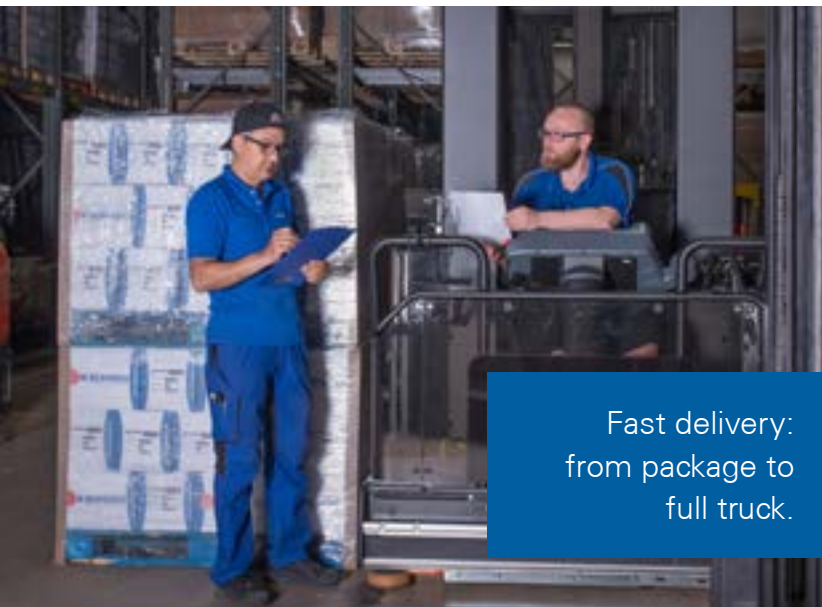


PORTFOLIO

100 1922
2022

M BÜHNEN
ADHESIVE SYSTEMS



Fast delivery:
from package to
full truck.

Small and large
hot glue guns,
accessories and
suitable adhesives.



Large selection
of melters,
accessories and
adhesives.



Compatible
spare parts for
all well-known
manufacturers.



Service and maintenance by professionals.

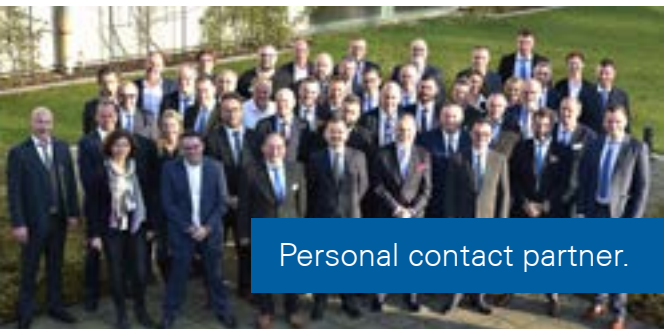


Application technology labor-
atory provides security.

Drum and bag
melters,
accessories
and matching
adhesives.



Competent
advice and
training.



Personal contact partner.



Worldwide-
One team for
your project.

10 reasons for

1

One contact person **for all**
adhesive-related questions

11 BÜHNEN

H BÜHNEN

A good connection from the start



Heinrich Bühnen (1887 - 1953)

He founds the company in 1922. He develops BÜHNEN from a workshop to a manufacturing company. The company founder is described by his family as a tinkerer, but not a dreamer. He uses his inventive spirit on the basis of well-founded knowledge. During his time, the foundation stone for future connection technologies was laid.



Heinz Bühnen (1920 - 2009)

He takes over the business as managing director after the death of his father. With him, the BÜHNEN Group develops from a manufacturing company to a fixing specialist in many sectors. His family describes him as a pioneer and a doer with the courage to take risks. Driven by his commercial intuition, he was always on the lookout for innovations. In the 1970s, he laid the foundation for hot-melt adhesive technology.



Constanze Wriedt

After the death of Heinz Bühnen in 2009, the family shares in the holding company were initially taken over by his wife Ilse Bühnen, and then by her daughter Constanze Wriedt in 2011. With the children Nina and Jannes von Constanze and Christian Wriedt, the fourth generation stands for the continuity of the house of Bühnen.

Open for ideas and innovations – the Bühnen Group develops its perspectives for the entrepreneurial future.





Welcome!

Today, BÜHNEN is a specialist in the niche – what does that mean for our customers?

BÜHNEN provides the solution for everyone who uses hot-melt adhesives in their manufacturing process, regardless of the industry in which the solution is needed. We supply you with the right system technology and the right accessories, as well as the right adhesive – so that you can carry out your bonding successfully and safely. BÜHNEN offers you the benefit of understanding your entire manufacturing process and using this knowledge to your advantage. The broad range of applications and industries in our portfolio is a plus that you will not find with other providers. We take a creative approach to working out the best possible solution for your application, and also offer the widest portfolio of adhesives and system technology. Our unique strength lies in the versatility and flexibility of our solutions.

*“Above all, you need enthusiasm for the end products and the associated processes:
Only in this way can we develop, offer and advance solutions for our customers.”*

At first glance, gluing with hot-melt adhesive is a simple process. The hot-melt adhesive is melted in a device and applied in the liquid state. This is followed by the joining of the components to be bonded. The complicated thing about the mundane topic of gluing is keeping an eye on the entire process.

In the end it is not only the many factors of the manufacturing process, but also the further transport and the final use of your product that have to be taken into account. BÜHNEN is the specialist to find the best solution for you. What do you want to achieve as our customer? When we know your goal, we ask the right questions and deliver the best possible result for safe and optimal bonding of your components. For us, the focus is not on our products, but on the best result for our customers.

Our goal is to find a solution for all challenges, to optimise the coordination of systems and adhesives for our customers, and to offer everything from a single source. BÜHNEN is a competent partner for all steps of gluing. If there are problems, you don't have to ask the plant engineer or adhesive manufacturer to find a solution. With BÜHNEN at your side, you have a contact who will help and support you.



“We believe in what we do and want to make a success of it.”

Bert Gausepohl

Jan Hunke





Content



001 Hot-melt adhesives

EVA hot-melt adhesives	8 - 9
PO hot-melt adhesives	10 - 11
PA hot-melt adhesives	12 - 13
Pressure-sensitive adhesives	14 - 15
avenia hot-melt adhesives	16 - 17
Sustainable hot-melt adhesives	18 - 19
Reactive hot-melt adhesives	20 - 21

002 Applications

Filter Industry	22 - 23
Automotive industry	24 - 25
Packaging industry	26 - 27
Construction industry	28 - 29
Electronics industry	30 - 31
Foam	32 - 33
Floristry	34 - 35
Special applications	36

003 Mechanical hot-melt glue guns

HB 181, HB 181 LT	38
HB 191, HB 196	39
Accessories, Adhesive selection	40
HB 225, HB 250	42
HB 326	43
Accessories, Adhesive selection	44

004 Pneumatic hot-melt glue guns

HB 720 Bead, HB 720 Spray	46
Adhesive selection, HB 710 HT	47
Accessories	48
HB 720 K Bead, HB 720 K Spray	50
Adhesive selection	51
Cartridge preheater, Consol, work station	52
Accessories	53

005 HB 5010 melters

HB 5010 - Bead- and Spray version	56
Adhesive selection, Application areas	57
Accessories	58

006 Handguns for melters

Handpistole HB 910 Bead and Spray	60
Handpistole HB 950 Bead and Spray	61
Accessories	62

007 HB 6000 melters

HB 6000 connect	64
Adhesive selection	65
Line control	66
Granulate conveyor	67

008 Heatable hoses

Heatable hoses	68
Hosecomponents / Construction / Accessories	69
KS heatable hoses, HP heatable hoses	70

009 HB 4000 melters

HB 4000, HB 4100	72 - 73
HB 4200, HB 4450	74
HB 4650, 4800	75
HB 4130, Adhesive selection	76
HB 4070, HB 4150	77
HB 4250, Adhesive selection	78 - 79
HB 4000	80
HB 4004, 4008 for PUR / POR	81
HB 4022	82
Accessories HB 4000	83 - 84
HB 4000 bag melter series	85
HB 4020 BS, HB 4180 BS	86
HB 4000 drum melter series	87
HB 4020, HB 4200 FS	88

010 Application heads

Bead application heads	90 - 91
Surface application heads	92 - 93
Spray application heads	94 - 95

011 one4all

one4all Compatible spareparts	97
one4all Bead application heads	98 - 100
one4all Surface application heads	101
one4all Spray application heads	102
one4all Module	103
one4all Heatable hoses	104 - 105



EVA Hot-melt adhesives

001



Ethylene vinyl acetate (EVA)

Due to their attractive price-performance ratio, the hot-melt adhesives produced on the basis of [ethylene vinyl acetate \(EVA\)](#) are used for a large number of applications, for example in packaging, in the concrete industry, in floristry and in the DIY sector.

They are characterised in particular by short to medium open times and fast setting times. This type of hot-melt adhesive is often processed [in the form of sticks](#) with the help of [mechanical hot glue guns](#).

The main area of application for sticks is in floristry and for simple manual assembly bonds.

EVA-based hot-melt adhesives in granulate form processed by melters have become an indispensable part of the production lines of large packaging systems. You can find more packaging adhesives under our [avenia](#).

Advantages of EVA hot-melt adhesives

- › Attractive price-performance ratio
- › Short to medium open times and short setting times
- › Proven technology
- › Excellent adhesion, even on difficult surfaces
- › Very wide range of formulation options
- › Ideal for high throughputs
- › Frequent use in the food industry (FDA 175.105)

[Our product selection](#) (Other adhesives on request.)

A1537.1

This adhesive for fast-running packaging systems is especially suitable for double-fluted corrugated board.

- › Absorption of high restoring forces
- › Fast packaging systems
- › FDA Guideline 175.105



A2914

This adhesive is exceptionally suitable for sealing cardboard boxes on medium to high-speed packaging machines.

- › Medium open time
- › Very short setting time
- › FDA Guideline 175.105



A0158.1

Universally All-purpose hot-melt adhesive for industry and handcraft:

- › Colour: white
- › All-rounder for assembly in industry, household and floristry
- › Four delivery forms available: 11 & 18 mm stick, cartridge, granules



A0364.1

Hot-melt adhesive for assembly bonds with high requirements in terms of initial strength, cohesion build-up on difficult substrate surfaces in industry and as well as in the packaging industry.

- › Short setting time
- › For lacquered surfaces
- › FDA Guideline 175.105



Application areas



Packaging



Floristry



Filter industry



Display

A1189

The hot-melt adhesive has its applications in industry, floristry, household and hobby.

- › Standard floristic glue
- › Wide open-time window
- › Easy assembly bonding
- › Colour: white-transparent



A1289

The hot-melt adhesive has its applications in industry, floristry, household and hobby.

- › Universal for household, hobby and floristry
- › Medium setting time
- › Light to medium assembly bonding
- › Available in three delivery forms



Low temperature A2738-300

- › Low processing temperature for sensitive surfaces
- › Ideal for floristry and light assembly applications
- › Processing temperature 120 - 180 °C
- › FDA guideline 175.105



A2075.1

The hot-melt adhesive is used in industry, floristry, household and hobby.

- › Universal for household, hobby and floristry
- › Water-clear and flexible
- › Light to medium assembly bonding
- › Available in 200 & 300 mm lengths





PO
Hot-melt adhesives

001

Polyolefin (PO)

Compared to conventional EVA hot-melts, Polyolefin-based (PO) hot-melts offer a wider performance spectrum, for example higher heat resistance and an improved adhesion spectrum in the case of low-energy surfaces, such as PP.

