

SONDERHOFF DM 70 COMPACT

Mixing and dosing machine for one or two components
for manual material application



Space-saving and handy

The mobile workstation for manual material application

The SONDERHOFF DM 70 COMPACT is a low-pressure mixing and dosing machine for the processing of one or two components in manual operation for sealing, bonding and potting. This machine precisely processes and doses liquid, medium and high viscosity compounds such as polyurethanes, silicones, epoxy resins or other polymeric reactive materials.

Simple processing

The DM 70 COMPACT is designed in such a way that you as an operator can easily and safely fulfil the most divers tasks. The operation is carried out with a 7" touch screen. The mixing and dosing machine is based on a non-recirculating system with continuous material dosing by means of precision gear pumps. The processed materials are mixed by a static mixing head (MK 20/21) or a dynamic mixing head (MK 50). All machine components are housed on a mobile chassis. The easy access to the machine allows fast and comfortable completion of service and maintenance work.

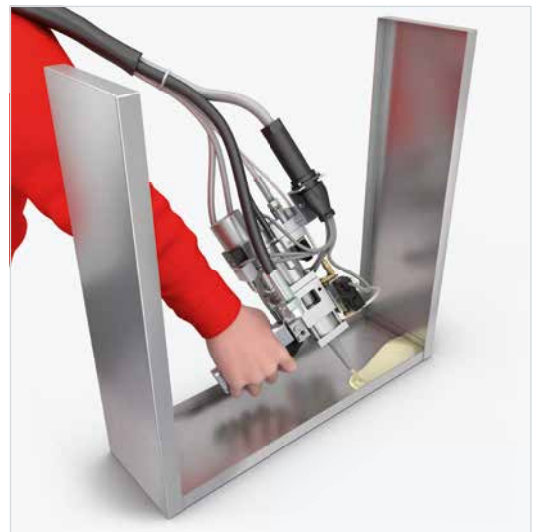
Guaranteed quality

The DM 70 COMPACT processes the used materials with constantly high production quality. The machine control allows the operator to store and monitor the main material-processing parameters, such as material reactivity data. In addition, parameters for automatic rinsing or automatic repeat shot dosing, and the gauging and shot time can be programmed, as well as the material feed quantity and mixing ratio can be set variably.

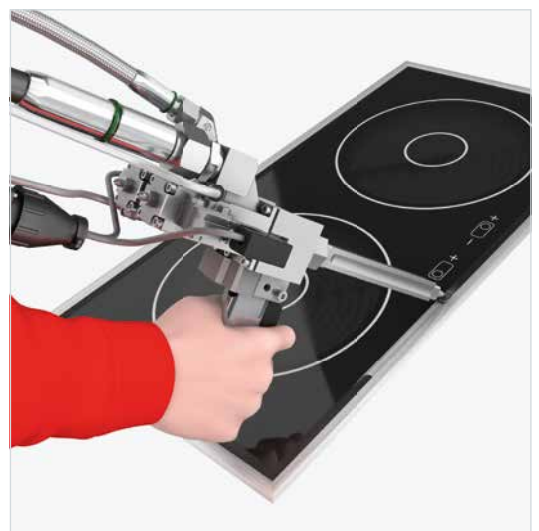
Flexible today and tomorrow

The DM 70 COMPACT permits the manual application of a wide range of materials by means of a handheld pistol, consisting of either the mixing head MK 20/21 or MK 50. This mobile stand-alone system for manual material application can be used in your production in a space-saving manner.

Functional design, proven technology and reliable processes guarantee the profitability of your investment.



Manual application of bonding compound with the MK 50 mixing head



Manual potting with the MK 20/21 mixing head

Dynamic or static mixing

Only your requirements count

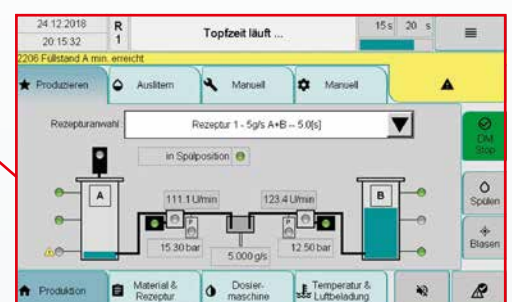
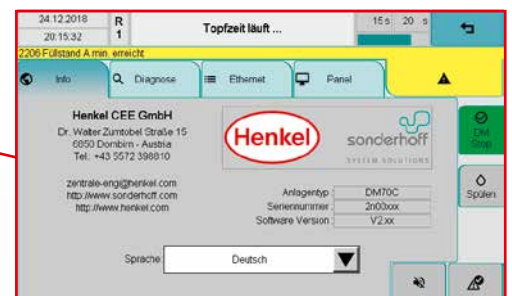
Henkel is the system supplier for polymeric sealing and potting systems.

