



microcut
SWITZERLAND

THE CUTTING EDGE OF A MICRON

MicroBore 125

Micro Bore Sizing Machine
for bores with \varnothing **0.060 – 0.250 mm**

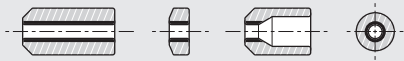


MicroBore 125

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Typical workpieces

rotation-symmetric
workpiece



Outer diameter: approx. 1.00 – 8.00
Length: approx. 5.0 – 16.5 mm
Material: sapphire, ceramic, tungsten carbide, steel etc.

System description

- Lapping process with free abrasive grain
- Automatic slurry distribution and dosing system (diamond-suspension)
- Single sided fixed conical tool (floating)
- Rotation and oscillation on workpiece
- Force controlled machining process
- Automatic tool dressing and feeding system to compensate tool wear

System advantages

- Geometric corrections: roundness, cylindricity
- Sizing of the bore dimension and the dimensional accuracy
- Surface finishing achievement
- No changes in the bore positioning alignment, therefore:
 - simple workpiece fixture possible
 - machining of smallest inner diameters on stepped bores
 - only a minimum of oversize is necessary
- Quality control by process analyses
- Stock removal of approx. 2 - 10 μm , depending on bore diameter, bore length and material

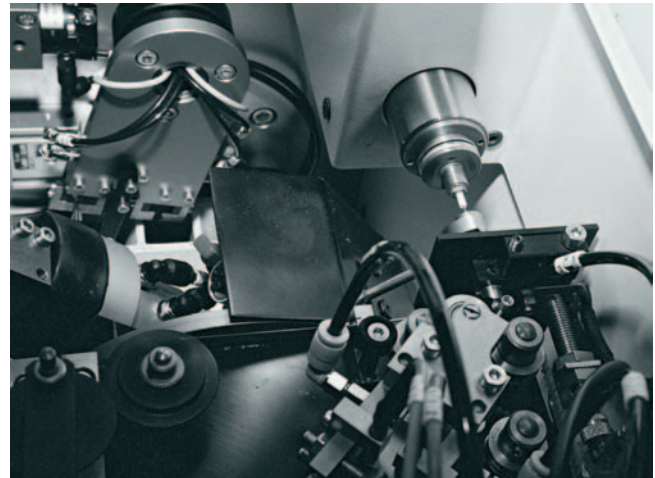
Workpiece handling, loading and unloading

- Integrated loading and unloading unit (optional)
- Designed according to workpiece and customer requirements

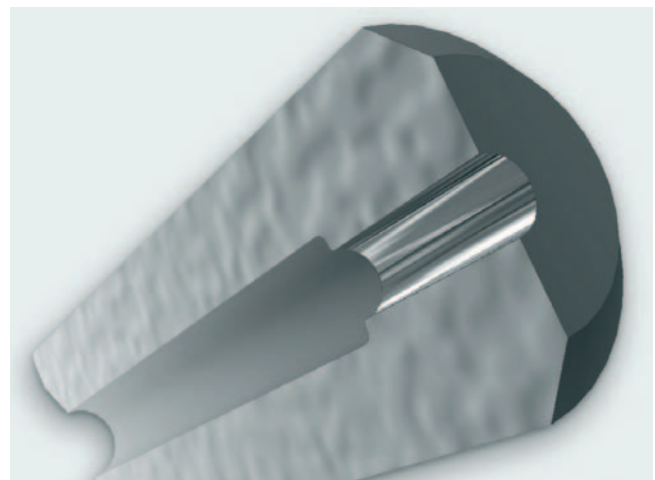
Technical data

- Oscillating high frequency workpiece spindle (19 Hz /60'000 min^{-1})
- Wear resistant linear-guiding
- Different specified parameter access levels
- Software controlled process parameters
- Visualised and recorded process parameters for each machined bore

Electrical requirements: 3 x 400 V, 50/60 Hz
Power consumption: 800 VA
Air requirements: 5,5 bar (dry, clean filtered air)
Dimensions (L x W x H): 1050 x 1000 x 1600 mm
Weight: approx. 450 kg

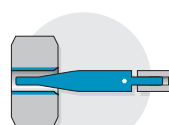


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- 1.) Insight into the MicroBore 125: Machining-Head
- 2.) Ferrule (fibre optic connector)
- 3.) Typical workpiece- and bore-geometry

Subject to modifications



Micro Bore Sizing



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