Depending on the recipe, it is possible to vary between a very short and a much longer open time. The same applies to the formulation for the sprayability of the hot-melt adhesives.

These base polymers of the polyolefin hot-melts have a decisive impact on the properties, depending on the catalysis technology chosen.

Advantages of PO hot-melt adhesives

- › Very good value for money
- › From short through medium to long open times and short to medium setting times
- › Proven and at the same time innovative technology
- › Excellent adhesion, even on difficult surfaces
- › Very wide range of applications

Our product selection (Other adhesives on request.)

B1730

Suitable for interior applications in the automotive industry.

- › High thermal stability
- › High initial strength
- › Very wide adhesion spectrum



B1052.1

Foam bonding and suitcase upholstery.

- › Sprayable
- › Very long
- › Open time
- › Soft glue line
- › Case manufacture



B0715

The all-rounder among PO hot-melts for industry and trade:

- › Universal: Suitable for bead and spray.
- › Very wide adhesion spectrum – high combinability
- › High cohesion – internal strength with good thermal stability
- › Balanced application properties
- › Concrete Industry



Application areas



Concrete industry



Packaging



Furniture industry



Textile industry



Automotive



Filter industry

B0524

For assembly bonding and surface lamination in the industrial and craft sectors, especially in the concrete industry, as well as upholstery and foam lamination.

- › Concrete industry, especially recommended for the colder seasons
- › Inlays in suitcases
- › Good cold flexibility



B1596

This adhesive is preferred in the mattress and upholstery industry.

- › Short setting time
- › ECO Passport
- › For large areas



B1063.1

This adhesive is characterised by the combination of its properties:

- › Universal: Suitable for bead and spray.
- › Broad adhesion spectrum – many materials can be combined
- › High cohesion – high internal strength combined with a high heat resistance





PA
Hot-melt adhesives

001



Polyamides (PA)

Polyamides complete our range of hot-melt adhesives. The applications in which our adhesives are used could not be more different. For example, our adhesives are true specialists in the field of glazed or varnished concrete or slate roof tiles.

Then again, others are used in the low-pressure injection moulding of electrical components. They score here with excellent flexibility at low temperatures and good plasticizer resistance.

In the automotive sector, PA hot-melts are used in the foundry industry to manufacture cores using the Cold-Box or Hot-Box process.

This is where you benefit from the wide range of application technology products. You can obtain polyamide from us as granulate and to some extent also in stick form. You can obtain both forms of the required application technology from BÜHNEN. Benefit not only from our knowledge of polyamide hot-melt adhesives, but also from the technical advice regarding application technology.

Advantages of polyamides

- › Excellent cold flexibility
- › More than 50% produced from renewable raw materials
- › To some extent resistant to oils and chemicals
- › To some extent with flame-retarding properties

Our product selection (Other adhesives on request.)

C1429.2

For use in the roof tile industry as spacer or scratch protection for concrete roof tiles with anti-soiling coating, glazing or varnish on the upper side of the tile.

- › Short open time
- › Very short setting time
- › High blocking resistance



C0874 / 0874S

Low pressure injection moulding of electrical components and plug forms. Securing of electrical components on printed circuit boards, as well as enamelled wires on spools. Also available in black.

- › Sticks and granules in two colours
- › Good thermal stability and elasticity
- › Good adhesion on soft PVC
- › Excellent cold stability (down to -30 °C)



Application areas



Electronic industry



Automotive



Construction industry



Furniture industry

C1404

For use in the roof tile industry as spacer or scratch protection for clay roof tile surfaces that are glazed or varnished.

- › Scratch protection
- › Short setting time
- › High blocking resistance



C2417

Very suitable for core bonding in the foundry industry and is also used in wood processing. It has a high initial strength.

- › For cores manufactured using the Cold-Box / Hot-Box process.
- › Especially for iron foundries
- › For core packages to be coated (aqueous)
- › Short open and setting times





**Pressure-sensitive
adhesives**

001

Pressure-sensitive adhesives

Hot-melt pressure-sensitive adhesives are adhesives on the basis of [thermoplastic rubber](#). These are characterised by the fact that they do not set completely, but remain permanently tacky. For this reason, the designation "PSA – Pressure Sensitive Adhesive" was created for this group of adhesives.

There is a very wide range of formulation options that can be used to adjust the final properties of hot-melt pressure-sensitive adhesives. Such adjustable properties include surface tack, cohesion and adhesion etc. The contact pressure has a major influence on the resulting adhesive strength, in order to achieve sufficient wetting between the hot-melt adhesive and the substrate.

In many applications, bonding takes place in the cold state, for example, when closing packages or shipping bags (self-adhesive closures). On the other hand, there are industrial inline gluing processes whereby the substrates are joined with the still warm adhesive. One example of this is insulation board lamination in insulating materials. In addition, a distinction is made in the [pressure-sensitive hot-melt](#) adhesives between permanently adhesive and removable/repositionable types; these can often be found in magazines with free samples.

Advantages of pressure-sensitive adhesives

- › Very good adhesion to low-energy surfaces, such as PE
- › Broad formulation options
- › Elastic glue joint
- › Good sprayability
- › Fast cohesion build-up
- › Permanent sticky

[Our product selection](#) (Other adhesives on request.)

D1544.1

Pressure-sensitive hot-melt adhesive for fixing and assembly in many branches of industry, for example bonding insulation material onto supporting materials, fixation of insulation materials and for upholstered furniture.

- › Very good sprayability
- › Universal for instant gluing / inline gluing processes
- › High oxidation stability
- › Low temperature



D1628.1

Hot-melt pressure-sensitive adhesive for the production of self-adhesive articles.

- › Fixing and assembly
- › High initial tack
- › Manufacture of self-adhesive closures for online shipping boxes



D1586

Universally applicable pressure-sensitive hot-melt adhesive for fixing and assembly in many branches of industry, e.g. self-adhesive pre-coating of roof lining membranes.

- › Very good cohesion and adhesion
- › Very good absorption forces of restoring forces
- › Self-adhesive finishing of roof lining membranes



Application areas



Packaging



Self-adhesive closures



Construction industry



Automotive

D1631.1

Universal hot-melt pressure-sensitive adhesive, suitable for industrial inline bonding processes, as well as for self-adhesive pre-coating of substrates.

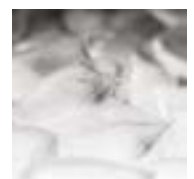
- › Extremely good cohesion and adhesion
- › Very good absorption of restoring forces
- › Suitable for self-adhesive closures



D1645

Residue-free, removable bonded joints.

- › For easily removable bonds
- › Colour: white, clear



D1341

Pressure-sensitive hot-melt adhesive for inline bonding processes in the automotive industry, e.g. luggage compartment interior lining / lamination of needle felt on carrier materials.

- › Very high heat resistance
- › Very high cohesion



avenia
Hot-Melt

001

Oxidation-stable hot-melt adhesives

The initiator for oxidation-stable hot-melt adhesives was the development of the catalysis technology based on Metallocene for PO-base polymers. Oxidation-stable hot-melt adhesives have been offered under the name avenia for over 10 years. These types of adhesives are particularly suitable for packaging applications and, thanks to their oxidation stability, lead to an increased service life of the application technology.

BÜHNEN **avenias** offer a number of improved properties compared to conventional hot-melt adhesives. The thermal stability and the associated high process reliability in use are features to be emphasised.

Advantages when using avenia products:

- › Extremely high colour and viscosity stability in the melts leads to an increase in machinery efficiency.
- › High process reliability due to the avoidance of unplanned downtimes.
- › Reduction in reject costs
- › Extension of maintenance intervals in the case of application technology
- › High heat resistance
- › User-friendly processing due to absence of smell

[Our product selection](#) (Other adhesives on request.)

avenia A3633

Versatile hot-melt adhesive for industrial applications in the packaging industry, such as crates, trays, cardboard packaging, folding cartons and frozen packaging.

- › Low odour
- › Short setting time
- › Very good peel-off behaviour
- › Suitable for frozen packaging



avenia B1844

avenia hot-melt adhesive for industrial packaging applications is particularly suitable for the production of, for example, folding boxes and trays.

- › Short open time
- › Very fast setting time
- › Low odour
- › Good flowability
- › Very good oxidation stability



avenia B3706

The first avenia hot-melt adhesive for the concrete industry. It achieves the desired balancing act between bonding and removability on a completely new level in the manufacturing industry.

- › Very good oxidation stability in the melt
- › Residue-free removal from the pallet
- › Wide range of applications
- › Medium open and setting time



Application areas



Packaging



Construction industry



Concrete industry



Floristry



Display

avenia B2615

Particularly suitable for bonds in the packaging industry on high-speed machines where high restoring forces have to be safely absorbed, such as trays and crates.

- › Rapid, immediate absorption of high restoring forces with short pressure times
- › Good flowability
- › Optimized handling with 15 kg bags



avenia B1472.1

Versatile hot-melt adhesive for industrial applications, particularly suitable for bonding in the packaging industry, including deep-freeze packaging and display production.

- › For difficult surfaces
- › Medium setting time
- › Very good oxidation stability



avenia B1577.2

Universally applicable hot-melt adhesive for industrial applications in the packaging industry, such as cardboard packaging, folding cartons and deep-freeze packaging.

- › Low odour
- › Short setting time
- › Suitable for deep-freeze packaging
- › Very good oxidation stability



Sustainable hot-melt adhesives

001



Sustainable hot-melt adhesives

The sustainability trend on the packaging market is especially evident in the growing interest in natural, resource-saving materials which use biologically renewable raw materials that help reduce the CO₂ – balance. In addition to the well-known low-temperature hot-melt adhesives, the Adhesive selection has been expanded to include bio-based hot-melt adhesives. The new nature adhesive series is DIN-certified and tested by external laboratories. The high proportion of renewable raw materials (up to 50%) makes these adhesives particularly environmentally friendly. Our sustainable nature hot-melt adhesives can be processed with the tried and tested application technology. Many of the BÜHNEN devices have the option of setting the processing temperature with an accuracy of one degree.

Low-temperature hot-melt adhesives

These adhesives can be applied at a temperature of around 120° to 140 °C, whereas conventional hot-melt adhesives require 160° to 175°C. Adhesives with lower application temperatures also reduce the risk of break through on thinner substrates. The low-temperature hot-melt adhesives are particularly suitable for the packaging of temperature-sensitive goods, e.g. chocolate. When less energy is required to heat pipes and tanks, CO₂ emissions decrease and our customers come one step closer to their sustainability goals.

Advantages of nature hot-melt adhesive

- › DIN ISO 16620-2:2019 certified
- › Bio-based 20 – 50 %
- › Very high colour and viscosity stability in the melt leads to an increase in machine efficiency.
- › User-friendly processing due to odourlessness

Advantages of low-temperature adhesives

- › Lower risk of burns during processing
- › Use on temperature-sensitive materials / surfaces
- › Packaging of temperature-sensitive goods
- › Energy-saving
- › Reduction of CO₂ emissions

Our product selection (Other adhesives on request.)

avenia B3771 nature

White bio-based hot-melt adhesive for industrial applications in the packaging industry, e.g. coated cardboard and fast carton erectors.

- › Proportion of biogenic carbon: 41 %
- › High absorption of restoring forces
- › Good adhesive spectrum
- › Excellent oxidation stability



avenia B3570 LT

Versatile hot-melt adhesive for industrial applications in the packaging industry, such as crates, trays, cardboard packaging and folding cartons.