From us, you get the dosing technology AND the application-specific chemistry from one source – tailor-made for your process and from our own development and production!

The knowledge consistently acquired over many years, as well as more than 1.000 recipes are the guarantee for optimal customer orientation, tailor-made products and market-driven solutions – for your industry as well.

Henkel masters the interplay of material and machine, combining chemical-technical expertise with creative engineering in the fields of sealing foams, bonding and potting. Whether for fully automated inline production systems or manually operated stand-alone systems such as the DM 70 COMPACT, Henkel products always stand for precise, reliable and easy-to-operate production processes.

And so, with the DM 70 COMPACT, too, the sophisticated operating concept is the key to the consistently high quality of the dosed sealing and potting materials.

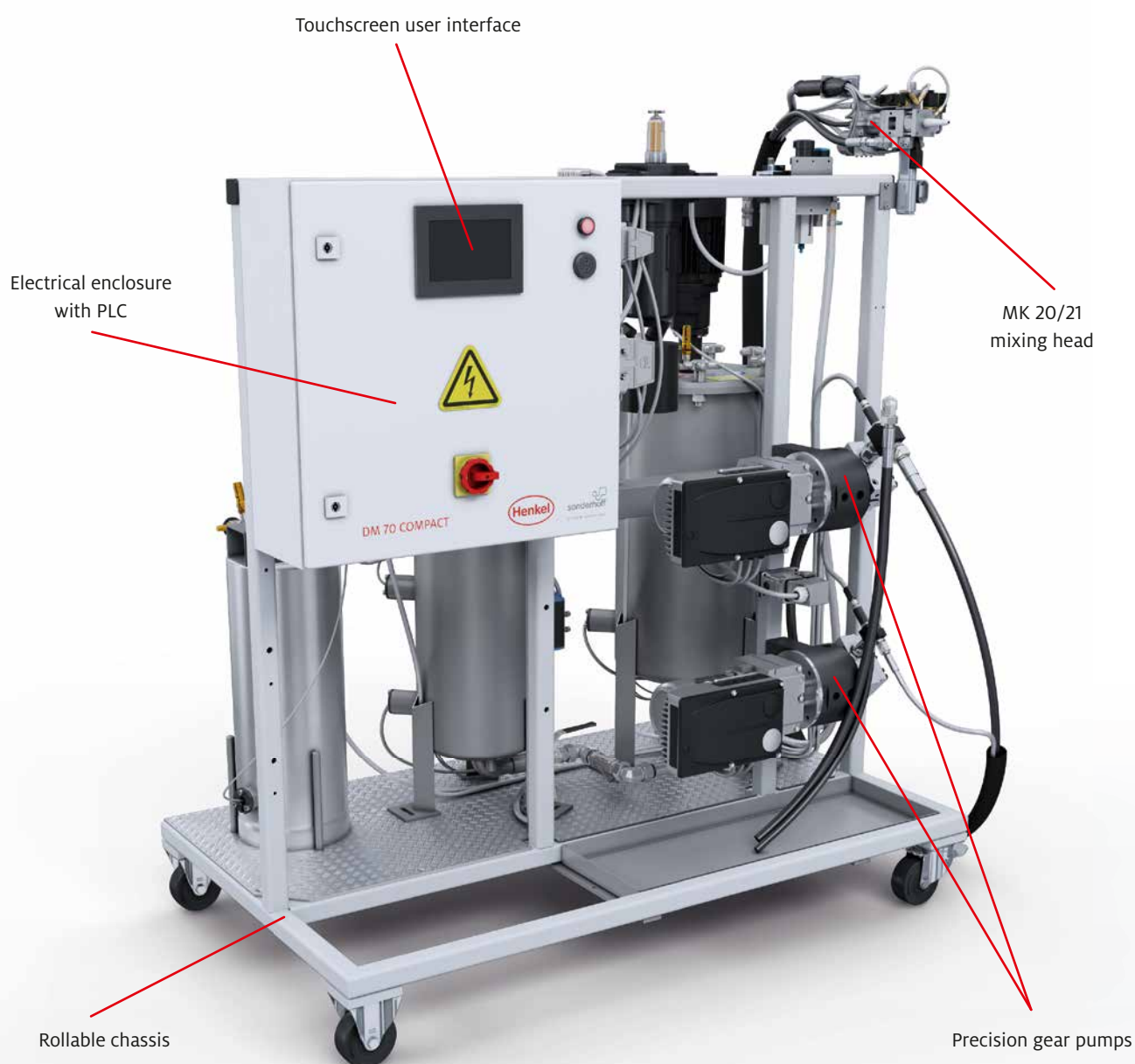


SONDERHOFF DM 70 COMPACT

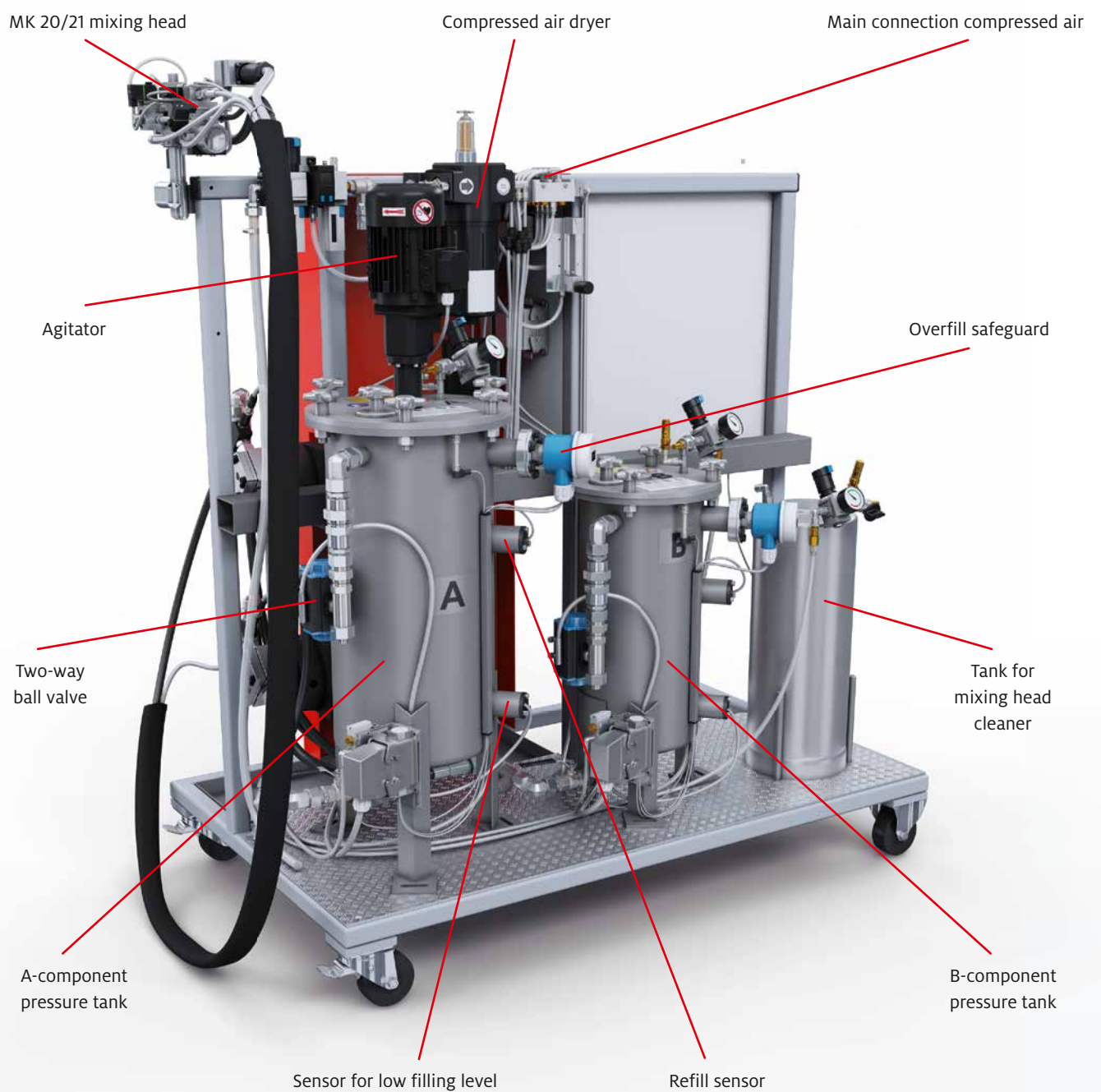
2-component dosing system with dynamic the MK 50 mixing head on mobile chassis

