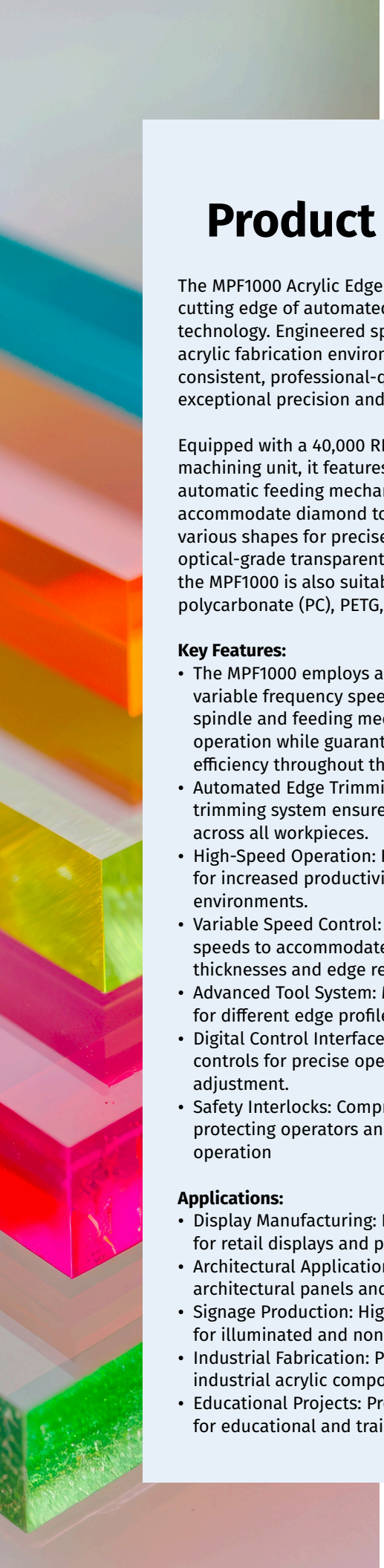
MINTECH
CNC SOLUTIONS

9380 7th Street, Suite A
Rancho Cucamonga, CA 91730
(909) 755-1011
https://mintechusa.com
admin@mintechusa.com

Acrylic Edge Trimmer
MPF1000



Product Overview

The MPF1000 Acrylic Edge Trimmer represents the cutting edge of automated acrylic finishing technology. Engineered specifically for high-volume acrylic fabrication environments, the MPF1000 delivers consistent, professional-quality edge trimming with exceptional precision and efficiency.

Equipped with a 40,000 RPM spindle as the primary machining unit, it features an elastic tension belt and automatic feeding mechanism. The spindle unit can accommodate diamond tools or carbide cutters of various shapes for precise edge cutting, achieving an optical-grade transparent finish. In addition to acrylic, the MPF1000 is also suitable for trimming polycarbonate (PC), PETG, and other plastic materials.

Key Features:

- The MPF1000 employs a simple analog circuit and variable frequency speed control for both the spindle and feeding mechanism, ensuring intuitive operation while guaranteeing reliability, safety, and efficiency throughout the trimming process.
- Automated Edge Trimming: Precision-controlled trimming system ensures consistent edge quality across all workpieces.
- High-Speed Operation: Rapid processing capabilities for increased productivity in manufacturing environments.
- Variable Speed Control: Adjustable processing speeds to accommodate different acrylic thicknesses and edge requirements.
- Advanced Tool System: Multiple cutting tool options for different edge profiles and finishings.
- Digital Control Interface: User-friendly digital controls for precise operation parameter adjustment.
- Safety Interlocks: Comprehensive safety systems protecting operators and ensuring reliable operation

Applications:

- Display Manufacturing: Professional edge finishing for retail displays and point-of-sale materials.
- Architectural Applications: Clean edge finishing for architectural panels and decorative elements.
- Signage Production: High-quality edge preparation for illuminated and non-illuminated signs.
- Industrial Fabrication: Precision edge trimming for industrial acrylic components.
- Educational Projects: Professional-quality finishing for educational and training applications.

Applicable Materials

1. Acrylic (PMMA)
- Primary material; designed for optical-grade polishing.

2. Polycarbonate (PC)
- Compatible for edge finishing and surface milling.

3. PETG and other plastic sheets
- Suitable for transparent plastics requiring clean, polished edges.

Specifications

Model	MPF1000
Machine size	35" × 26" × 54" (880 × 660 × 1360 mm)
Weight	600 lbs
Processing Length	≥ 4 Inches (≥ 100 mm)
Processing Width	• Automatic Feeding: ≥ 1.77 Inches (≥ 45 mm) • Manual Feeding: ≥ 0.24 Inches (≥ 6 mm)
Processing Thickness	≤ 4 Inches (≤ 100 mm)
Processing Angle	Dependent on Tool Angle
Processing Method	Material Feed
Operation Interface	Button & Speed Controller
Machine Power	4.7 HP (3.5 kW)
Spindle Power	4 HP (3 kW)
Spindle Speed	40,000 RPM
Speed Adjustment Method	Variable Frequency Drive
Feed Speed	0-78 Inches / min (0-2000 mm/min)
Positioning Accuracy	±0.05 mm
Repeatability	±0.02mm
Cooling System	Water Cooling
Drive System	• Motor Types:Servo Motor • Transmission:Ball Screw
Control System	Mintech
Power Supply	208-220V, Single Phase, AC 50-60Hz, 15 Amp