- › Low processing temperature 120 – 140 °C
- › Low odour
- › Short setting time
- › Very good oxidation stability



A1637 LT

Particularly suitable for packaging of heat-sensitive packaging goods (e.g. chocolate)

- › Low processing temperature of 120 - 150 °C
- › FDA guideline 175.105
- › Low odour



Application areas



Packaging



Display

avenia B3571 LT

Versatile hot-melt adhesive for industrial applications, particularly suited for bonds in the packaging industry, including deep-freeze packaging, as well as display production.

- › Low processing temperature 130 – 150 °C
- › For difficult surfaces
- › Low odour
- › Medium setting time with very good oxidation stability



Pressure-sensitive adhesive D3043 LT

Universally applicable pressure-sensitive hot-melt adhesive for fixing and assembly in many branches of industry. Particularly well suited for applications in the low temperature range.

- › Good adhesion for assembly applications
- › Good adhesion properties, e.g. PE film
- › Barely visible glue joint
- › For temperature-sensitive surfaces
- › Resource-saving



Reactive adhesives

001



Reactive adhesives

The reactive hot-melt adhesives on the [basis of polyurethane and polyolefin](#) are becoming increasingly important. They enable constructive bonds to be achieved. The principle behind these moisture-curing hot-melt adhesives is a two-stage setting mechanism. After the [reactive PUR hot-melt](#) has been applied, it first sets physically, giving the bond a handling strength. In the second step, the adhesive reacts chemically with the available humidity to form high molecular weight polymers with high cohesion. The speed of the reaction depends on the available humidity. In this way, exceptionally high temperature resistance can be achieved, with good flexibility at low temperatures and resistance to a large number of chemicals. Standard PUR hot-melts with an MDI content > 0.1 % are subject to labelling.

Another group in the field of reactive hot-melt adhesives are the formulations based on [silane-modified polyolefins](#). These are distinguished from PUR hot-melts in particular by the fact that a bonding of non-pretreated polypropylene is possible. In addition, they do not contain any isocyanates and are therefore not subject to labelling. The cohesive properties, on the other hand, are below those of [polyurethane-based adhesives](#).

Advantages of reactive PUR / POR

- › High cohesion enables constructive bonds
- › High temperature resistance in the cold as well as in the heat enable, for example, use in the automotive industry
- › Resistance to plasticizers, oils and solvents enables the bonding of soft PVC and demanding filter applications
- › High level of ageing stability of the bond
- › PUR have a very wide adhesion spectrum to many plastics, for instance ABS
- › POR offer a very good adhesion spectrum to low-energy surfaces, for example PP

[Our product selection \(Other adhesives on request.\)](#)

E0931.2 – PUR

Structural bonds with high demands on strength and reaction to changes in temperature

- › Long open time
- › High cohesion



E1075.2 – PUR

Structural bonds with high demands on strength and reaction to changes in temperature

- › Fast handling strength
- › Average open time



E3315 – PUR

Particularly suitable for surface lamination and light assembly bonds. Due to the reduced MDI content < 1 %, the H351 labelling is no longer required.

- › Low MDI < 1 %
- › Good sprayability
- › FDA guidelines 175.105
- › Very long open time



Application areas



Automotive



Furniture industry



Construction industry

B1452.1 – POR

For bonding low-energy surfaces with high demands on the cohesive behaviour.

- › Solvent-free
- › High heat resistance
- › Good flexibility at low temperatures



E3379 – PUR

Particularly suitable for surface lamination and light assembly bonds.

- › Excellent solvent resistance
- › Very soft glue line
- › Long open time
- › Good sprayability



E2456UVM

For assembly and constructional bonds that are exposed to high temperatures. Available in black and white.

- › Low processing viscosity
- › UV marked
- › Fast cohesion build up
- › Good solvent resistance



Hot-melt adhesives and application technology in use

002



Hot-melt adhesives and devices for the filter industry

002

There are many possible uses for hot-melt adhesives in the manufacture of filter media. They are used, amongst other things, as spacers in fluted filters or for bonding frames. Depending on the type of filter and production process, different BÜHNEN product solutions can be used here.



Pleating

The folded filters or pleated filters are made of different materials, such as fleece or paper, depending on the area of application and filter class. The hot-melt adhesive is used to fix the pleating. The dynamic pressure in front of the filter causes a force to act on the pleated filter lamellas; the stability of the hot-melt adhesive beads protects them from deformation that would otherwise reduce the effective filter surface. The dynamic pressure increases as the particle load in the filter increases.

The beads require a level of elasticity in order to withstand the deformation during installation. In later service life, thermal forces (heat/cold) act on the filter, whereby the geometry has also to be maintained. Hot-melt adhesive for filters must meet the optical and olfactory requirements; white adhesives, which have low emissions, are preferably used here.



Frame bonding

The frame gives the filter additional stability in order to withstand the dynamic pressure. There are many different designs for filters. The frames can be made of fleece, plastics, paper, cardboard or wood.

The types of application are accordingly different. The adhesive can be applied continuously as a surface and bonded or frames can be cast with filters. Depending on the type of frame bonding, there are different demands on the hot-melt adhesive, e.g. viscosity and setting behaviour.

Hot-melt adhesives for frames must meet the optical and olfactory requirements; white adhesives, which have low emissions, are preferred here.



Our range of devices for the filter industry



Melters HB 6000 series



Application heads



Accessories



Heatable hoses



one⁴all

Hot-melt adhesives and devices for the automotive industry

002

Reactive and non-reactive hot-melt adhesives are used widely and in increasing numbers in the automotive industry. Due to the freedom of design that gluing enables, the number of glued or laminated components in the car is growing. Even dents in the paintwork can be removed with the help of hot glue.

The demand for automation and process reliability lead to fully automatic application and bonding processes. Manual gluing processes can still be found in cable assembly and the removal of dents. We offer a wide range of suitable application technologies for both application techniques.



Interior lamination

The boot of an automobile offers various applications that lend themselves to bonding with reactive and non-reactive hot-melt adhesives – the gluing of the carpet on the loading floor, lamination of the rear seats with needle felt and the lining of the side panels, for example. Depending on the requirements and process sequences, different types of adhesives are used: These range from pressure-sensitive hot-melts and polyolefins to reactive polyurethane hot-melt adhesives.

Increased demands in the area of VOC and fogging are leading to an increased use of PUR hot-melt adhesives. At the same time, emission-optimised pressure-sensitive hot-melt adhesives will be launched on the market.

The development of PUR products is increasingly moving towards adhesives with reduced labelling through to label-free adhesives.

In the case of pressure-sensitive hot-melt adhesives, inline laminating is preferred, within the open time of the hot-melt adhesive. In the case of PUR, a pre-coating with a reactivating step during lamination is generally used.



Roof lining production

In addition to PU dispersion, reactive and non-reactive hot-melt adhesives are also used to laminate the textile-foam composite onto the carrier.

A series of assembly steps to optimise acoustics is carried out on the back of the carrier, which is not visible later. In addition to foams, many cables are positioned there, which are fixed using hot-melt adhesive. This method of fixing cables also used on car seats, e.g. in seat heating.





Door sills



Illuminated door sills are becoming more and more popular and are being increasingly installed in car models. The environmental influences on this type of bonding have a stronger influence than with pure interior bonding. For this reason PUR hot-melt adhesives are the products of choice.

The challenge of the material combination of different plastics e.g. ABS, PC, etc. with the metallic inserts can only be met with the properties of the PUR adhesives. The wide adhesion spectrum combined with the characteristics of bonding and sealing speaks in favour of these hot-melt adhesives.



Decor, emblems, covers, clips



A large number of assembly bonds can also be resolved with PUR hot-melt adhesives.

Worth mentioning are:

- › Decors in the central console area
- › Emblems on car keys
- › Emblems on hubcaps
- › Fastening clips on all internal cladding and trim

Our range of devices for the automotive industry



Melters HB 4000 series



Application heads



Accessories



Heatable hoses



one4all

Hot-melt adhesives and devices for the packaging industry

002

Secure gluing plays an important role in the packaging industry. The selection of a suitable adhesive is linked to various prerequisites. Let us together determine the most suitable system for you, consisting of adhesive and application technology.



Sealing of cardboard packaging



First of all, it is important to clarify for which use the packaging is intended. What are the environmental variables, such as temperature, humidity, etc., during both production and shipping?

The type of production is important when choosing the adhesive. For example, how high is the throughput in the system?

The material of the cardboard packaging / corrugated cardboard also plays a major role. High restoring forces in particular require good advice on the choice of hot-melt adhesive, so that there are no nasty surprises.

Shipping packaging is also increasingly developing into an advertising medium and is often lacquered or shrink/film-wrapped. The smooth surfaces present an increased degree of difficulty for the adhesion of hot-melt adhesives, which must also be kept in mind.



Carton erector



Self-adhesive closures



Mailing boxes, envelopes and other packaging materials are equipped with a covered self-adhesive seal for later use and a tear strip for easy opening.

The immediately-adhesive closure means that the goods can be packaged at the end customer's premises without the need of any additional packaging material. The cardboard packaging can be stored flat and is only erected shortly before use. As a rule, a pressure-sensitive hot-melt adhesive is applied to the packaging material over a surface area of up to 30 mm, in order to maintain the adhesive strength.

In the production of shipping boxes, envelopes and other packaging materials with adhesive seals, the most important things are that the packaged goods are safely transported to the recipient even at changing temperatures, that the shipping packaging can be securely closed again if necessary, and that the adhesive is applied cleanly and economically.



Self-adhesive closures





Display bonding



The displays used for product presentation are usually relatively stiff. High restoring forces act at the folds, which the adhesive has to absorb in order to prevent the folds from cracking open. These forces act on many packaging materials, corrugated cardboard or carton.

If the hot glue is applied by hand, the open time of the adhesive must be matched to the length of the gluing process. After all dots, areas or lines have been applied, the hot-melt adhesive must still ensure good adhesion with rapid and high build-up of cohesion.



Display bonding

Our range of adhesives for the packaging industry

avenia oxidation-stable hot-melt adhesives

- › Extremely high colour and viscosity stability in the melts leads to an increase in machinery efficiency.
- › High process reliability due to the avoidance of unplanned downtimes.
- › Reduction in reject costs
- › Extension of maintenance intervals in the case of application technology
- › High heat resistance
- › User-friendly processing due to absence of smell

EVA hot-melt adhesives

- › Attractive price-performance ratio
- › Short to medium open times and short setting times
- › Proven technology
- › Excellent adhesion, even on difficult surfaces
- › Very wide range of formulation options
- › Ideal for high throughputs
- › Frequent use in the food industry (FDA 175.105)

Our range of equipment for the packaging industry



HB 6000 Melters



Application heads



Accessories



Heatable hoses



one4all

Hot-melt adhesives and devices for the construction industry

002

The production process in the construction industry can be significantly optimised by the use of hot-melt adhesives. For example, the components for recesses in precast concrete parts (e.g. for sockets) can be quickly and easily fixed on the pallet and be removed again after completion of the concrete wall.

In terms of climate protection, insulation materials are becoming more and more important in new buildings and in the renovation of construction projects. Thermally insulated buildings are easy on the wallet and increase living comfort. The materials used are diverse and the production conditions on site are very different. Take advantage of our many years of experience in the construction industry and our wide range of hot-melt adhesives and application technology.