The new SONDERHOFF DM 70 COMPACT

An overview



Mixing and dosing machine DM 70 COMPACT without its front design cover



SONDERHOFF DM 70 COMPACT

Technical data

CONTROL CONCEPT

- › Modular contact-free control with operation and visualization via 7" touch screen, integrated in the switch cabinet
- › EMERGENCY OFF function by master switch
- › Recipe management
- › Dosing machine on mobile chassis
- › Programmable pot life monitoring and dosing quantity preselection
- › Rinsing of mixing head depending on mixing head type used
- › Spontaneously available material feed quantity adjustment by means of frequency converter
- › Pressure monitoring of the components
- › Digital display of components' working pressure

CONTROL

- › Speed adjustable spur gear motor with setting at the display
- › Drive power: 0,75 kW
- › Drive speeds: 15 – 260 rpm

PRECISION GEAR PUMPS (OPTIONAL)

- › Size: 0,1/0,2/0,3/0,6/1,2/3,0/6,0 ccm/R
- › Special pumps on request

HOSE PACKAGE

- › Length 3 m, with all electrical and pneumatic connections
- › A-component: textile-reinforced polyamide high-pressure hose
- › B-component: steel-reinforced PTFE high-pressure hose

PNEUMATICS

- › Pneumatics with filter pressure reducer and micro mist lubricator
- › Maintenance unit for supplying the pneumatic consumers

CONNECTED VALUES

- › Electricity: according to EN 60 204 - 1
- › Electrical power supply: 3 x 400 V, 50 Hz
- › Rated power: approx. 4 kVA (basic version)
- › Ø consumption: approx. 2 kVA (basic version)
- › Compressed air connection value: 100 – 550 L/min at 6 – 7 bar

DIMENSIONS

- › Tank / pump chassis: W/H/D 1.400 x 1.300 x 850 mm
- › Switch cabinet: W/H/D 600 x 600 x 210 mm; with voltage adjustment 600 x 800 x 250 mm
- › Total weight: approx. 400 kg

GENERAL

- › Mixing ratio: 100 : 5 – 1 : 1, infinitely variable
- › Output quantity: from 0,1 to 100,0 g/s, other output quantity on request
- › Viscosity processing range: from 100 to 2.000.000 mPas, other viscosities on request
- › Chassis: design in shaped tubular-steel welded frame, painted RAL 5015

Options

CONTROL

- › Display languages available in English, German French, Spanish, Italian
- › Strand identification
- › Operating hours counter
- › Voltage adaptation to different power-supply ratings, 60 Hz version

QUALITY ASSURANCE

- › Maintenance unit for monitoring of compressed-air supply
- › Pressure monitoring of the components
- › Additional quality assurance devices are adaptable according to customer requirements

MATERIAL PREPARATION

- › Material pressure tank with capacitive minimum fill level sensors, shut-off ball valve, with compressed air fittings and compressed air reducer valves for pre-pressure control of the tank pressures
- › Safety pressure valve (TÜV type approved)
- › 24 L or 44 L material pressure tank, single-walled, stainless steel
- › 44 L material pressure tank, double-walled, stainless steel
- › 19 L tank for cleansing agent, with safety valve and minimum-level monitoring
- › Wire mesh filter cartridges and plate disc filter
- › Three-phase agitator with 23 rpm or alternatively 95 rpm
- › Electric heating for single-walled tanks
- › Temperature control for double-walled tanks
- › Manual vacuum degassing
- › Prepared to control an automatic refill station
- › Material supply by refill station for containers from 20 to 200 liters

HOSE PACKAGE

- › Electrically heated hoses with steel-reinforced PTFE high-pressure hose core
- › Double-walled medium heated hose with PTFE high-pressure hose core

