SPD Series “Sterile Aware™” Hospital and Clinic Medical Device Pouch Sealer

Sealer Engineered for Absolute Confidence in Sterile Packaging

The **SPD-2 SterileAware™ Series 2** is the next evolution in medical device packaging technology—purpose-built for sterile processing departments, device manufacturers, and life-science teams who refuse to compromise on seal integrity. Designed in collaboration with global healthcare partners and engineered to meet the rigorous expectations of **EN ISO 11607-2** and **DIN 58953-7**, the SPD-2 delivers a level of process control, reliability, and traceability that sets a new benchmark for rotary sealers.

Every detail of the SPD-2 reflects a singular mission: protecting patients by ensuring every sterile barrier is sealed with precision, repeatability, and validated performance.

Unmatched Process Control for Validated Sealing

The SPD-2 is a microprocessor-controlled rotary sealer that continuously monitors the three critical sealing variables:

Temperature Control

- Dual heating elements (top and bottom) ensure uniform thermal transfer
- Electronic monitoring locks the drive if temperature deviates by ±5 °C
- Four programmable temperature setpoints for different packaging materials
- Designed for compliance with DIN 58953-7 sealing requirements

Contact Pressure

- Strain-gauge-based pressure monitoring
- Automatic alarm and process lockout if pressure deviates ±20%
- Precision-machined sealing rollers ensure consistent mechanical force

Sealing Speed (Dwell Time)

- Tachometer-based speed monitoring
- Automatic alarm and lockout if speed deviates ±10%
- Fixed throughput optimized for validated sealing performance

This triad of controls ensures every seal produced by the SPD-2 is consistent, repeatable, and fully compliant with modern sterile packaging standards.

Designed for the Realities of Sterile Processing

The SPD-2 isn't just engineered for performance—it's engineered for the workflow of busy SPD teams.

Fast, Intuitive Operation

- Automatic feed engages as soon as packaging is inserted
- Adjustable sealing edge width from 0–30 mm
- Unlimited sealing length for pouches and reels
- Clear, easy-to-read controller with real-time status indicators

Built for Demanding Environments

- Powder-coated metal housing and V2A stainless steel component
- Quiet operation (<70 dB)
- Stable performance in ambient temperatures from +5 to +40°C
- Designed for long service life with minimal maintenance

Compatible with the Most Common Sterile Barrier Systems

- Paper pouches (EN ISO 11607-1 / EN 868-4)
- Film/paper combinations (EN 868-3 / EN 868-5)
- Tyvek® and polyolefin-based materials (EN 868-9)
- PP fleece and non-woven materials

Advanced Traceability & Digital Integration

Modern sterile packaging requires more than a good seal—it requires documentation. The SPD-2 delivers.

USB Data Logging

- Automatic CSV data capture for every sealing event
- Records temperature, pressure, speed, batch number, operator ID, expiry date, and more
- Plug-and-play USB export for audit trails and validation reports

RS232 Serial Interface

- Integrates with external printers and tracking systems
- Supports IntelligentScan™ barcode input for operator ID, batch numbers, and expiry dates

Configurable Print Data (with external printer)

- Date/time
- Sterilization method
- Batch number
- Personnel code
- Expiry date
- Package content quantity
- Custom text fields

The SPD-2 transforms sealing from a manual task into a fully traceable, data-driven process.

Seal Check Function for Daily Verification

Quality assurance is built directly into the device. The SPD-2's Seal Check mode allows users to verify temperature, pressure, and dwell time before and after each shift or batch. When paired with Seal Check indicators, teams gain a documented, routine method for confirming sealing performance—an essential component of ISO 11607-2 validation.

Engineered for Serviceability & Longevity

Van der Stähl Scientific understands that uptime is everything in sterile processing. The SPD-2 is designed for easy maintenance and long-term reliability.

Service-Friendly Design

- Modular components for rapid replacement
- Accessible PTFE guides, pressure rollers, and heating dies
- Annual calibration recommended for validated performance

Available Replacement Parts (with proper care, the SPD-2 delivers years of dependable service.)

- PTFE guide strips
- Pressure rollers
- Toothed belts
- Heating cartridges
- Temperature sensors
- SST and DMS modules
- Gear motors
- Temperature controllers

Electrical Specifications

Voltage	100 / 115 / 230 V
Frequency	50 / 60 Hz
Max Power	500 W

Mechanical Specifications

Dimensions	565 × 255 × 155 mm
Weight	14.7 – 15.7 kg
Seal Width	12 mm ±1
Seal distance from edge	0 – 35 mm
Unlimited seal length	-

Process Parameters

Max temperature	220 °C
Temperature tolerance	± 5 °C
Contact pressure	100 N
Pressure tolerance	± 20%
Speed tolerance	± 10%

van der stähl
SCIENTIFIC

Connecting medical device packaging to patient safety.

Call Customer Care: 800-550-3854