

Universal front- and back-end grinding machine
for ferrules processing

MicroGrind 21



Short information:

- Fully automated process for
 - length adjustment
 - chamfering
 - V-bore
 - APC type, e.g. 8°, 30°, 45°
- Automatic loading/unloading
- Roughing and finishing with 2 individual spindles
- 3 servoaxes (2 linear/1 rotational)
- Postprocess measuring device
- Length tolerance $\leq \pm 0.01$ mm
- Cycle time 8–20 s, depending on actual operation



microcut
SWITZERLAND

Microcut Ltd
Rolliweg 21/P.O. Box 448
CH-2543 Lengnau BE

Phone +41 (0)32 654 15 15
Fax +41 (0)32 654 15 16
www.microcut.ch

Technical data

Machine:	MicroGrind 21; universal front- and back-end grinding machine for ferrules processing, including loading and unloading system
Material that can be processed:	Ceramics, zirconia, sapphire, ruby, carbide, HSS steel
Range of applications:	<ul style="list-style-type: none">• Fiber-optic connectors/ferrules face side grinding• Carbide/ceramic parts• Customer-specific application (drilling small holes, milling and turning) for mass production parts
Standard diameter to be processed (handling):	1.25–2.8 mm (other dimensions on demand: ~ 1–8 mm)
Standard length to be processed:	Approx. 6–16.5 mm (other dimensions on demand)
Achievable surface finish:	Ra: approx. 0.05 µm (depending on tooling)
Length tolerance:	<±0.01 mm (in temperature-controlled room and consistent OD)
Typical cycle time:	One operation (simple chamfering) approx. 8 s, two operations approx. 11 s (depending on the conditions of the workpiece, stock removal, surface quality, etc.)
Speed of ferrule spindle:	500–6000 rpm
Speed of grinding tooling:	Max. 60000 rpm
Electrical requirements:	220–240 V AC, 50/60 Hz (or customer demand)
Power consumption:	700 VA
Air requirements:	5.5 bar (80 psi)
Dimensions (W × D × H):	1050 × 1000 × 1600 mm (45 × 40 × 60")
Weight:	450 kg