Concrete industry

The use of hot-melt adhesives saves both time and money, thanks to an optimised production process: Damage to the formwork from screws, nails, welding or bolts is avoided, and the surface of the finished parts remains smooth. The hot-melt adhesive offers immediate and secure adhesion to the components to be bonded, regardless of whether they are made of metal, wood, foam or plastic.

If the adhesives have a sufficiently long open time, corrections can be made before the concrete is poured in, even after the first fixing. Due to the high adhesive strength, the bonded components remain firmly connected to the metal plate during the filling, shaking and demoulding of the concrete. All adhesives can be removed easily and without leaving any residue and without sanding or the use of solvents.

Depending on which release agent is used and how high the temperatures are in the production preparation, in the drying oven or during demoulding - the BÜHNEN hot-melt range offers the right solution for every challenge.



Insulating materials

Countless materials are employed in the construction industry: non-wovens, foils, foams and mineral wool are used to protect against cold, heat and water. In order for them to perform their function optimally, they have to be processed correctly. Hot-melt adhesives serve as assembly aids in production, are used for short-term fixation, or are long-term connectors. Every application and every material has its own challenges. These must be taken into account when choosing the right hot-melt adhesive.

A selection of possible applications:

- › Lamination of roof underlays by means of a hot-melt adhesive based on thermoplastic rubber.
- › Equipping of the roof underlays with self-adhesive strips for easier handling. The hot-melt adhesive is equipped with a UV absorber.
- › Bonding of polystyrene to foil in the production of impact sound insulation and surface heating systems.





Roller shutter construction

Polystyrene and foam, which are glued with hot-melt adhesives, are used as insulating material in the roller shutter curtain. They are glued to a plastic or metal cover strip of the roller shutter box.

The hot glue used is exposed to strong temperature fluctuations over the course of the year. Our customers have had very good experience with polyolefin hot-melt adhesives. These have both high heat resistance and good flexibility at low temperatures.

The application of hot-melt adhesive is always tailored to the respective manufacturing conditions.

As the bonding of insulation materials in roller shutter boxes is primarily performed manually, the HB 910 has proven itself. Connected via a heatable hose with, for example, a type HB 5010 melter, the manual applicator forms a closed, reliable system.



Concrete/slate roof tiles

In the roofing tile industry, hot-melts are applied as spacers or scratch protection on concrete roof tiles with an anti-dirt coating or glaze on the underside.

The adhesive provides reliable scratch protection during storage and transport, even in summer. There is no transfer of adhesive or shadow formation on the top of the slate roof tiles.

The application technology is adapted to the manufacturing process. A route control enables automated work. It controls the solenoid valves on the application heads independently. The control enables precise and exactly recurring hot-melt adhesive application and high process reliability.



Our range of equipment for the construction industry



HB 6000 Melters



Application heads



Accessories



Heatable hoses



one4all

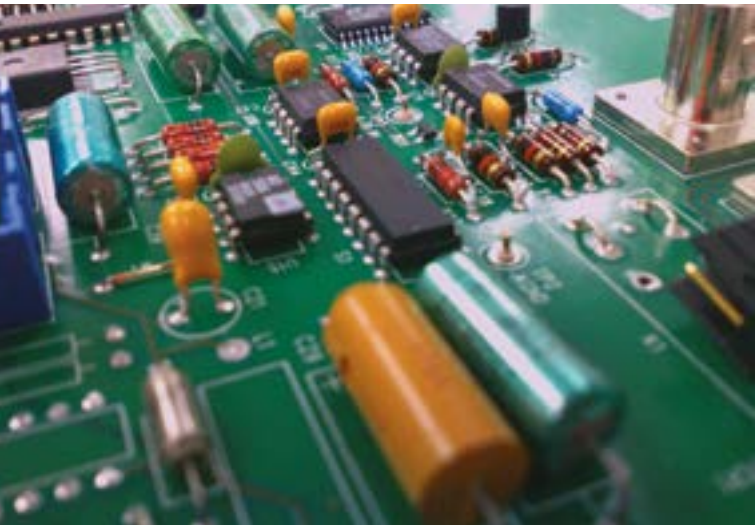


Hot-melt adhesives for the electronics industry

002

Hot-melt adhesives offer a wide range of solutions for the electronics industry. Today's consumers demand smaller devices, more functionality, and superior reliability.

Our portfolio of advanced formulations includes a good range of products to create electrical connections, enable structural stability, protect components and dissipate heat – for reliable and high-performance electronics.



Sealing against moisture

Housings can be sealed against moisture and contamination with hot-melt adhesives. The housings are usually made of low-energy materials, such as PP.

Polyolefin can guarantee a material bond with PP. A durable, stable adhesion to the material / housing material is built up.

This composite covers the requirements for impermeability to liquids, e.g. water or disinfectants. A short circuit or corrosion of the electrical component is prevented.



Low-pressure injection moulding

Common hot-melt adhesives in low-pressure injection moulding are based on polyamide.

The polyamides are very special sealing compounds. These combine material properties with adhesive properties. This means good adhesion to the cable materials, as well as to the usual solder resists on the circuit board. The material properties of the polyamides used meet the requirements in the terms of elasticity and the operating temperature range. To protect electronic components during the manufacture of plugs or caps, the hot glue can be pressed into a tool or cavity using the low-pressure process with only approx. 2 – 50 bar.

With this process, components are extrusion-coated with hot-melt adhesive to give shape, and the wire or contact is sealed, insulated and mechanically protected. The simple and safe handling of the low-pressure "potting" machines through the regulated injection and cooling times (immediately ready for use) ensures a high level of reproducibility and productivity in the production area.

The main application here can be seen in the automotive sector, due to the high productivity / number of pieces.





WATERPROOF

Hot-melt adhesives and devices for foam materials

002

Hot-melt adhesives can be used in a wide range of applications in the processing of foams. They are used, for example, for gluing foam inserts in suitcases or in mattress production. The BÜHNEN range of hot-melt adhesives also offers certified ECO Passport products.



Mattress manufacture

The manufacturers of pocket spring core mattresses traditionally opt for gluing with hot-melt adhesives.

In order to be able to follow the body movements during sleep, the system of steel springs can move independently of one another. The spring pockets are bonded to each other by means of a sideways bead application (2-3 beads next to each other).

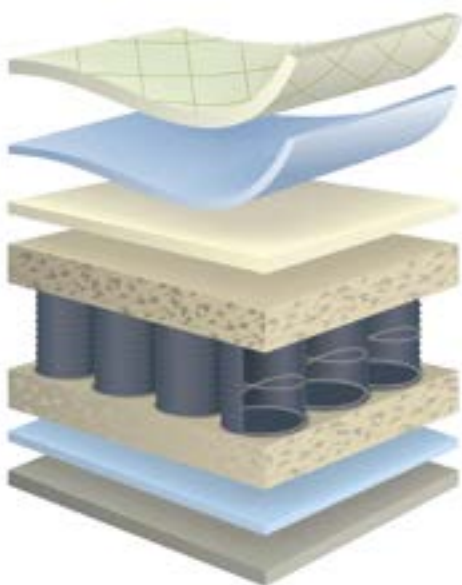
A compromise is made in the selection of the adhesive: The hot-melt should be flexible in the solidified state in order to follow the movements, but also hard enough in itself so that the bond does not come off.

When selecting these properties, the Shore hardness of the adhesive is crucial – not too high, otherwise the hot-melt adhesive will be too brittle – but not too soft either.

Hot-melt adhesives are solvent-free. High-quality hot-melt adhesives do not contain any chemical double bonds that can react or cross-link. Without double bonds, the adhesives are UV light-stable and do not change colour when exposed to light. When gluing the spring core cover (fleece and foams), a visually perfect result is important so that the adhesive does not shimmer through with very light foams.

The average body temperature of a person is 37 °C. With the adhesives used, attention is paid to sufficient heat resistance. Fibrous and non-fibrous are used for the fabric cover of the pockets. In order to achieve a sufficient bond, the adhesive must be able to flow into the tissue of the fabric, as this creates mechanical anchoring. Hot-melt adhesives with a long open time and fast setting are ideal.

Another good combination of properties consists of high initial tack and rapid cohesion build-up. The mattresses can be lifted, transported and packed immediately after bonding. In this way the production process is efficient without waiting time.





Form inserts

Tool inserts, foam inserts, inserts for suitcases, but also padding for shipping packaging, are glued with hot-melt adhesives. The inserts can be prefabricated to fit perfectly so that the products to be transported are optimally protected or presented. The case inserts are, for example, foam inserts made of PE rigid foam and PU soft foam, as well as deep-drawn inserts. The different materials of the upholstery fabrics have an effect on the selection of the suitable hot-melt adhesives. The cushioning is often joined manually: Some polyolefins from our range have proven their worth here with their long open time and soft glue joints.



Our range of equipment for foam materials



HB 6000 Melters



Application heads



Accessories



Heatable hoses



one4all

Hot-melt adhesives and devices for floristry

002

Mechanical hot-melt glue guns are the ideal tools in floristry for making flower arrangements, wreaths, garlands and decorations.

Combined with the right adhesive, a little patience and natural materials, wonderful objects can be formed. A wide variety of materials, such as flowers, material, wood, plastics, ceramics or metal can be combined.



Floristry

The extensive Adhesive selection of mechanical hot glue guns contains the right device for every hand size, every adhesive requirement and every price range.

With their advantageous equipment and especially long trigger, the glue guns ensure fatigue-free work and high melting capacity. Glue sticks with a diameter of 12 mm are used, which can be processed with the models HB 181, HB 191, HB 196 or HB 250.

In contrast, the HB 326, which works with 18 mm diameter sticks, is suitable for higher adhesive consumption.

The HB 181 LT ("Low Temperature") glue gun is ideal for all decoration and handcraft work and serves as a reliable tool for florists. .

A hand gun in the low temperature version is particularly suitable for temperature-sensitive materials such as flowers and styrofoam. The reduced application temperature of 120 °C is also advantageous when the adhesive has to be precisely applied and reshaped with the finger.

All glue guns have a drip-free nozzle so that the manufactured products are optically flawless.



Our range of equipment for floristry



HB 181



HB 181 LT



HB 191



HB 196



Hot-melt adhesives and devices for special applications

002

Special applications often require complex coordination between the partners involved: In addition to the customer, mechanical engineers/OEMs are often involved. Both parties specify their requirements in specifications, which must be taken into account when selecting the application technique and the adhesives.

In order to meet the non-standard requirements, these often have to be simulated in the in-house laboratory. In order to achieve a good result in the interests of the customer, the entire expertise of application technology and adhesives is applied.



Video
Sand core bonding



Video
Lid bonding



Automotive foundry

Iron foundries primarily use polyamides for the bonding of core packages in the foundry industry. BÜHNEN has polyamides in its range that are ideally suited for core packs that are to be coated (aqueous/ethanolic), and subsequently dried in a drying tunnel. Polyofins or EVA adhesives are used in aluminium foundries. The demands on the adhesives used in sand blasting or in the bonding of core packages are very high.

The hot-melt adhesives require a wide open time frame with a short setting speed. The short setting speed, combined with a high initial strength, enables rapid further handling of the cores produced using the cold-box or hot-box process. Depending on the degree of automation, glue guns or melting devices are used.



Assembly bonding

Assembly bonding is often a special application. The example shown is the fully automated gluing of the seal into a canister lid. The planned timing, the process and the substrates were determined in the on-site discussions. BÜHNEN's in-house laboratory simulated the process and tested various adhesives. The specified materials placed high demands on the choice of adhesive.

