MD-4000 Series Medical Pouch Sealer

Cleanroom-Ready. ISO-Compliant. Engineered for Precision

The **MD-4000 Series** is a stainless-steel rotary medical pouch sealer designed for the demanding requirements of medical device and pharmaceutical packaging. Built for cleanroom use and fully aligned with **GMP** and **ISO 11607-1/2** expectations, the MD-4000 delivers validated, repeatable sealing performance for sterile barrier systems across a wide range of materials.

Its wipe-down-friendly stainless housing, intelligent touchscreen interface, and advanced monitoring technologies make it one of the most capable and compliance-ready sealers in its class.

Cleanroom Focused Design

The MD-4000 Series is engineered for controlled environments where sterility, traceability, and process control are essential. The system requires **no external air supply**, reducing contamination risk and simplifying installation. A **7" TFT touchscreen** with AppCtrl™ provides intuitive navigation, customizable main screens, and multilingual operation.

Core Technologies That Elevate Packaging Performance

Transducer-Monitored Pressure

A calibrated pressure transducer continuously monitors sealing force, ensuring **repeatable, validated pressure profiles** across every pouch. The system delivers **80–120 N** of monitored force and produces a **12 mm SealPeak™ seam**, engineered for high seal strength and excellent peel characteristics—even on uncoated Tyvek® and polyolefin materials.

SealPeak™ Wide-Band Seal

SealPeak™ technology creates a flat 12 mm seal with a reinforced central "peak" that increases seal strength toward the center. Soft edges prevent product breakthrough, while the central peak captures the product if it pushes against the seal. This design also provides clean, fiber-free peeling—even when opened in the wrong direction.

Dual Heating Platens

Dual sealing platens deliver fast, uniform heat transfer for consistent seal formation across long production runs.

Integrated System Alarms

The MD-4000 continuously monitors temperature, pressure, and speed. If any parameter drifts outside your validated range, the system triggers an immediate alarm—protecting your sterile barrier integrity.

TraceLog™ Digital Logbook

Every action performed on the machine is recorded and can be exported for audit review. When DataMatic™ is enabled via USB, all actions are automatically copied and can be viewed in spreadsheet format.

DocLink™ Connectivity

DocLink™ provides four USB-A ports, RS-232, and Ethernet connectivity, enabling seamless integration with batch documentation, tracking systems, and external printers.

ProTrack™ (Optional)

For high-demand applications, ProTrack™ monitors temperature, pressure, and speed **across the entire seal length**, capturing up to **1,000 data points per seal** for unmatched process visibility.

FontMatic™ Printing

The integrated printer supports text, barcodes, and international characters. FontMatic™ automatically adjusts font size to match pouch width for clean, readable labeling.

IntelligentScan™ Programming

Operators can pre-configure packaging materials, personnel data, and print sequences via PC software and load them instantly using a scanner.

Validation Driven Features

ValiUp™ Temperature Optimization

ValiUp™ helps determine the optimal sealing temperature during process validation, following the guidance of ISO 11607-1, ISO 11607-2, and CEN ISO/TS 16775.

Daily Seal Check

A built-in Seal Check function provides traceable daily verification of seal quality, including pouch parameter printing for documentation.

ProDoc™ Documentation Software

ProDoc™ enables complete, legally compliant process documentation. Sealing protocols are digitally signed, archived in tamper-protected PDF format, and stored with a two-year digital signature.

GreenTek™ Energy Efficiency

The MD-4000 uses a highly efficient **24-volt heating system**, consuming only a fraction of the energy required by comparable devices. Automatic standby and shut-down modes reduce power usage without compromising seal quality.

Technical Specifications

Sealing speed	5–13 m/min (monitored)
Temperature range	Up to 220°C (monitored)
Contact pressure	80–120 N (monitored)
Seal width	12 mm SealPeak™
Material compatibility	Paper, film, Tyvek®, polyolefins, PP fleece/nonwoven, PA/PE (per EN 868 and ISO 11607)
Connectivity	USB (x4), RS-232, Ethernet, HDMI
Power	100–240 V, 50/60 Hz
Dimensions	710 × 260 × 220 mm
Weight	20 kg
Housing	Stainless steel

(All specifications sourced directly from the attached MD-4000 spec sheet.)

What Comes with Your MD-4000 Series Sealer

ISO/IEC 17025 Accredited Calibration

Your sealer arrives with a **no-cost thermal calibration** performed in our accredited laboratory, ensuring immediate compliance.

Certified Installation Qualification (IQ) Support

Our quality-system-certified technicians provide IQ documentation and support to help you integrate the system into your validated workflow.

Pouch Integrity Testing

You receive a **complimentary 10-specimen pouch integrity study**, including full reporting from our ISO/IEC 17025 accredited laboratory.

All documentation, certifications, and test results originate from our accredited pouch testing and calibration laboratory.

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Connecting medical device packaging to patient safety.

Call Customer Care: 800-550-3854