MIXING HEAD VARIANTS

- › 1K application valve
- › MK 20/21 with feed lines and static mixing
- › MK 50 with feed lines and dynamic mixing, mixing chamber rinsing with chemical cleansing agents

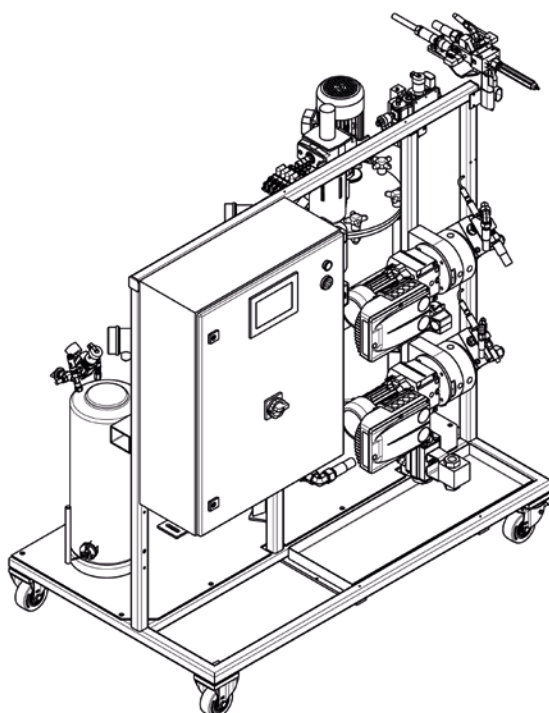
GENERAL

- › Rinsing and filling shot container
- › Spare parts packages
- › Material supply monitoring for component pumps
- › Freestanding gallows with balancer for manual application
- › Interface for external integration
- › Compressed air dryer
- › Transport, setup and instruction

