

CNC246F - Fluting+Relieving



CNC246F - FLUTE AND O.D. RELIEF GRINDER

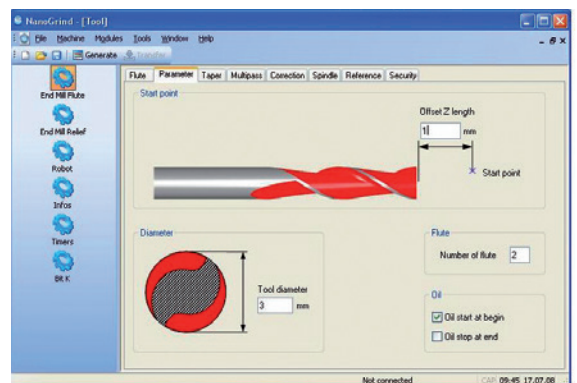
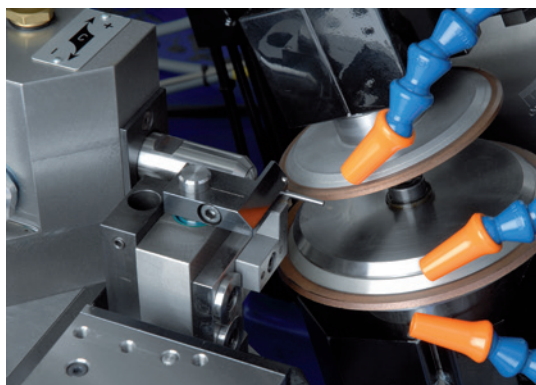
The CNC246F is a highly productive fully-automatic precision grinding machine designed for fluting and relieving carbide, HSS and other hard material cutting tools in the diameter range of 0.2 to 6.35 mm (.008" to .25"). Its unique features make it ideal for the production of drills, endmills, taps, reamers and dental tools in one clamping.

The CNC246F is a versatile grinder for all types of milling, drilling and boring, routing and de-burring applications in the industrial, medical, electronic, semiconductor, dental and woodworking industries.

SPECIAL FEATURES

Exclusive benefits of the CNC246F:

- Integrated 3-axis CNC high speed load/unload robot
- Convenient access to the operating area for easy use
- Modular tool support systems for maximum tool concentricity and flexibility
- Modular design of the grinding wheel spindles
- Rapid profiling of the grinding wheels on the spindle, outside the machine
- Quick setup with tool shank guidance and easy programming
- Extremely rigid bed provides high repeatability and excellent quality surface finish
- Compact layout with very short travel distances minimizing cycle times
- Uncomplicated design for minimum maintenance
- Fanuc PowerMate iH CNC control with Rollomatic grinding software, graphic interface and FluteCalc® simulation software ensure rapid setup and quick program change-over with secure database management



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SPECIFICATIONS

GRINDING RANGE

Grinding Ø range	0.2 – 6.35 mm (.008"– .25")
Shank range	1.0 – 6.35 mm (.04"– .25")
Cutting length	52 mm (2")
Overall blank length	100 mm (4") hand loading

FLUTING SPINDEL

Power	2.2 kW
Rotation speed	up to 6000 rpm
Grinding wheels	Ø 80 – 150 mm (3"– 6")

RELIEVING SPINDEL (Option)

Power	0.55 kW
Rotation speed	up to 6000 rpm
Grinding wheels	Ø 80 – 100 mm (3"– 4")

CONTROL

Fanuc PowerMate iH Windows XP user's interface, programming with graphic assistance

X axis	Stroke	58 mm (2.3")
	Fast travel	6 m/min (20 ft/min)
	Resolution	0.0001 mm (Less than .00001")
Z axis	Stroke	80 mm (3.15")
	Fast travel	6 m/min (20 ft/min)
	Resolution	0.0001 mm (Less than .00001")
C axis	Stroke	continuous
	Fast rotation	10'000°/min
	Resolution	0.0001°

U axis	Stroke	174 mm (6.85")
	Fast travel	7 m/min (23 ft/min)
	Resolution	0.0001 mm (Less than .00001")
V axis	Stroke	160 mm (6.3")
	Fast travel	7 m/min (23 ft/min)
	Resolution	0.0001 mm (Less than .00001")
W axis	Stroke	335 mm (13.2")
	Fast travel	35 m/min (115 ft/min)
	Resolution	0.0001 mm (Less than .00001")

CLAMPING Collet type: B8

ROBOT LOAD & UNLOAD

Number of tools	500 Ø max 3.175 mm (1/8")
	300 Ø max 6.35 mm (1/4")
Shank diameter	1.0 – 6.35 mm (.04" – .25")
Overall length	76.2 mm (3")

TOOL SUPPORT

Shank guide	High precision half-moon or "V" shape holder
Cutting portion support	Steady rest half-moon or "V" shape

MACHINE

L x W x H	2025 x 1330 x 1960 mm (80" x 53" x 77")
Weight	1400 kg (3087 lbs)
Total power	6 kW

HYDRAULIC

Oil tank	10 liters (2.6 US Gal.)
Oil pressure	12 bars (174 psi)

* Specifications are subject to change without notice