

MP500

Automated Electropolishing System for Medical Applications



Superior Processing Technology for Precise Control and Repeatability

Technic's **MP500** provides high-throughput and complete automation of the electropolishing process for stainless steel, Nitinol, and titanium in a small footprint.

The MP500 is fully compatible with any commercially available electropolishing chemistry, alkaline/acidic cleaning solutions, and citric acid solutions. Typical applications include electropolishing, sharpening, and deburring medical devices such as catheters, scalpels, saws, and screens.

Operation data of the tool is automatically logged. Adding a barcode scanner guarantees lot traceability and tracking. Daily usage and maintenance are simple and convenient. The user-friendly HMI allows easy operation and learning for new operators, supervisors, and engineers.



Features

- Capable of processing parts from 10 mm up to 20" long
- Machine footprint on production floor is 8' wide x 8' long x 11' tall
- Suitable for stainless steel, Nitinol, titanium, and related metals
- Robotics integration possible for loading parts/racks or a combination of both
- HMI touch-screen for operation and monitoring of process parameters
- Recipe management, data logging, and lot traceability
- Suction and high flow heated dryer to ensure cannulated parts are dried
- Integrated wastewater lift station to collect all counterflow rinsing discharge
- Light curtain safety device at load/unload station
- Sludge management enabled by large access panels and sloped reservoir/process cell bottoms

Benefits

- Superior part-to-part uniformity over batch methods with better throughput
- Repeatable, consistent material removal using precision-controlled rectifiers
- Increased operator safety via hazardous chemical transfer system
- Minimizes fresh water consumption by using counterflow rinsing

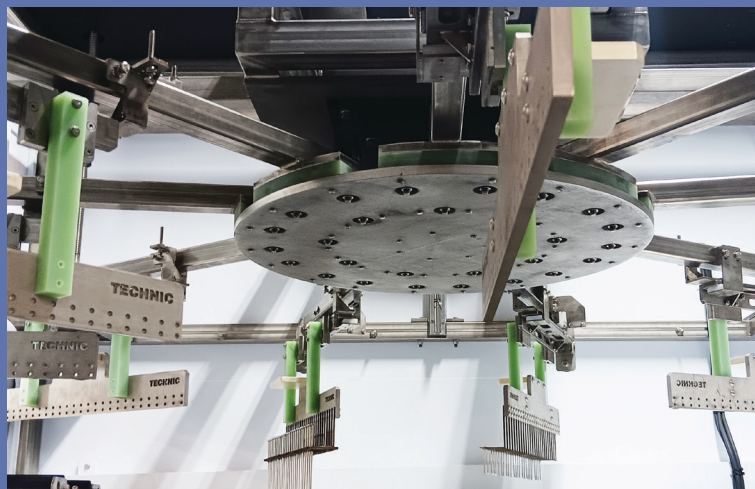


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What our customers say about Technic's MP500

"We acquired the MP500 automated electropolish system in May 2021. Our requirements were slightly different from the stock system, so we worked on those adjustments with the Technic team. This process was seamless and Technic easily accommodated all of our needs.

The installation of the machine could not have been easier. Technic handled the whole process and got it installed within two days. After installation, Technic walked us through programming the software and making adjustments to the equipment.



During the training process, Technic set up several different part programs, allowing us to run the parts through the system before they left, which was incredible.

We have been running the MP500 flawlessly for two shifts, five days a week for the last 3 years. Our production has increased by more than 90% using this system.

We have had very minimal issues. When some of the wiring under the EP tank got corroded, Technic was there to replace it within a day.

Thanks to its ease of operation, we are able to train staff on this system in less than a week, which allows for greater staff flexibility. We truly can't say enough good things about this automated electropolish system."

Step	Process Description	Dwell Time (Sec)	Temp. (°F)
1	Manual Load	60	-
2	Electropolish*	60	120-150
3	Dragout Rinse #1	60	RT
4	Counterflow Rinse #2	60	RT
5	Counterflow Rinse #3	60	RT
6	Ultrasonic Citric Acid Dip	60	120
7	Counterflow Rinse #4	60	RT
8	Counterflow Hot Rinse #5	60	140
9	Dryer (Suction/Heated Forced Air)	60	140-160
10	Manual Unload	-	-

*Recommended rectifier size: 24VDC/500A



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