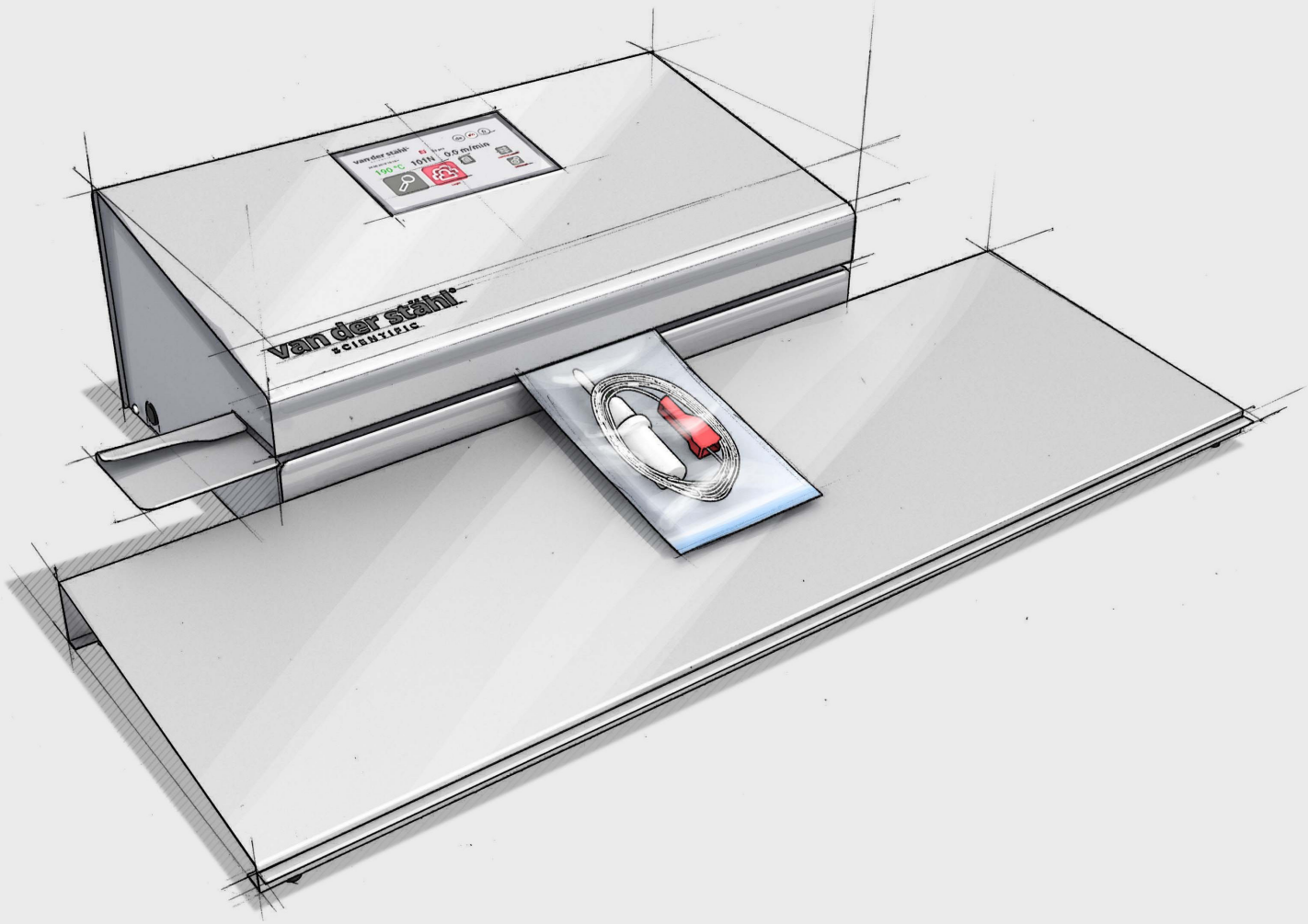
VAN DER STÄHL SCIENTIFIC

ROTARY MEDICAL POUCH SEALER

MD 4000
SPECIFICATIONS



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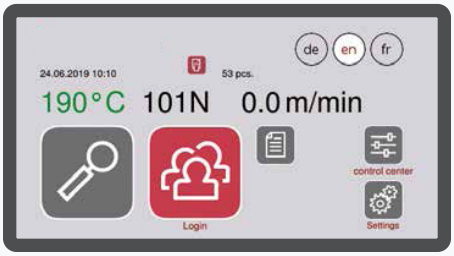
STAINLESS STEEL ROTARY SEALING MACHINE FOR THE SEALING OF SEALABLE PACKAGING.

