

acuwire-S

The acuwire-S is designed to hone bores from 0.10 to 0.80 mm. As all Schläfli machines the acuwire-S is perfect to machine hard material as ruby, carbide, technical ceramics and steel. It is possible to mount long single parts as well as multiple short parts. Depending on the workpiece geometry the parts are cast into a quill shaft or a mechanical clamping fixture is used.

Part OD

up to 10 mm (customized solutions for bigger ODs are available)

Bore size range

0.04 – 0.800 mm

Maximum part or arbor length

200 mm

Process control

Siemens SIMATIC S7
linear drive

Spindle motor

100-3000 min⁻¹

Electrical specification

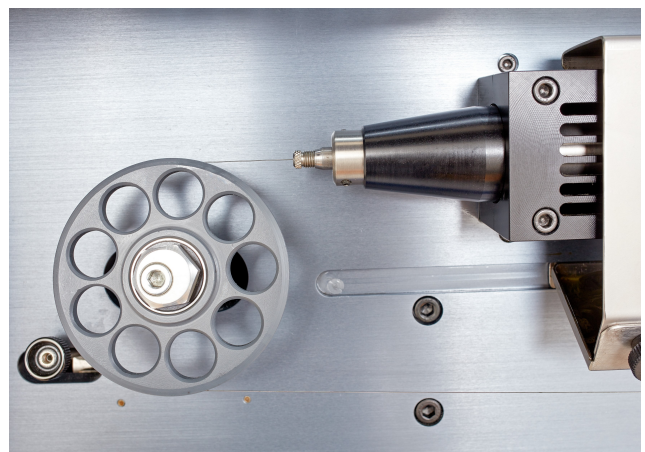
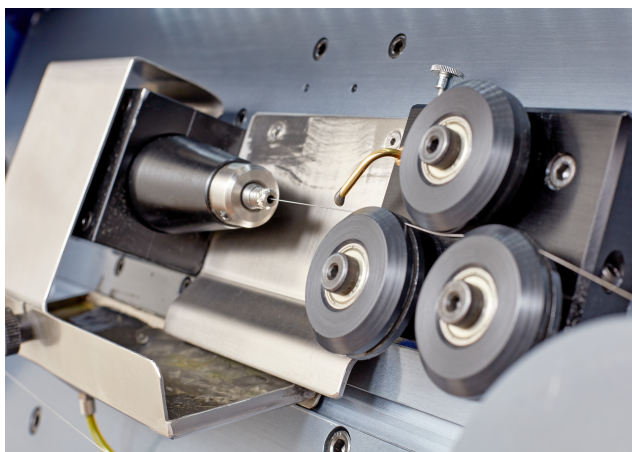
voltage 110VAC – 240VAC
frequency 50Hz – 60Hz

Dimensions (length x width x depth)

1030 x 475 x 1510 mm

Weight

130 kg



APPLICATIONS

Ceramic tubes

Technical ceramics are found in a broad range of application.



Workpiece specifications

Material	Zirconium oxide
Inner diameter	0.90 mm
Outer diameter	1.302 mm
Length	10.1 mm

Honing process data

Achieved tolerances (diameter)	0/+0.004 mm
Material removal	0.6mm
Number of pieces / clamping (=1 group)	85
Cycle time (group)	30 minutes
Cycle time (workpiece)	21 seconds

Carbide workpiece



Workpiece specifications

Material	Carbide
Inner diameter	0.1 mm
Outer diameter	3.5 mm
Length	3.6 mm

Honing process data

Achieved tolerances (diameter)	+/- 0.001 mm
Honing length	3.6 mm
Number of pieces / clamping (=1 group)	58
Cycle time (group)	35 minutes
Cycle time (workpiece)	36 seconds

AVAILABLE ACCESSORIES

Standard clamping (arbor)

Customized clamping

[Tooling: honing wire with entry and final diameter according to customer specification, gradation: 0.001](#)

[Diamond suspension](#)

[Casting-system acucast-H](#)

[System to mount workpieces onto the honing wire: acuthread](#)

[Guiding wire, gradation: 0.001](#)

[DeCast 600 system to extract the workpiece](#)

OmniFlow compound to cast the workpiece

[Carbide gauge pins](#)