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
# CNC246F - Fluting + Relieving

## 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 Spindle
- Power: 2.2 kW
- Rotation speed: up to 6000 rpm
- Grinding wheels: Ø 80 – 150 mm (3” – 6”)

### Relieving Spindle (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)

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* Specifications are subject to change without notice