In the interplay of consultation, hot-melt know-how and the used application technology, the requirements of the mechanical engineer, the customer and the process could be successfully implemented.



Mechanical hot-melt glue guns

003



Mechanical hot-melt glue guns

003

Our hand guns are indispensable helpers for many areas of application: Whether in the automotive industry, the packaging industry, the woodworking industry, the toy industry, exhibition stand construction or shop fitting – the areas of application are almost unlimited - for perfect bonding of wood, plastics, rubber, fabrics, leather, paper, cardboard, earthenware or metal, for example. BÜHNEN has a range of different types of hot-melt adhesive that are precisely tailored to your particular applications.

HB 181



HB 181 and HB 181 LT – the florist's favourites

Good craftsmanship needs good tools. The BÜHNEN HB 181 is the entry into professional gluing. The lightweight gun sits comfortably in the hand. The narrow design makes gluing with the device clear and secure.

Advantages and equipment features

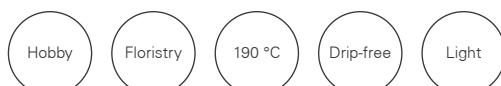
HB 181 and HB 181 LT

- › Small and handy
- › Low actuating force
- › Universal stand, versatile storage options
- › (Fixed nozzle (diameter 2.5 mm))
- › Can be delivered in a box

Technical data

Dimensions 215 x 180 x 38 mm
 Weight 0.27 kg
 Operating voltage 220-230 V, 50 Hz
 Power consumption 80 W
 Working temperature 190 °C
 Hot-melt adhesive form Stick 200 mm / 300 mm length, Ø 12 mm
 Melting capacity 0.3 – 0.6 kg/h*

* Depending on temperature and adhesive viscosity



HB 181 LT



Divergent Advantages and equipment features of the HB 181 LT

The Low Temperature (LT) version of the HB 181 heats a suitable hot-melt adhesive to 120 °C. This makes it possible to work with particularly heat-sensitive materials such as Styrofoam (EPS).

Advantages and equipment features

HB 181 LT

- › "Low Temperature" (120 °C)
- › Protects fingers and material
- › Minimizes burns
- › Low energy consumption

Technical data

Dimensions 215 x 180 x 38 mm
 Weight 0.27 kg
 Operating voltage 220-230 V, 50 Hz
 Power consumption 80 W
 Working temperature 120 °C
 Hot-melt adhesive form Sticks 200 mm / 300 mm length, Ø 12 mm
 Melting capacity 0.3 – 0.6 kg/h*



Product video
 HB 181 / 181 LT



HB 191



HB 191 – Everyday hero

The heroes of everyday life use the HB 191. The glue gun has a high melting rate of up to 0.7 kg per hour. The universal stand enables the setting of an individual storage position.

In addition, the device can be switched on and off without having to be disconnected from the mains. The rubberised handle sits comfortably in the hand. The amount of adhesive that is dispensed depends on the diameter of the nozzle. The installed 3.0 mm nozzle is exchangeable. Smaller and larger nozzle diameters are available on request.

Advantages and equipment features

- › Fatigue-free work thanks to the ergonomic handle
- › Small and handy
- › Low weight
- › High melting capacity
- › Nozzle exchangeable (standard diameter 3.0 mm)
- › Can be delivered in a blister or in a case

Technical data

Dimensions 220 x 190 x 38 mm
Weight 0.27 kg
Operating voltage 220-230 V, 50 Hz
Power consumption 100 W
Working temperature 190 °C
Hot-melt adhesive form Sticks 200 mm / 300 mm length, Ø 12 mm
Melting capacity 0.4 – 0.7 kg/h*

* Depending on temperature and adhesive viscosity



HB 196

wing.line®stick



HB 196 – For individualists

The smallest model of the wing.line® design series. Slim, black, blue and with a removable power plug. The device is able to process a stick without a power connection. Short - term applications outside or away from the work place are now possible. The stand foot (detachable) allows the gun to stand securely on the worktop. Without the stand foot, one can easily work in hard - to - reach places.

The illuminated on-off switch shows at a glance whether the device is switched on. 125 watts ensure that the operating temperature is quickly reached. The 3.0 mm nozzle installed can be exchanged if necessary. Smaller and larger nozzles are available on request.

Advantages and equipment features

- › Fatigue-free work thanks to long trigger
- › Removable plug for cordless work
- › Very high melting capacity
- › Integrated on/off switch (illuminated)
- › Nozzle exchangeable (standard diameter 3.0 mm)
- › Can be delivered in a carton or in a case

Technical data

Dimensions 265 x 185 x 65 mm
Weight 0.41 kg
Operating voltage 220-230 V, 50 Hz
Power consumption 125 W
Working temperature 200 °C
Hot-melt adhesive form Sticks 200 mm / 300 mm length, Ø 12 mm
Melting capacity 0.5 – 0.8 kg/h*



Removable cable



Mechanical hot-melt glue guns

003

Accessories



Cone nozzle, long

Bead application
insulated
Ø 1.5 mm
Ø 2.5 mm
Ø 3 mm
L = 45 mm
Thread:
UNF 7/16"



Cone nozzle, short

Minimal dot
application, fine
Bead application
Ø 3 mm
L = 38 mm
Thread:
UNF 7/16"



Silicone underlay

Minimal dot
application, fine
Bead application
Ø 1 mm
L = 29 mm
Thread:
UNF 7/16"



Silicone underlay

Clean workplace
Dimensions:
500 x 600 x 2 mm
Colour: blue
No adherence of
hot-melt adhesive



Balancer

Secure positioning
Easy handling at
the workplace,
loadable up to
2.0 kg



Protective gloves

Heat-resistant
Safe handling of
hot objects

Adhesive selection

Type	Base	Form	Description
A0158.1	EVA	Sticks	All-rounder for assembly in industry, household and floristry
A0364.1	EVA	Sticks	For lacquered surfaces
A1189	EVA	Sticks	Household, floristry, hobby
A2075.1	EVA	Sticks	Floristry, "water-clear", flexible
A2738-300	EVA	Sticks	Low processing temperature for sensitive surfaces / 300 mm long

Base: EVA – ethylene vinyl acetate

Delivery form: 2 – Sticks 200 mm long, Ø 12 mm



Application areas



Packaging



Display



Floristry



Furniture
industry



HB 225

wing.line®stick



NEW

HB 225 – For professionals

You can happily work all day with the HB 225. The slim device sits comfortably in the hand. The stick gun can be safely placed on the fixed stand. A new feature is the LED status display, which clearly signals that the working temperature has been reached. The adhesive is treated gently thanks to the possibility of setting the temperature to the exact degree. An exchangeable 3.00 mm nozzle is preassembled. If required, the BÜHNEN range offers a large selection of small or larger nozzles.

Advantages and equipment features

- › Intuitive LED status display
- › Detachable cable
- › Small, handy and light
- › Adjustable temperature
- › High melting capacity
- › Nozzle exchangeable (Standard diameter 3.00 mm)
- › Available in a case

Technical data

Dimensions 290 x 205 x 75 mm
 Weight 0.465 kg (without cable)
 Weight 0.735 kg (with cable)
 Operating voltage 220-240 V, 50/60 Hz
 Power consumption 200 W
 Working temperature 140 - 230 °C
 Hot-melt adhesive form Sticks 200 mm / 300 mm length, Ø 12 mm
 Melting capacity up to 1.2 kg/h*

* Depending on temperature and adhesive viscosity



HB 250

wing.line®stick



HB 250 – For intensive users

The HB enables fatigue-free work thanks to significantly reduced pull-off forces. A high melting capacity and an innovative trigger system set standards in this device class. The very precise, electronically-controlled temperature control integrated in the handle ensures process-reliable operation.

Alternatively, the device is available without a digital display with a fixed working temperature of 190 °C (HB 240).

Advantages and equipment features

- › 30 % reduced pull-off forces
- › Innovative trigger system
- › Precise, electronically-controlled temperature
- › Digital status display
- › Mechanical stroke limitation
- › High melting capacity
- › Nozzle exchangeable (Standard diameter 3.00 mm)
- › Available in a case

Technical data

Dimensions 260 x 215 x 85 mm
 Weight 0.605 kg
 Operating voltage 220-230 V, 50 Hz
 Power consumption 400 W
 Working temperature 140 - 230 °C
 Hot-melt adhesive form Sticks 200 mm / 300 mm length, Ø 12 mm
 Melting capacity 1.2 – 2.6 kg/h*



Product video
HB 240



Digital status display on the HB 250 and HB 326



Heating phase = Blue



Preset temperature = Green



Menu selection = Red

30 % reduced pull-off forces



Innovative
trigger system

Mechanical glue guns

003

Accessories



Cone nozzle, long

Bead application
insulated
Ø 1.5 mm
Ø 2.5 mm
Ø 3 mm
L = 45 mm
Thread:
UNF 7/16"



Cone nozzle, short

Bead application
insulated
Ø 3 mm
L = 38 mm
Thread:
UNF 7/16"



Nozzle

HB 240 / 250
Bead application
incl. teflon ring
Ø 2.0 mm
Ø 3.0 mm
Ø 4.5 mm
Thread: IG
UNF 9/16-18"



Adapter HB 240 / 250 nozzles

Adapter UNF 9/16
to UNF 7/16



Silicone underlay

Clean workplace
Dimensions:
500 x 600 x 2 mm
Colour: blue
No adherence of
hot-melt adhesive



Balancer

Secure positioning
Easy handling at
the workplace,
loadable up to
2.0 kg

Adhesive selection

Type	Base	Form	Description
A1289	EVA	Sticks	Household, hobby, cardboard, packaging, available in Ø 12 mm / 18 mm
A0364.1	EVA	Sticks	High absorption of restoring forces, available in Ø 12 mm / 18 mm
A0158.1	EVA	Sticks	All-rounder for assembly in industry, household and floristry available in Ø 12 mm / 18 mm
C0874	PA	Sticks	Low pressure injection moulding of elec- trical components, available in Ø 12 mm

Base: EVA – Ethylene vinyl acetate, PA - Polyamide

Delivery forms:

2 – Sticks 200 mm long, Ø 12 mm

3 – Sticks 300 mm long, Ø 18 mm



Application areas



Packaging



Display



Automotive



Construction
industry



Electronic
industry



Service video
nozzle adapter for
HB 240 / HB 250

Pneumatic glue guns

004



Pneumatic glue guns

004

The application devices of the HB 720 series are optimised for high melting capacities. Three heating cartridges with a total output of 600 watts ensure that the tank, nozzle and cap are heated quickly and evenly. The shape, weight and ergonomics were developed for fatigue-free work. The devices have a new, patented and unique level control, which reliably indicates when to refill hot-melt adhesive.

HB 720 bead



HB 720 – Dot and bead application

The universal hand-held device for manual applications in a professional environment. It enables extreme productivity without the outlay for automation. Hot-melt adhesives in the form of granules, pillows or cartridges (43 mm) can be processed in the tank.