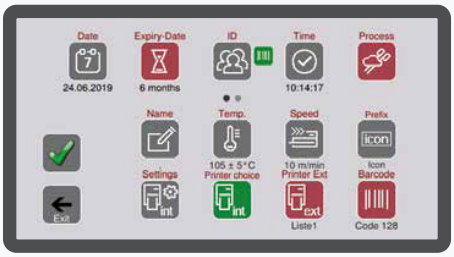
MD 4000 DC-VI

The rotary sealing machine md 4000 DC-VI has been developed for the special requirements of the medical and pharmaceutical industry (LifeScience) and for use in clean rooms. It guarantees GMP-compliant packaging quality.



Self configurable main screen

Simple catalogue input with internal on-screen or external keyboard



User friendly and intuitive applications (AppCtrl)

AppCtrl – TOUCH SCREEN.

A 7” TFT touch screen and an intelligent controller in connection with the AppCtrl applications allowing to call up device and programming functions make operation and validation child’s play. The main screen can be adapted in-dividually by the user according to his needs. The md 4000 DC-VI is equipped with an HDMI port and can be connected to any commercially available monitor or TV.

DocLink – COMMUNICATION.

Due to the innovative DocLink communication unit the md 4000 DC-VI can easily be linked to batch documenta-tion and tracking systems. DocLink has four USB A and one RS 232 interfaces. An additional Ethernet interface makes the md 4000 DC-VI network-compatible.

TraceLog – DIGITAL LOGBOOK.

The md 4000 DC-VI is equipped with the new TraceLog technology. All actions are recorded and can be viewed if required. If the DataMatic function is activated via a connected USB stick, each action is automatically copied and can then be viewed in a spreadsheet program (e.g. Excel).

ValiUp – VALIDATION.

The md 4000 DC-VI has been fitted with the new system integrated function to determine the optimum sealing temperature during process validation (ValiUp). This innova-tive tool complies exactly with the pre-set process of the international Guidance on the application of ISO 11607-1 and ISO 11607-2 (CEN ISO/TS 167751).

[1] Types of packaging for the end-packaging of sterilised medical products – Guide manual for the application of ISO11607-1 and ISO 11607-2.

ProTrack – PROCESS TRACKING

ProTrack is an optional technology for the holistic monitoring of the sealing process over the entire sealing seam length – a technology for highest demands. For each sealing seam the temperature, contact pressure and speed (dwell time) are monitored and recorded on a USB stick. The innovative technology can record up to 1,000 measured values within one seam (additional USB dongle required).

FontMatic – PRINTER.

The printer of the md 4000 DC-VI is capable of not only printing the required text information, but it can also print barcodes. Make your selection via the print application. The FontMatic technology automatically adjusts the font size to match the width of the packaging. The printer is able to print international languages characters (e.g.Chinese).

SealPeak – SEAL STRENGTH.

For the sealing seam, the proven SealPeak technology is used. SealPeak sealing seams are 12 mm (0,5 inch) wide flat seams with a so called barrier of extremely high solidity at their centre, the SealPeak. The seal strength increases steadily from the edges towards the SealPeak. The advantage of these soft edges is that the product cannot break through the edges, but gently pierces them and is then caught by the SealPeak at the centre. SealPeak sealing seams also have excellent peeling properties without paper shredding, even if the user peels the pack open in the wrong direction. Thanks to the tried-and-tested sealing technology, SealPeak sealing seams are also ideal for uncoated Tyvek®2 and polyolefin packagings.

