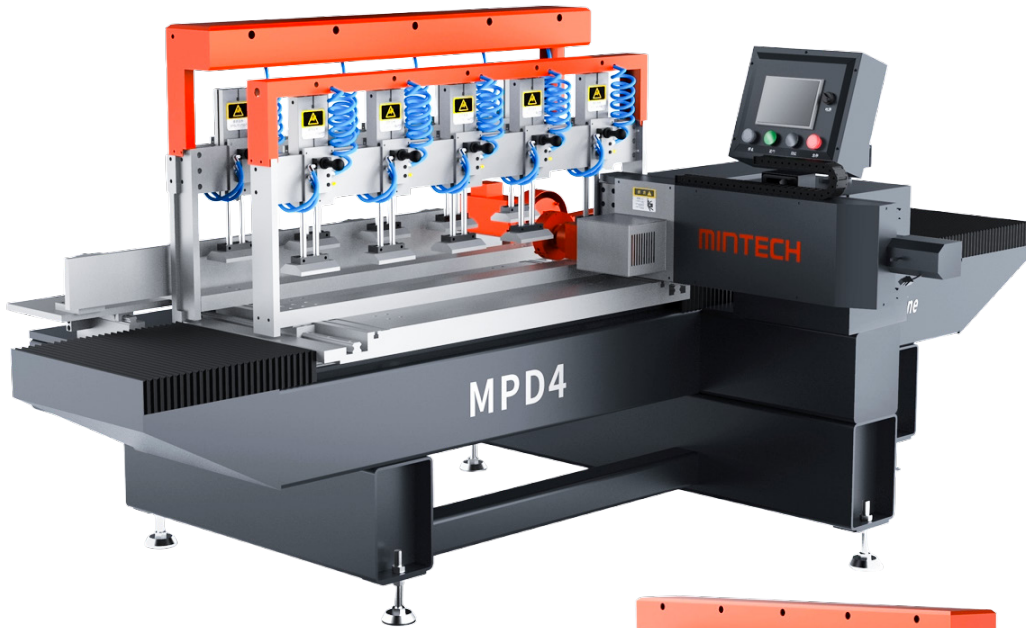




Double-Sided Acrylic Polisher

MPD4



Product Overview

The MPD4 Double-Sided Acrylic Polisher delivers professional-grade surface finishing for acrylic materials with unmatched precision and efficiency. Engineered for high-volume production environments, the MPD4 provides consistent, crystal-clear surface polishing that transforms cut acrylic edges into optically perfect finishes.

The MPD4 Double-Sided Acrylic Polishing Machine is specifically designed for high-volume polishing of acrylic sheets. Featuring a dual-spindle structure and a pneumatic material pressing feed system, the machine uses high-speed rotating diamond cutter discs to perform precision trimming on both sides of the material simultaneously, achieving an optical-grade transparent finish. In addition to acrylic, the MPD4 is also suitable for polishing polycarbonate (PC), PETG, and even soft metals like aluminum.

Key Features:

- The MPD4 employs a PLC-based logic control circuit, integrated with pneumatic and mechanical transmission systems.
- Double-Sided Polishing: Simultaneous polishing of both sides for maximum efficiency and consistency.
- Variable Speed Control: Adjustable polishing speeds to accommodate different acrylic types and thicknesses.
- Precision Pressure Control: Consistent pressure application ensures uniform surface quality across all workpieces.
- Advanced Polishing Compound System: Integrated compound delivery system for optimal polishing results.
- Digital Temperature Control: Precise temperature management prevents material damage and ensures quality.
- Automatic Feed System: Consistent material feed for uniform processing and reduced operator intervention

Applications:

- Optical Components
- Display Manufacturing
- Architectural Elements
- Sign Manufacturing
- Medical Devices
- Laboratory Equipment
- Acrylic display stands

Applicable Materials

1. Acrylic (PMMA)

- Primary material; designed for optical-grade polishing.

2. Polycarbonate (PC)

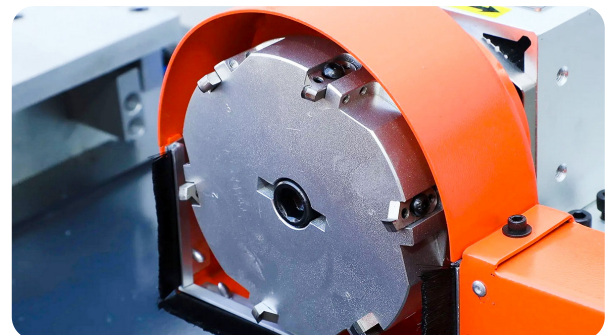
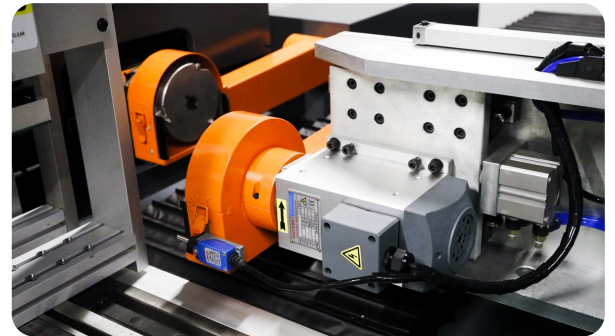
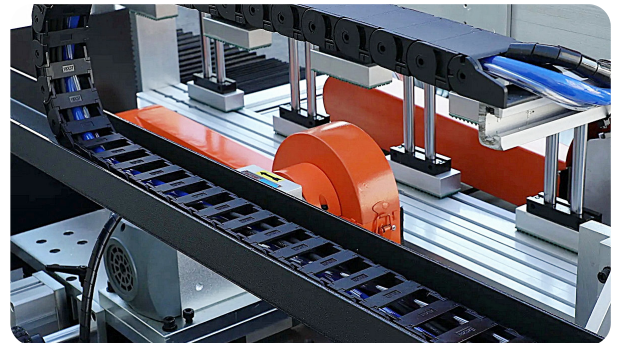
- Compatible for edge finishing and surface milling.

3. PETG and other plastic sheets

- Suitable for transparent plastics requiring clean, polished edges.

4. Soft metals like aluminum

- Light milling/polishing capability for aluminum



Technical Specifications

Model	MPD4
Machine size	144" × 93" × 58" (3658 × 2362 × 1473 mm)
Weight	1400 lbs
Processing Length	• 51.18 Inches (1300 mm) • 122 Inches (3100 mm)
Processing Width	2.36-13.6 Inches (60-600 mm)
Processing Thickness	≤ 4 Inches (≤ 100 mm)
Processing Angle	0°
Processing Method	Material Feed
Operation Interface	Touchscreen Control Panel
Machine Power	8 HP (6 kW)
Spindle Power	3 HP (2.2 kW)
Spindle Speed	7000 - 9000 RPM
Speed Adjustment Method	Variable Frequency Drive
Feed Speed	0-78 Inches / min (0-2000 mm / min)
Positioning Accuracy	±0.01 mm
Repeatability	±0.01mm
Cooling System	Air Cooling
Drive System	• Motor Types: Servo Motor • Transmission: Ball Screw
Control System	Mintech
Power Supply	208-220V, Single Phase, AC 50-60Hz, 15 Amp
Air Pressure Supply	80 - 120 PSI (5.5-8.2 Pa)