Advantages and equipment features HB 720 Bead

- › Process reliability through continuously adjustable temperature control +/- 1 °C
- › Integrated level control and thus extremely efficient operation
- › One-hand bayonet lock for optimum ease of use
- › Ergonomically-shaped handle for fatigue-free work
- › Automatic temperature lowering for economical energy consumption and protection of the hot-melt adhesive
- › Temperature control with digital display integrated in the handle
- › Incl. conical nozzle standard Ø 1.5 mm

Technical data

Dimensions 300 x 270 x 107 mm
Weight 1.35 kg
Operating voltage 220-230 V, 50 Hz
Power consumption 600 W
Working temperature 40-210 °C
Capacity 200 ml
Melting capacity for cartridges 3.2 kg/h, for granules 1.3 kg/h*



* Depending on temperature and adhesive viscosity

HB 720 spray



HB 720 Spray

If materials have to be bonded together over a large area, the spray version is selected. With the spray version of the HB 720, different spray applications patterns can be realised. The spray pattern is changed by regulating the spray air. The device is particularly suitable for processing pressure-sensitive hot-melt adhesives.

Differing advantages and equipment features HB 720 Spray

- › Wafer-thin spray film and thus lower consumption of hot-melt adhesive
- › Process reliability through a consistent spray pattern
- › Inc. swirl nozzle with a standard diameter of Ø 1.5 mm
- › Large-area application
- › Suitable for bonding heat-sensitive materials
- › Conversion to a bead version is possible if required
- › Also ideal for securing pallets at changing workplaces

Technical data

Dimensions 280 x 270 x 107 mm
Weight 1.5 kg
Operating voltage 220-230 V, 50 Hz
Power consumption 600 W
Working temperature 40-210 °C
Capacity 200 ml
Melting capacity for cartridges 3.2 kg/h, for granules 1.3 kg/h*





The HB 720 bead and the HB 720 Spray are used successfully in the concrete industry, among others.

Adhesive selection

Type	Base	Form	Description
B3706	PO	Pillow	Very good oxidation stability, aenia, concrete industry.
B0715	PO	Cartridges Pillow, Granules	The all-rounder among the hot-melt adhesives for industry and handwork, suitable for bead and spray, concrete industry.
B1063.1	PO	Granules Pillow	Universal: Suitable for bead and spray, insert systems for suitcase and general EPS bonds for the purpose of insulation, roller shutter construction, suitcase production.
D1544.1	PSA	Pillow	Pressure-sensitive hot-melt adhesive for fixing and assembly in many branches of industry, e.g. fixing insulation materials and for upholstered furniture.
C0874	PA	Granules	Low pressure injection moulding of electrical components, cable ducts and connector shapes. Securing of electrical components on circuit boards and enamelled wires on spools. Also available in black.

Base: PA - Polyamide, PO - Polyolefin, PSA - Pressure-sensitive

Delivery forms:

- 1 – Cartridge (Diameter ca. 42 mm, 50 mm long)
- 2 – Sticks (Diameter ca. 12 mm, 200 mm long)
- 4 – Granules
- 6 – Pillow

Application areas



Electronic industry



Automotive



Construction industry



Concrete industry



Furniture industry



Foam materials

HB 710 HT



HB 710 HT – High temperature

In the high temperature version all plastic parts and seals are suitable for the processing of hot-melt adhesives with a temperature of up to 250 °C. This hand gun is particularly good for processing polyamide.

Advantages and equipment features

- › Particularly robust/ temperature-resistant housing
- › Even broader processing spectrum for hot-melt adhesives
- › Process reliability through continuously adjustable temperature control +/- 1 °C
- › One-hand bayonet lock for optimum ease of use
- › Ergonomically-shaped handle for fatigue-free work
- › Automatic temperature lowering for economical energy consumption and protection of the hot-melt adhesive
- › Temperature control with digital display integrated in the handle
- › Incl. conical nozzle standard Ø 1.5 mm

Technical data

Dimensions 308 x 270 x 109 mm
 Weight 1.4 kg
 Operating voltage 220 - 230 V, 50 Hz
 Power consumption 600 W
 Working temperature 40 - 250 °C
 Capacity 200 ml
 Melting capacity for cartridges 3.2 kg/h, for granules 1.3 kg/h*

* Depending on temperature and adhesive viscosity



Grouling



Electro



Wood



Polyamide

Pneumatic glue guns

004

Accessories HB 720 bead and HB 710 HT



Cone nozzle,
Standard

Bead application
Ø 0.8 mm
Ø 1.0 mm
Ø 1.5 mm
Ø 2.0 mm
Thread:
UNF 1/2"



Cone nozzle with
capillary

Exact dot
application
Non-drip
Ø 0.7 mm
Thread:
UNF 1/2"



Flat nozzle

Precise film
application
Film width: 10 mm
Thread:
UNF 1/2"



Wide slot nozzle

Film application
Slot width:
0.2 mm
Film width:
16 oder 30 mm
0.2 x 16 mm
0.2 x 30 mm
Thread:
UNF 1/2"

Accessories HB 720 spray



Spray nozzle set
Standard

Spray application
air cap
Set: Swirl nozzle
Ø 1.5 mm
Thread:
M10 x 0,75



Bead application
nozzle for spray
devices

This nozzle enables
a bead applica-
tion with the HB
710 Spray. Direct
mounting on the
spray device.
Ø 1.2 mm
Thread:
M10 x 0.75



Bead nozzle adaptor
for spray devices

For the use of bead
nozzles with an HB
710 Spray. Direct
mounting on the
spray device.
Thread: M10 x 0.75 to
UNF 1/2"



Air cap with adap-
tor for check valve

Incl. adaptor for
check valve Steel
ball, compression
spring and O-ring
Ø 2.0 mm



Pneumatic cartridge glue guns

004

This HB 720 variant enables reactive hot-melt adhesives such as polyurethanes (PUR) or polyolefins (POR) to be processed from aluminium cartridges. With this device it is possible to work horizontally or overhead. The devices are equipped with an innovative level control for information about the fill level in the cartridge. This effectively prevents glue from being wasted in partially empty cartridges. One of BÜHNEN'S contributions to sustainable bonding! For continuous processing of cartridges, we recommend our new cartridge preheater.

HB 720 K bead



HB 720 K – Dot and bead application

This model has an automatic temperature reduction function, which reduces the total energy consumption. The level indicator ensures that the entire adhesive is processed and that the cartridges are changed in good time but not too early. Suitable for all reactive hot-melt adhesives in 310 ml cartridges.

Advantages and equipment features HB 720 K Bead

- › Process reliability thanks to the microprocessor-controlled, stable temperature
- › Integrated level control and thus increased efficiency
- › One-hand bayonet lock for optimum ease of use
- › Minimal maintenance due to the PTFE-coated tank (reduces build-up)
- › Automatic temperature lowering for economical energy consumption and protection of the hot-melt adhesive
- › Temperature control with digital display integrated in the handle
- › Incl. conical nozzle standard Ø 1.5 mm

Technical data

Dimensions 390 x 295 x 107 mm
Weight 1.75 kg
Operating voltage 220-230 V, 50 Hz
Power consumption 600 W
Working temperature 40 - 210 °C
Capacity 310 ml
Melting capacity 0.7 – 1.2 kg/h* (without cartridge prewarmer)



* Depending on temperature and adhesive viscosity

HB 720 K spray



HB 720 K Spray

The spray version of the HB 720 K is the perfect choice if a high level of economy and efficiency is required with a PUR/POR application device. If materials have to be bonded together over a large area, the spray version is selected. Different spray application patterns can be realised with the swirl nozzle.

Differing advantages and equipment features HB 720 K Spray

- › Extremely thin spray film and therefore lower hot-melt adhesive consumption
- › Process reliability owing to a reproducible spray pattern
- › Preheated spray air
- › Incl. swirl nozzle set with a standard diameter of Ø 1.5 mm
- › Large area application
- › Suitable for bonding heat-sensitive materials
- › Optimised ergonomics make handling easier

Technical data

Dimensions 390 x 295 x 107 mm
Weight 1.9 kg
Operating voltage 220-230 V, 50 Hz
Power consumption 600 W
Working temperature 40 - 210 °C
Capacity 310 ml
Melting capacity 0.7 – 1.2 kg/h* (without cartridge prewarmer)





Microprocessor-controlled temperature setting

Adhesive selection

Type	Base	Form	Description
E0931.2	PUR	Cartridge, Pull-ring can, Hobbock	Structural bonds with high demands on strength and temperature behaviour.
B1452.1	POR	Cartridge, Pull-ring can, Drum	For bonding low-energy surfaces with high demands on cohesion behaviour.
E3315	PUR	Cartridge, Cardboard Tube, Hobbock	Particularly suitable for surface lamination and light assembly bonds. Due to the reduced MDI content < 1%, the H351 label is no longer required.
F3490B	Detergent	Cartridge	Cleaning of melters when using reactive PUR hot-melt adhesives, blue

Base:
 PUR – reactive polyurethane
 POR – reactive polyolefin
 Detergent – EVA copolymer

Delivery forms:
 7 – Cartridge (Diameter ca. 47 mm, 215 mm long)
 9 – Containers from 2 - 200 kg (Aluminium bag, bucket, pull-ring can, hobbock)



PTFE-coated tank reduces build-up

Application areas

Automotive

Textile industry

Innovative level control for information about the fill level in the cartridge.



K 725

Cartridge preheater

wingline®_{air}



NEW

K 725 - Cartridge preheater

The cartridge preheater is used to preheat 310 ml cartridges. It has two separately adjustable chambers, which are PTFE coated. The status displays indicate that the cartridges are ready for use. The heating-up time for cartridges is around 20 minutes (140 °C).

Advantages and equipment features

- › Infinitely adjustable temperature control +/- 1 °C
- › Separately switchable chambers, very fast heat-up time
- › Adjustable temperature range 40 - 210 °C
- › Silicone-free
- › Status display offers security when bonding
- › Increases operational readiness in combination with HB 720 K Bead and Spray at 1.3 - 2 kg/h (melting capacity)
- › Reduces the waiting time before being ready for operation:
Increasing efficiency and productivity.

Technical data

Dimensions 224 x 244 x 253 mm
 Weight 2.5 kg
 Operating voltage 220-230V, 50 Hz
 Power consumption 2 x 400W
 Operating temperature 140 - 230 °C



Consol

für HB 720 Serie

wingline®_{air}



NEW

Console with integrated pressure regulator

The console for the HB 720 series is a safe stand and storage option and ensures a tidy workplace. The mains plug of the HB 720 is connected directly to the console. The pressure regulator display is mounted on the console, where it is clearly visible. The air pressure can be precisely adjusted with the regulator for a constant application pattern.

Work station

for HB 720 series

wingline®_{air}



NEW

The station for hands-free operation

For stationary work with the HB 720 series. The hand-held devices are installed in the secure device stand. The mains plug of the HB 720 is connected directly to the workstation. The workstation includes a pressure regulator, trigger valve and foot valve. The spacer plate on the stand is adjustable to optimise the working area. Working with the foot switch enables you to work hands-free with the workpiece to be bonded. The display of the pressure regulator is mounted on the station and clearly visible. The air pressure can be set precisely with the regulator for a constant application pattern.

Optionally, the group can be expanded to include a timer. This enables a reproducible application quality per actuation.



Pneumatic hot-melt glue guns

004

Accessories HB 720 K bead



Nozzle block Standard

Bead application
If necessary, the complete nozzle block on the HB 720 K can be exchanged.
A 3.0 mm cone nozzle is included in the kit.



Nozzle set

Bead application
The nozzle set is screwed directly onto the adhesive cartridge. Thread: UNF 7/16"



Cartridge nozzle, for high viscosity adhesives

The nozzle set is screwed directly onto the adhesive cartridge.
Without ball



Nozzle set

The nozzle set is screwed directly onto the adhesive cartridge.
Ø 1.5 mm
Thread: UNF 1/2"



Sika nozzle mandrel

The Sika nozzle mandrel is part of the Sika nozzle block.
With point.
For SikaMelt® cartridges.



