



## DM 50 / DM 70

1- / 2- component dosing and mixing system



AUTOMATED SEALING SOLUTIONS



## DM 70

2- component dosing and mixing system with dynamic mixing head MK 50 on a mobile chassis



## DM 50

2- component dosing and mixing system with static mixing head MK 20 on a mobile chassis

# DM 50 / DM 70

## Technical data

### CONTROL CONCEPT

- Modular-design contact-free control system; operating terminal with display elements integrated into switchgear cabinet, keypad with LED indicators, size of display screen: 4-lines with 20 characters each
- EMERGENCY OFF function provided by master switch
- Switchgear cabinet fixed on a mobile chassis
- Programmable potlife monitoring system, shot and repeat-shot preselection, automatic rinsing and material conditioning
- Spontaneous output-quantity adjustment by use of frequency converter
- Monitoring of components pressure
- Component working-pressure indicated by manometer

### DRIVE TECHNOLOGY

- Turning-speed controlled spur wheel back-gearred motor with revolution counter and adjustment by use of the operating display
- Driving power: 0.55 kW
- Drive-system running speed: 40 -260 rpm (optional with DM 70: 15 – 260 rpm with separately driven fan)

### PRECISION GEAR PUMPS (OPTIONAL)

- Size: 0,1 / 0,12 / 0,25 / 0,3 / 0,52 / 0,6 / 1,0 / 1,2 / 2,0 / 3,0 / 4,0 ccm/U (DM 70 additionally: 6,0 / 8,0 / 12,0 / 16,0 / 20,0 ccm/U)
- Special pumps are available on request

### HOSE PACKAGE

- Length 3 m, with all electrical and pneumatic connection lines included
- A-components: Woven fibre-reinforced polyamide high-pressure hose
- B-components: Steel-reinforced teflon high-pressure hose

### COMPRESSED-AIR SYSTEM

- Compressed-air system with filter-pressure reducer and micron oiling system
- Maintenance unit to control the pneumatically-operated items

### CONNECTION RATINGS

- |                            |  |
|----------------------------|--|
| • Electrical system:       | according to DIN EN 40 439-1 and DIN EN 60 204-1 |
| • Electrical power supply: | 3 x 400 V, 50 Hz or 60 Hz, TT or TN network      |
| • Rated capacity:          | approx. 4 kVA (basic configuration)              |
| • Average consumption:     | approx. 2 kVA (basic configuration)              |
| • Compressed-air:          | 100 – 550 l/min at 6 – 7 bar                     |

### DIMENSIONS

- |                          |   |
|--------------------------|---|
| • Tank and pump chassis: | DM 50: W/H/D 600 x 1.450 x 850 mm<br>DM 70: W/H/D 850 x 1.300 x 1400 mm |
| • Switchgear cabinet:    | W/H/D 600 x 600 x 210 mm  |
| • Total weight:          | DM 50: approx. 300 kg<br>DM 70: approx. 400 kg                          |

### GENERAL

- |                               |   |
|-------------------------------|---|
| • Mixing ratio:               | from 100 : 5 to 1 : 1, infinitely variable  |
| • Output quantity:            | DM 50: from 0,1 to 30,0 g/s, other output quantities are available on request<br>DM 70: from 0,1 to 100,0 g/s, other output quantities are available on request |
| • Viscosity processing range: | DM 50: from 100 to 50.000 mPas, other viscosities are available on request<br>DM 70: from 100 to 2.000.000 mPas, other viscosities are available on request     |
| • Chassis:                    | configured as shaped tubular-steel welded frame, supplied in RAL 5015 paint finish  |

# DM 50 / DM 70

## Options

### CONTROL

- Display languages available in English, German, French, Spanish or Italian
- Wire identification
- Operating hours counter
- Adaptable to different power-supply ratings (60 Hz version)

### QUALITY ASSURANCE

- Maintenance unit for monitoring of compressed-air supply
- DM 70: additional monitoring of component operating pressure
- Additional quality assurance devices are adaptable according to customer requirements

### MATERIAL PREPARATION

#### DM 50 / DM 70:

- 12 l pressure container, single-walled, galvanized

#### DM 50 only:

- Non-pressurized tank with shutoff ball valve
- 9 l tank for cleaning agent, with safety valve

