumulations" typically seen when pocketing are removed by the air flow.

Fusing of cut surfaces when machining plastics or highly heat sensitive materials can be avoided by switching off the water/oil medium and blowing a cooling air stream onto the workpiece.

The core of the MTB system

When changing tools, the nozzle body is installed on the spindle along with the tool holder. When milling the tool holder rotates whilst the nozzle body remains stationary and is, therefore, independent of the milling speed.

There are fine nozzles drilled all around the annular tip of the nozzle body. With high pressure, these nozzles generate a spray jet forming an air curtain around the cutter shaft. The spray jet is directed precisely onto the cutting area.

Advantages

- High process reliability and fast feeds
- Longer milling cutter service life
- Spray jet always pointed at cutting edge
- Considerable heat reduction at cutter and workpiece
- Clean tool for length measuring
- No built-up edges
- 80% savings due to highly reduced cooling medium consumption (5 grams per medium/hour)
- No readjustment of blow nozzles and spray nozzles
- Lower manufacturing costs
- Can be used on all shrink-fit holders
- Retrofittable to existing MAKAs machines