Sika nozzle block complete

Bead application
The Sika nozzle block is screwed directly onto the HB 720 K.
For SikaMelt® cartridges.
Ø 3.0 mm

Accessories HB 720 K spray



Nozzle block, Standard

Spray application.
If necessary, the complete nozzle block on the HB 720 K can be replaced. A 37° swirl nozzle is included in the kit.



Spray nozzle set, Standard

Spray application.
Set: swirl nozzle and air cap Ø 1,5 mm
Thread: M10 x 0.75



Cartridge tongs

Safe removal of hot aluminium cartridges:
- From the cartridge preheater
- From the HB 720 K Bead
- From the HB 720 K Spray



General accessories HB 720 series



Protective gloves Heat-resistant

Safety when handling hot adhesive:
Particularly cut and puncture resistant



Quiet-running compressor

For working with pneumatic handguns.



Silicone underlay

Due to the non-stick properties of the silicone, the hot-melt adhesive can be easily removed.
Dimensions: 500 x 600 x 2 mm



Balancer

Spring-loaded suspension for glue guns up to 2kg.
Easier and faster handling



Time control

Foot switch with adjustable timer



HB 5010 melters

005



Gear pumps melters

005

HB 5010 – Bead and spray version



Switch on . Get started!

The HB 5010 is the entry-level model for melters. Combined with the HB 910 hand gun, it is particularly suitable for manual applications. The robust system can be ordered as a bead or spray version.

The advantages

The simple menu navigation of the control system is designed to be user-friendly, so that the device can also be operated intuitively by unskilled personnel. A password protection can also be activated if required.

The extremely robust plastic housing has a dirt-resistant coating. The modular construction of the system increases the ease of maintenance and guarantees good accessibility of the parts in the event of servicing. A filter change is possible without the need for disassembly.

A conveyor system with a gear pump ensures a constant volume per unit of time. Due to its simple construction, the pump is robust and inexpensive. The construction of the pump also enables the processing of polyamides up to 210 °C.

A special feature of this system is the radio communication of the trigger signal from the hand gun to the receiver integrated in the system. There is therefore no need for an expensive special hose.

Up to 2 heatable hoses can be connected. In combination with application heads, it is possible to automate simple tasks. All common hot-melt adhesives can be processed without problem in bead, dot and/or spray application.

Technical data

Dimensions	720 x 360 x 360 mm
Weight	35 kg
Operating voltage	220-230 V, 50 Hz
Working temperature	40 - 210 °C
Temperature sensor	PT100, alternatively Ni120 for hose and hand-held device
Hose connection	2
Melting capacity	4.5 kg/h*
Heating-up	app.30 minutes
Pump system	gear pump
Pump output	26 kg/h*
Usable tank volume	4.5 litres
Hot-melt adhesives	EVA, PA, PO and pressure-sensitive adhesive

* Depending on temperature and adhesive viscosity

Advantages and equipment features

- › Intuitive user handling
- › Integrated week clock
- › Easy-to-clean, stable plastic housing
- › Connection for up to 2 hoses
- › Coated aluminium tank
- › 4.5-liter capacity
- › Fast heating in less than 30 minutes
- › High melting capacity of 4.5 kg/h
- › Service-friendly, modular structure
- › Integrated filter
- › Maximum cleaning comfort



Adhesive selection

Typ	Base	Form	Description
B3706	PO	Pillow	Very good oxidation stability, avenia, concrete industry.
B0715	PO	Cartridge Pillow, Granules	The all-rounder among PO hot melts for industry and handwork, suitable for bead and spray, concrete industry.
B1063.1	PO	Granules Pillow	Universal: Suitable for bead and spray, insertion systems for cases and general EPS bonding for the purpose of insulation, roller shutter construction, case production.
D1544.1	PSA	Pillow	Pressure-sensitive hot-melt adhesive for fixing and assembly in many branches of industry, e.g. fixing insulation on carrier materials, fixing insulation materials and for upholstered furniture.
C0874	PA	Granules	Low-pressure injection moulding of electrical components, cable ducts and connector shapes. Securing of electrical components on circuit boards and enamelled wires on spools. Also available in black.

Base: PA - Polyamide, P - Polyolefin, PSA – Pressure-sensitive adhesive

Delivery forms:

- 1 – Cartridge (diameter ca. 42 mm, 50 mm long)
- 2 – Sticks (diameter ca. 12 mm, 200 mm long)
- 4 – Granules
- 6 – Pillow

Application areas



Packaging



Display



Automotive



Textile industry



Furniture industry



Construction industry



Easy-to-clean,
stable plastic
housing

Easily understandable display



Flexible connection of up to 2 hoses



Melters

Accessories for the HB 5010



Transport trolleys for melters

It is used for the safe transport of the systems - with practical handles for pushing and easy-running wheels. All wheels can be locked. The table can be loaded up to a maximum of 100 kg.



Mount with motor switch

When the hand gun is hung on the mount, it interrupts the power supply to the pump motor. This interrupts the delivery of the hot-melt adhesive when the work is paused. The interruption protects the hot-melt adhesive as well as the device technology.



Holder for hand-held devices

A holder as an optional accessory for our melters. Enables the practical hanging of the hand gun directly on the device.



Container for granulate adhesives

Rollable container for dry and clean storage for approx. 75 kg granulate.



Maintenance package

One sack (25kg) B41577.2 "cleaning adhesive" One 0.7kg bottle F93492-01
3 cleaning spatulas

one4all



Adapter for Nordson hoses

This adapter enables heated hoses from Nordson to be operated on the HB 5010.
Note: Before using the adapter with a Nordson hose, the Ni120 version must be selected in the operating programme!



Low-noise compressor

For working with pneumatic devices.



Spray air attachment kit without solenoid valve

The spray air attachment kit is used for spray applications when working manually with handguns, or automatic application by means of a spray application head.



Heat-resistant protective gloves

Safe handling of hot glue: particularly cut and puncture resistant

**Hand guns
for melters**

006



Hand guns for melters

006

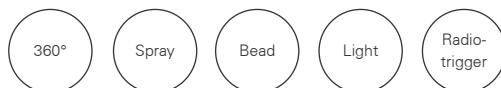
HB 910 bead and spray

360° free movement

The 360° swivel joint of the HB 910 hand gun enables trouble-free work. The gun follows every movement without twisting the hose. The slim handle ensures good working comfort even for smaller hands. All parts in contact with the adhesive are in the isolated area and the risk of injury is low. The non-slip handle lies comfortably in the hand and stays cold.

The advantages

- › Low weight
- › 360° mobility
- › Incl. radio switch for starting the pump motor of the HB 5010
- › No annoying cables whilst working
- › A clear view of the work area due to the hose guide from below
- › Stable and protected hose connection to the hand-held device
- › Standard temperature sensor PT100,
- › Ni120 or FeCuNi temperature sensors available
- › Spray version: clean nozzle due to built-in air valve
- › Adjustable spray application: pressure regulator on the spray air attachment kit
- › Different nozzle diameters with 3/8" thread available



Technical data

	HB 910 Handgun Bead	HB 910 Handgun Spray
Weight	0.76 kg	0.87 kg
Operating voltage	230 V AC / 50-60 Hz	230 V AC / 50-60 Hz
Heating capacity	120 W	120 W
Max. operating temperature	210 °C, optional 250 °C	210 °C
Temperature sensor	PT100, Ni120, FeCuNi	PT100, Ni120, FeCuNi
Heatable hose	1.2 - 6 m* HP series	1.2 - 6 m* HP series

* Other lengths on request

For our range of devices



HB 5010



HB 6000



HB 4000

HB 950

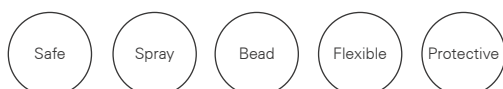
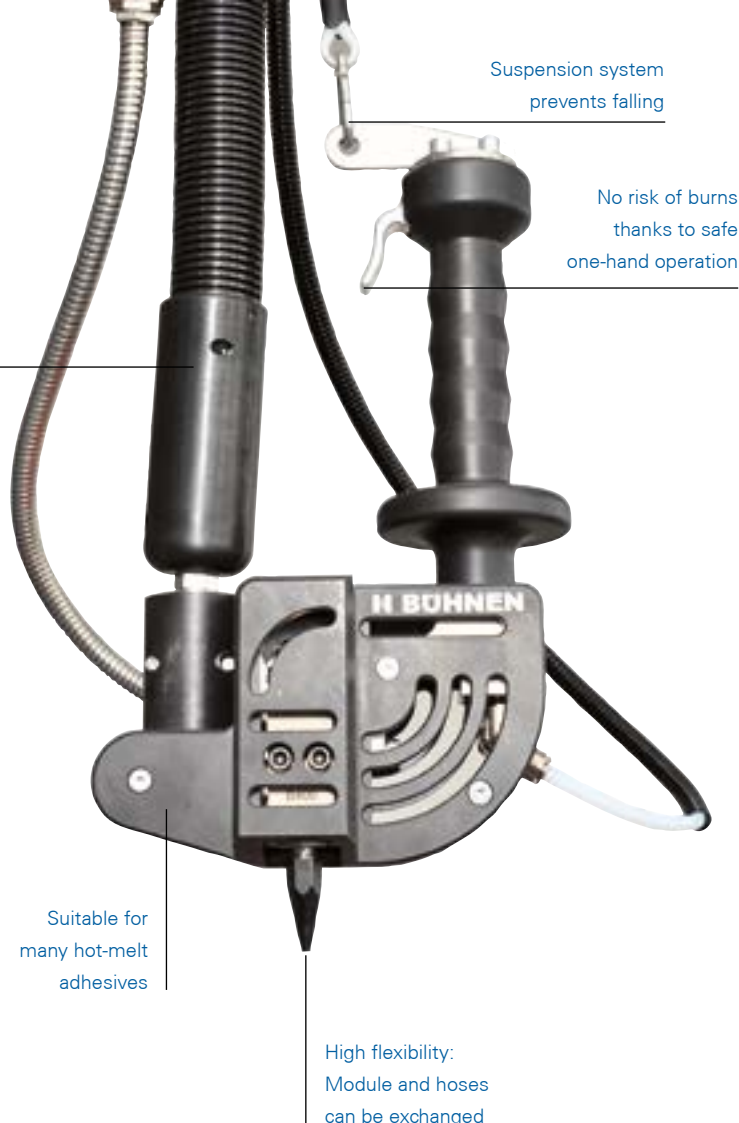
bead and spray

Protects muscles and tendons

If the hot-melt adhesive is applied from above, working with the HB 950 is ideal. By hanging the hand gun on a balancer, work can be carried out in a manner that is gentle on muscles and tendons. The safety and protection of the user is ensured by the insulation of the handle, which also does not The advantages carry any adhesive.