#### DM 70 only:

- Pressure container with capacitive minimum filling-level sensors and shut-off ball valve, with compressed-air fittings and compressed-air reducer valves for controlling of container pressures
- Safety pressure valve, TÜV type-approved
- 24 l pressure container, single-walled, galvanized
- 24 l pressure container, single-walled, chrome nickel steel
- 44 l pressure container, single-walled, chrome nickel steel
- 44 l pressure container, double-walled, chrome nickel steel
- 90 l pressure container, double-walled, chrome nickel steel
- 19 l tank for cleansing agent, with safety valve and minimum-level monitoring
- Wire-mesh filter cartridges and plate disc filter
- Rotary current mixer: 22 rpm
- Electrical heating for single-walled containers
- Temperature control for double-walled containers
- Heating-system control for double-walled containers
- Manual nucleation mechanism
- Manual vacuum degassing
- Prepared to control an automatic refilling station
- Single- or double - RAM-presses for 20 to 200 l drums

### HOSE PACKAGE

- Electrical heating hoses with steel-reinforced teflon high-pressure hose core
- Length: up to 10 m (depending on application)
- DM 70: Double-walled medium-heating hose with teflon high-pressure hose core

### MIXING HEAD TYPES

- 1 K – application valve
- MK 20 with feed lines and static mixing
- MK 50 with feed lines and dynamic mixing (rinsing is carried out, in automatic or manual operating mode, by use of a chemical cleansing agent)

### GENERAL

- Rinsing and filling shot container
- Spare-part packages
- Freestanding gallow with balancer for manual application
- DM 70: Adjustable with a third plug-in component
- DM 70: Interface for connection of external components
- DM 70: Compressed-air dryer MDK 6
- Transport, set-up and instruction

# DM 50 / DM 70

## 1- / 2- component dosing and mixing system

### The individual mixture. Tailor-made with modular design for your seals.

The DM 50 and DM 70 are manual 1- / 2- component mixing and dosing systems for sealing, glueing and potting of different types of components. The DM 50 and DM 70 precisely process liquid, medium to high viscose media such as polyurethane, silicones, epoxy resins and other polymer reaction materials.

#### Simple processing

Sonderhoff has designed the DM 50 and DM 70 so that it is easy and safe for operators to fulfil their tasks. The system is run from a LCD operating panel with keypad control. The main outstanding feature of the devices is its non-recirculating system with continuous material dosing via precision-made geared pumps. The processed material is mixed by a static (MK 20) or dynamic (MK 50) mixing head. Another remarkable characteristic of the DM 50 and DM 70 is their compact design, which allows all components to be housed on a mobile chassis. The easy access to the machine permits the fast and trouble-free completion of service and maintenance work.

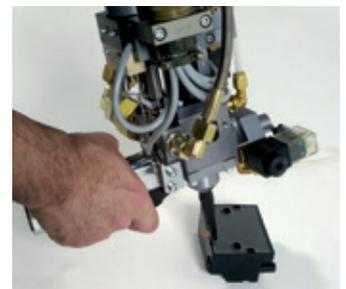
#### Guaranteed quality

The DM 50 and DM 70 process the input materials with constantly high levels of consistency with regard to dimensional stability and production quality. The control system allows the user to store and monitor the main material-processing parameters, such as material reactivity. Variable control is also provided for the parameters affecting automatic rinsing or the automatic repeat-shot, the gauging and shot-time, material feed amount and mixing ratios.

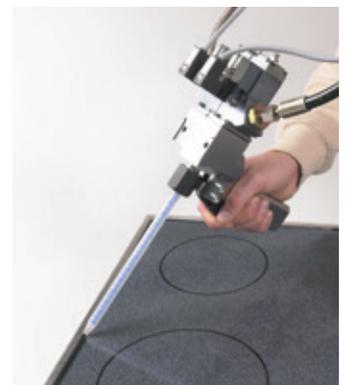
#### Flexible today, flexible tomorrow

Sonderhoff system owners are already prepared for tomorrows tasks as Sonderhoff systems are able to handle different parts with new geometries and materials under changing circumstances. The DM 50 and DM 70 permit the manual application of a wide range of materials by using a hand pistole. The future-oriented technology concept of the DM 50 and DM 70 offers the use of both MK 20 and MK 50 Sonderhoff precision mixing heads. Thanks to their modular design the DM 50 and DM 70 can be customized for almost any size or type of job – for instance as a mobile stand-alone system in manual operating mode.

Modular design, innovative technology and reliable processing procedures guarantee the efficiency of your investment.



Manual encapsulation with potting compound by use of the MK 50



Manual encapsulation by use of the MK 20



**We supply worldwide to more than 50 countries and our customers produce annually more than 300.000.000 seals with our products.**

\* SONDERHOFF and  are trademarks and/or registered trademarks of Sonderhoff and/or its affiliates in the U.S. and/or elsewhere. Other trademarks are trademarks of their respective owners.  
Technical modifications reserved GB 02/18