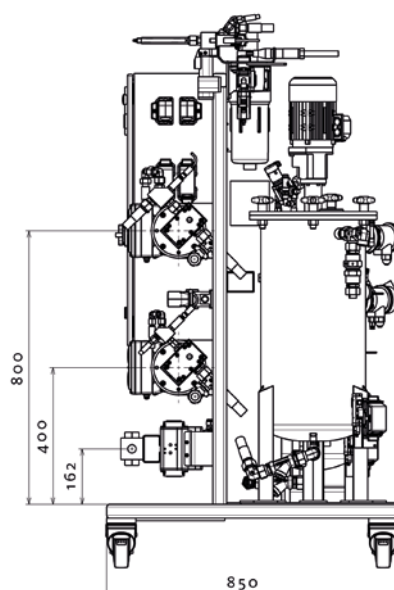
SONDERHOFF DM 70 COMPACT

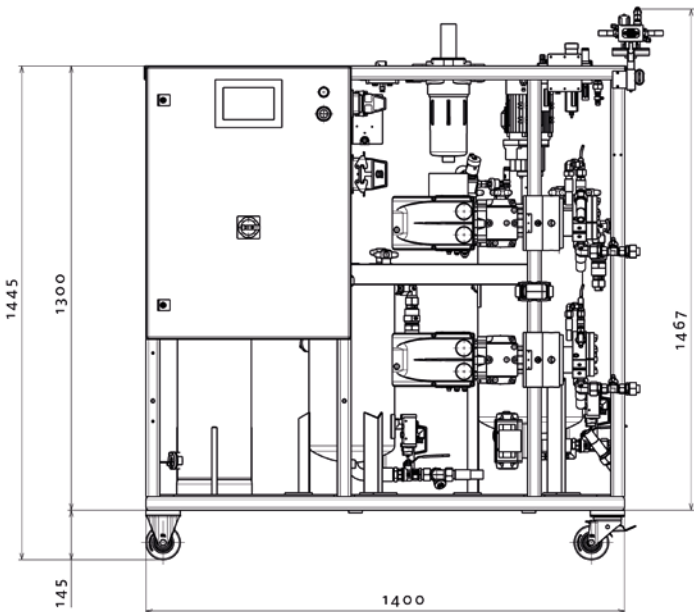
View and dimensions

Isometric view

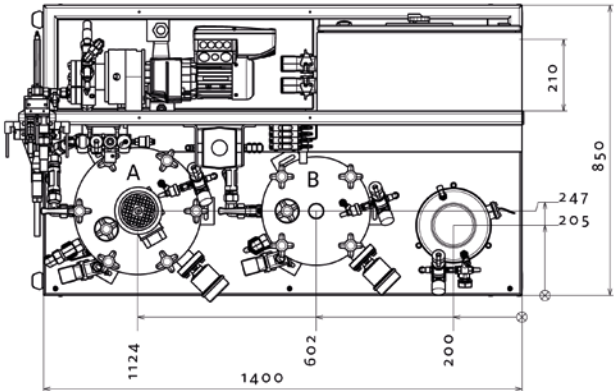


Side view





Front view



Top view

MK 50 Mixing Head

The entry into dynamic mixing



DESCRIPTION

- › 2-component mixing head with dynamic mixing for use with liquid to highly viscous polymeric reactive materials for sealing, bonding and potting, for small to medium output quantities
- › Intended for use with the mixing and dosing machine DM 70 COMPACT in manual or semi-automatic production operation
- › Mixing chamber rinsing with chemical cleaning agents
- › Needle-type injector valves with stuffing box seal
- › Weight-reduced construction for simple manual operation, anodized with blue-grey finish
- › Robust design in high-strength aluminum alloy
- › Mixer speed manually adjustable
- › Injection valves for cleansing agents and blast air used for drying the mixing system
- › Compressed air-driven mixer motor

| TECHNICAL DATA* | MK 50 Mixing Head |
|------------------------|---------------------------------------|
| Dimensions (H x W x D) | 230 x 160 x 250 mm |
| Operating pressure | up to approx. 50 bar / component |
| Output capacity | from min. 1 to 100 g/s |
| Dosing accuracy | ±1.5 % |
| Mixing head weight | approx. 5 kg |
| Mixing ratio | from 100 : 10 to 10 : 100, adjustable |
| Selectable mixer speed | from 200 to 2,700 rpm |

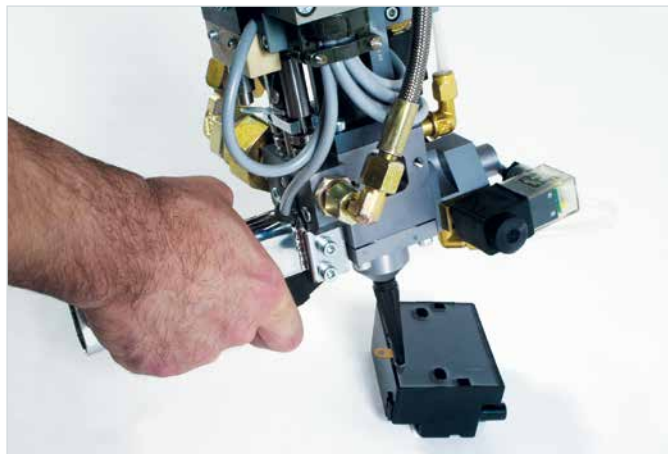
* In dependence of the mixing ratios, material viscosities and the adaptation of pumps, hoses and mixing elements.

VARIANTS

- › Manuel rinsing
- › Automatic rinsing

OPTIONS

- › Mixing head housing made of chrome-steel
- › Customer-specific outlet nozzles
- › Spray system
- › Mixing head temperature control



Manual potting of an electronic component with the MK 50 mixing head and the 2-component casting resin FERMADUR from Henkel

MK 20/21 Mixing Head

The basic version with static mixing



DESCRIPTION

- › 2-component mixing head with static mixing for use with liquid to paste polymeric reactive materials for sealing, bonding and potting. Intended for use with all mixing and dosing machines in either manual or automatic production operation
- › Needle-type injector valves with heavy-liquid element
- › Mixing with static mixing tube
- › Weight-reduced construction in modular configuration for simple manual operation, anodized with blue-grey finish
- › Robust and maintenance-free design in high-strength aluminum alloy and chrome steel

| TECHNICAL DATA* | MK 20/21 Mixing Head |
|------------------------|---|
| Dimensions (H x W x D) | 170 x 74 x 250 mm (without mixing tube) |
| Operating pressure | up to approx. 150 bar / component |
| Output capacity | from min. 1 to 50 g/s |
| Dosing accuracy | ±1.5 % |
| Mixing head weight | approx. 2.5 kg |
| Mixing ratio | from 100 : 1 to 1 : 100, adjustable |

* In dependence of the mixing ratios, material viscosities and the adaptation of pumps, hoses and mixing elements.