IntelligentScan – PROGRAMMING.

The md 4000 DC-VI can be operated as usual with a scanner. Entering data is now even more convenient and more secure. With IntelligentScan technology you can enter all the relevant device configurations, such as packaging materials, print and personnel data, as well as the print sequences beforehand, via the PC software.

[2] Tyvek® is a registered trademark of E.I. du Pont de Nemours.

GreenTek – SUSTAINABILITY

Environmental protection and sustainability are not ends in themselves. The md 4000 DC-VI is consistently focusing on resource-efficent design with a completely new type of sealing technology, which only needs a fraction of the energy required by similar devices. The heating works with the highly efficient 24 Volt system which reduces the power consumption to a mininum. The stand-by function and automatic shut-down, when not in use, complete the GreenTek concept. All this is achieved without compromising the quality of the sealing seam.

ProDoc – DOCUMENTATION SOFTWARE.

In line with the requirements of EN ISO 11607-2, the process variables must be routinely monitored and documented for the packaging process. It is now possible to ensure complete, legally sound process documentation thanks to the PC-documentation software. The PC or laptop with the installed ProDoc documentation software is connected to the serial interface of the sealing machine. Once the used sealing machine has been selected and activated, the software automatically receives the data for the process variables, as well as other relevant protocol
data (e.g. machine number, personnel number, etc.). The sealing protocols are digitally signed and archived. The archiving process takes place in a legally secure manner in a PDF format protected against unauthorised changes. A digital signature is included for a period of two years.

InkTest PRO | PRO HDPE | PRO PLUS

Using the innovative test systems InkTest PRO, InkTest PRO HDPE (red, for Tyvek®2/ plastic materials) or the new InkTest PRO PLUS (black, for other polyolefine materials) is an easy and cost-efficient way to comply with the required routine checks. InkTest PRO is ideal for checking gusseted materials.

	md 4000 DC-VI
SEALING MATERIALS	
Sealable paper pouches according to EN ISO 11607-1/EN 868-4	x (suitable for gusseted materials)
Sealable pouches and reels according to EN ISO 11607-1/EN 868-5 made of film and paper according to EN 868-3	x (suitable for gusseted materials)
Sealable pouches and reels according to ISO EN 11607-1/EN 868-5 made of film and uncoated materials made of polyolefins according to EN 868-9 (e.g. Tyvek®[1])	x
Sealable pouches and reels according to ISO 11606-1/ EN 868-5 made of PP fleece or PP nonwoven	x[2]
Peelable pouches PA/PE	x[2]
TECHNICAL DATA	
Validatable process	x
Microprocessor controlled	x
Display	7" TFT graphic colour
Input keyboard	touchscreen (external keyboard / mouse optional)
Printout[3]	24-dot matrix, single lined, for special characters
RS 232 connection	x
USB A connection	x (4x)
Ethernet connection	x
Connection for label printer	x
HDMI connection	x
Sealing speed (dwell)	5-13 m/min (197-512 inch/min) (monitored)
Sealing temperature	max. 220 °C (428 °F) (monitored)
Contact pressure	80-120 N (monitored)
Switch-off tolerance +/- 5°C (DIN 58953-7)	x
Seal distance from the material edge	0-35 mm (0-1.4 inch)
Seal seam width[4]	12 mm (0.5 inch)
Sealing system	flat (with SealPeak)
Mains connection	100-240 V, 50/60 Hz
Power consumption	90 W[5]
Dimensions W x D x H	710 x 260 x 220 mm (22.2 x 10.2 x 8.6 inch)
Weight	20 kg (44 lb)
Housing	stainless steel
ACCESSORIES	
PC-documentation software ProDoc	x
IntelligentScan hs 980 BR	x
Matrix reader	x
RFID Reader	x
Roll conveyor hm 500 RT	x
Tray hm 1000 T	x

[1] Tyvek® is a registered trademark of E.I. du Pont de Nemours.
[2] Approval and/or tests necessary.
[3] It is not possible to print on aluminium laminate film.
[4] Other sizes optional.
[5] The values may vary during the heat-up phase.

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