



Description

The Low-Pressure Heat Sealer NDS allows you to determine the sealability of coated paper, aluminium foils and laminates as well as other heat-sealable multi-layer films.

You can easily determine the optimum sealing parameters for any film types used for pressure-sensitive charge with appropriate packaging machines.

The NDS simulates the low-pressure heat sealability under real-life conditions. The two key sealing parameters - temperature and time - can be exactly set at the NDS.

Using the standard set of weights (5 x 214 g) the NDS operates with a sealing pressure of 0.35 N/cm², if you use the entire sealing area (20mm x 30mm). This sealing pressure corresponds to real life circumstances during the packing process for pressure-sensitive goods. The special construction of the set of weights guarantees exact parallelism and an evenly distributed sealing pressure across the entire sealing area at all sealing units. The five separately adjustable and self-optimising PID temperature controls ensure a high exactitude of the selected sealing temperatures. Therefore, the NDS ensures an excellent reproducibility of your tests.

Features

- **Broad temperature range:** For each of the 5 sealing units, you can preset a sealing temperature within the range of ambient temperature up to 200°C.
- **Fast determination of temperature profiles:** By choosing five different sealing temperatures, you can create a complete temperature profile of the sealability in a single test operation.
- **Dwell time selectable for a wide range:** For all 5 sealing units, you can preset a dwell time within the range of 0.1 seconds to 99.9 seconds.
- **Variable sealing pressure:** The sealing pressure will be adjusted using sets of weights. By replacing the different sets of weights you can cover a sealing pressure within the range of 0.15 N/cm² to 2 N/cm².
- **Good reproducibility of the sealing results:** High-quality components and an auto-optimising PID temperature control ensure reliable results.
- **User-friendly:** The sealing process is initiated with the press of a button.
- **Simple Test Equipment Monitoring:** To assure the reliability of the test results (according to ISO 9001), the NDS provides an external connector to validate the exact dwell time.

Specifications

Pressure connection	2 - 6 bar
Sealing area	20 mm x 30 mm
Sealing temperature	From ambient temperature to 200°C
Tolerance	< 2% from the maximum value
Dwell time	0.1 s bis 99.9 s
Tolerance	< 0.1 s
Sealing pressure (entire sealing)	0.35 N/cm ² (0.035 bar); corresponds to 214g across 6cm ² . Customised version from 0.15N/cm ² (0.015 bar) up to 2N/cm ² (0.2 bar)
Dimensions	72 x 49 x 37cm
Weight	25kg
Storage temperature	0°C - 50°C
Working temperature	15°C - 35°C
Relative humidity	max. 80% non-condensing
Electrical connection NDS	230V / 50 - 60Hz, power consumption 700W, approx.

Typical application

For determination of the optimum sealing parameters with small sealing pressures of film types used for pressure sensitive packaging.

Optional accessories

■ Sets of weights

for a sealing pressure of 0.15 N/cm² up to 2 N/cm²

■ Universal Tensile Tester VNG-E

for seam strength testing

■ Strip cutter STR

to prepare samples for the evaluation of the seam strength