VARIANTS

- › MK 20 for small to medium output quantities
- › MK 21 for large output quantities

OPTIONS

- › Mixing head housing made of chrome-steel
- › Customer-specific mixing-tube adapters
- › Mixing-tube centering device with quick-change mechanism
- › Application-specific support-tubes adaptable



Automatic production application with the MK 20/21 mixing head

Perfectly coordinated solutions for material, machine, and contract manufacturing

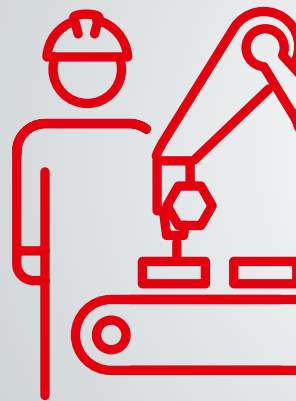
With its Sonderhoff brand, Henkel has not only acquired many years of experience in the manufacturing of tailor-made 2 component sealing systems and mixing and dosing machines, but also process expertise for very precise material application using the FIPFG (Formed-In-Place-Foam-Gasket) technology.

With the Sonderhoff portfolio, we offer our customers the advantages of a system provider from a single source and the solutions to meet your technical and commercial challenges.

We ensure efficient production processes in accordance with the requirements of fully automated series production with the dosing technology that is tailored to our sealing foams.

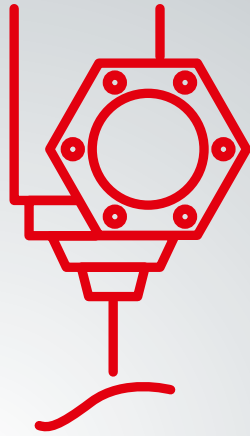
If you would like to take advantage of all the benefits of the FIPFG technology for your production in a flexible, fast, and effective manner, we provide sealing solutions for your components at one of our many contract manufacturing sites worldwide without having to make your own acquisition investments. The spectrum of capabilities ranges from the sampling of prototypes and small batch series to production scale manufacturing.

The choice is yours! You can take advantage of our all-inclusive package, consisting of material, machine and contract manufacturing, supported by application advice, sampling, and training. If you prefer, individual solutions are also available to suit your needs. We combine our products and services from a single source in such a way that you receive the optimum solution for your requirements profile.



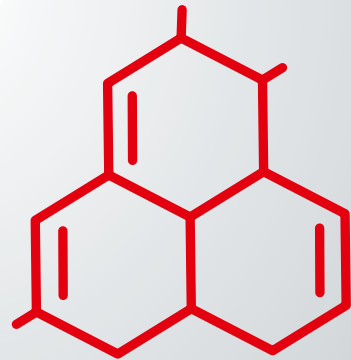
MANUFACT

Flexibility & Precision



EQUIPMENT

Automation Solutions



MATERIALS

URING

Customer-specific solutions – worldwide and for many industries

The Henkel specialists for the SONDERHOFF portfolio
are available to you worldwide

KOLO, POLAND

External Subcontracting Location

LONDON, GB

External Subcontracting Location

COLOGNE, GERMANY

Center of Expertise

ELGIN, ILLINOIS, USA

Regional Hub

RICHMOND (KANSAS CITY), USA

Regional Hub

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PUNE, INDIA

Regional Hub

PUNE, INDIA

External Subcontracting Location

SÃO PAULO, BRAZIL

External Subcontracting Location

Global Presence



Every year, more than 300 million seals are manufactured in more than 50 countries using products from the Sonderhoff portfolio. At our “Centers of Expertise” and “Regional Hubs”, our specialists offer application engineering advice on the selection of a suitable material system and sampling of your components as well as project management for dosing systems and automation. We can offer training on how to use the FIPFG technology. We will also support you with the selection of spare parts and a regular service offering. Furthermore, we will be pleased to take over parts of your production for you – from small to large series – at our subcontracting locations.

Sales staff at all other Henkel locations worldwide will also be happy to answer any questions and provide you with further information on our sealing, bonding, and potting solutions. We look forward to hearing from you.



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