The advantages

- › Extremely easy to guide thanks to the suspension
- › Easy to operate pneumatic trigger
- › One-hand operation (no need to hold or guide the hose)
- › Suitable for all hot-melt adhesives and all types of application (bead, spray application)
- › High flexibility: modules and nozzles can be exchanged
- › Optionally available: mobile table and suspension system
- › Production reliability: less staff absenteeism due to tendon disorders
- › No risk of burns, as the handle is made of special plastic
- › The handgun cannot fall down
- › Suspension protects the hose



Technical data

	HB 950 Bar-Handgun Bead	HB 950 Bar-Handgun Spray
Weight	1.5 kg	1.5 kg
Operating voltage	230 V AC / 50-60 Hz	230 V AC / 50-60 Hz
Heating capacity	200 W	300 W
Max. operating temperature	200 °C	200 °C
Temperature sensor	PT100, Ni120, FeCuNi	PT100, Ni120, FeCuNi
Heatable hose	3 - 6 m* KS series	3 - 6 m* KS series

* Other lengths on request

For our range of devices



HB 5010



HB 6000



HB 4000

Handguns for melters

006

Accessories HB 950 bead, HB 910 bead and spray



Long nozzle, steel
Bead application
screwable, steel
Ø 0.6 mm
Ø 0.8 mm
Ø 1.0 mm
Ø 1.2 mm
Ø 1.5 mm
Ø 2.0 mm
Ø 3.0 mm
Thread: UNF 3/8"



Long cone nozzle, copper
Bead application
Length 57 mm
Ø 1.5 mm
Thread: UNF 3/8"



Spray nozzle set 3/8"
Spray application
set: Swirl nozzle,
air cap and union
nut
Ø 0.8 mm
Ø 1.0 mm
Ø 1.5 mm
Ø 2.0 mm
Thread: UNF 3/8"



Wide spray nozzle set 3/8"
Spray application
set: swirl nozzle
and air cap
Ø 1.0 mm
Ø 2.0 mm
Thread: UNF 3/8"



Spray nozzle MS
Spray application
in the version with
7 drill holes
60° spray angle
Ø 0.2 mm
Ø 0.25 mm
Ø 0.3 mm
Ø 0.35 mm
Ø 0.4 mm
Ø 0.45 mm
Ø 0.5 mm
Ø 0.55 mm
Ø 0.6 mm
Ø 0.7 mm
Ø 0.8 mm
Ø 0.9 mm
Ø 1.0 mm
Ø 1.2 mm
Ø 1.5 mm
Ø 2.0 mm
Thread:
UNF 1/2" x 20



Spray nozzle MS WIDE
Spray application
in the version with
12 drill holes
90° spray angle
Ø 0.2 mm
Ø 0.25 mm
Ø 0.3 mm
Ø 0.35 mm
Ø 0.4 mm
Ø 0.45 mm
Ø 0.5 mm
Ø 0.55 mm
Ø 0.6 mm
Ø 0.7 mm
Ø 0.8 mm
Ø 0.9 mm
Ø 1.0 mm
Ø 1.2 mm
Ø 1.5 mm
Ø 2.0 mm
Thread:
UNF 1/2" x 20

Accessories HB 900 series



Silicone underlay
Clean workplace
and no adhesive
buildup
500 x 600 x 2 mm
Colour: Blue



Protective gloves
Heat-resistant
Safety when
handling hot
objects



Swivel arm with balancer
Safe positioning
Easier handling
at the workplace
Loadable up to 4 kg



Heatable hose HP series for HB 910
Bead and spray
version.
Standard lengths:
1.2 m to 6.0 m
Further lengths on
request



Heatable hose KS series for HB 950
Bead and spray
version Standard
lengths: 1.2 m
to 6.0 m Further
lengths on request

HB 6000 melters

007



Piston pumps melters

007

HB 6000 connect

It's all a matter of setting: Maximum compatibility.

The equipment of the HB 6000 connect offers a wide range of options for integration into existing production lines. Thanks to the clear touch-screen, the technology of the system is easy to operate. The latest generation is prepared for the 4.0 industry: MODBUS, RTU, PROFIBUS, PROFINET and ETHERNET/IP are optionally available for communication.

The advantages

The HB 6000 connect is systematically geared towards efficiency. Compared to other systems, this generation impresses with an energy saving of 60 %. This is achieved by means of the well thought-out insulation of all heated components and the processed Cool-Touch casing.

Safety and ease of maintenance were the top priorities in the development. All assemblies can be accessed in just a few simple steps. The removable side panels simplify service and installation work. The large tank lid can be opened completely and makes refilling and cleaning of the system easier.

The 6000 series heats the adhesive gently and sequentially. This improves the quality of the adhesive application and increases the service life of the system. The structure of the tank ensures that the temperature is uniform. There are no overheated areas in the tank where the adhesive can burn. This protects the adhesive and reduces production downtime due to clogged nozzles.

The HB 6000 connect are compatible with accessories from other manufacturers. Heatable hoses and application heads from Nordson and Robatech can be easily connected.

A wide range of accessories can be found in the BÜHNEN programme. The system can be expanded with, for example, a granulate conveyor, line control or level control.

Brand new! The HB 6000 connect can now be ordered with a flow meter. The system is a precise solution for monitoring adhesive consumption, which uses piston strokes as a reference. Among other things, the total consumption, the consumption per product and the number of articles processed are recorded.



Technical data

Dimensions	588 x 341 x 481 mm*
Weight	90 kg*
Operating voltage	400 V
Working temperature	0 - 230 °C
Temperature constancy	+/- 0.5 °K
Temperature sensors	PT100, Ni120 and NTC
Hose connections	2 / 6
Over-temperature protection	Yes, limited to 260 °C
Melting capacity	9 - 30 kg/h**
Pump system	Piston pump
Pump output	29.3 - 66 kg/h
Usable tank volume	5, 10, 20, 37 litres
Noise emission	60 dBA
Hot-melt adhesive	EVA, PO and thermoplastic rubbers

* Varies depending on the model. Information is based on model HB6350 connect.

** Depending on temperature and adhesive viscosity



7" Display

Efficient

Compatible

Industry 4.0

Adhesive selection

Type	Base	Form	Description
B0715	PO	Cartridge, Pillow, Granules	The all-rounder among hot-melt adhesives for industry and hand-work, suitable for bead and spray, concrete industry
B1063.1	PO	Granules, Pillow	Universal: Suitable for bead and spray, insert systems for cases and general EPS bonding for the purpose of insulation, roller shutter construction, case construction
B3771	PO	Granules	White bio-based hot-melt adhesive for industrial applications in the packaging industry, e.g. coated cardboard and fast carton erectors
D1544.1	PSA	Pillow	Pressure-sensitive hot-melt adhesive for fixing and assembly in many branches of industry, e.g. fixing insulating materials and for upholstered furniture

Base: PO – Polyolefin, PSA – Pressure-sensitive hot-melt adhesive

Delivery forms:

- 1 – Cartridge
- 4 – Granules
- 6 – Pillow

Advantages and equipment features

- › Reduction in energy costs through highly efficient insulation
- › More protection against burns thanks to the cool-touch housing
- › Easy integration into the production systems
- › Communication protocols for the industry can be called up via Modbus, RTU, Profibus, Profinet and Ethernet-IP
- › Flexibility in programming thanks to 6 calendars / 6 time windows for ON / OFF / Standby
- › Compatible with Nordson and Robatech
- › Easy-to-learn operation
- › Complete stand-alone melter
- › Connection of up to 6 heating hoses possible
- › The delivery rate of the piston pump can be individually regulated
- › Extensive standard equipment
- › Can be expanded with a flow meter, line control or granulate conveyor

Application areas



Packaging



Automotive



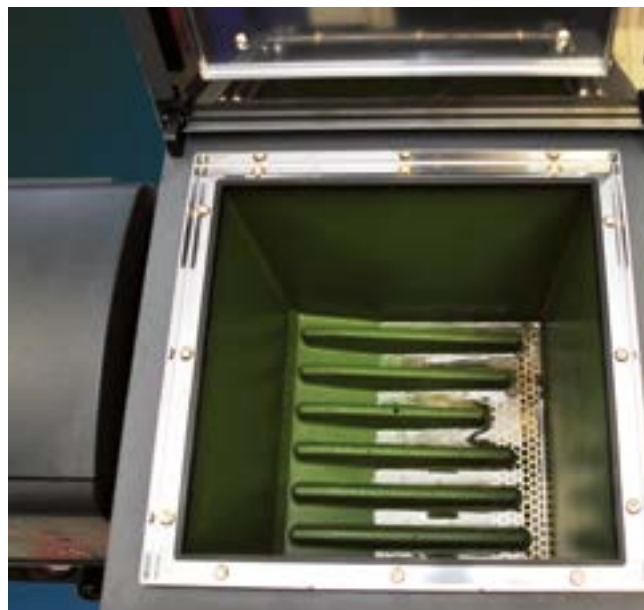
Construction industry



Insulation industry



Full access to the assemblies /components for maintenance work



Effortless cleaning g thanks to PTFE coating



Easy to program user- interface with 7" touchscreen

Linear path control for melters

007



Rear view with 4 channels

Linear path control

The linear path control enables automated work. It controls the solenoid valves on the application heads independently. The control enables precise and exactly recurring hot-melt adhesive application. This application is carried out by calling up recipes or programme variants. The recipes make changing the products to be bonded on the production line much faster. When changing a cardboard box in a packaging line, for example, it is not necessary to laboriously change the settings on the application heads. Up to 100 recipes can be programmed.

The linear path control is operated via a 7" touchscreen and is intuitive. The control is compatible with BÜHNEN HB 4000, HB 5010 and HB 6000 series melters and application heads. The adhesive is applied either time-controlled or distance-controlled.

The linear path control can save up to 30% hot-melt adhesive. Instead of a single hot-melt adhesive bead, several adhesive beads or dots can be applied in quick succession.

Advantages and equipment features

- › Precise and exactly recurring hot-melt adhesive application
- › Intuitive operation via 7" touchscreen
- › High compatibility with all BÜHNEN application systems (melters and application heads)
- › Programming of up to 100 recipes / patterns
- › Time or distance-controlled adhesive application (rotary pulse encoder is also required)
- › Easy integration into existing systems
- › Up to 30% savings in hot-melt adhesive with dot application
- › Simple plug connection from the line control directly to the application head
- › Own circuit – a direct connection to the parent machine or the melter is not required
- › Six inputs for reflex light scanners (depending on the model)
- › Six outputs for activation channels of the solenoid valve (depending on the model)
- › Rotary pulse encoder input
- › Two analogue 0-10 V outputs for regulating the pump pressure of the melter

Technical data

Dimensions 312 x 224 x 216 mm
 Operating voltage 20 - 230 V, 50 / 60 Hz
 Output voltage 24 V
 Maximum speed 600 m / minute

Granulate conveyor for melters

Combined with HB 6000 connect



Automatic adhesive filling by the granulate conveyor

Manual refilling of the hot-melt adhesive is no longer necessary when using a granulate conveyor. The fill level of the tank in the melter is continuously checked. Process reliability is increased with the use of the granulate conveyor, as unplanned production interruptions due to an empty tank are avoided. It is filled with fresh adhesive as required. This reduces temperature fluctuations in the melt and prevents cracking in the device. With the automatic filling process, the risk of accidents for personnel is significantly reduced. Maintenance costs caused by soiling of the system, triggered by overfilling or granules falling beside the tank are reduced to almost nil.

An alarm system warns of malfunctions, for example before the tank has been completely emptied or if the tank is incorrectly filled. A built-in filter prevents the release of dust particles from the granulate. The granulate stock is stored in a container; the container is connected to the melter by means of a suction pipe. Flowable adhesive in the form of granules or pillows up to 10 mm in size is suitable for processing. Refilling the container is child's play thanks to the large hinged lid. The vibration system of the suction plate prevents the stored adhesive from compressing.

Advantages and equipment features

- › Saves personnel costs in operating time
- › Helps to reduce temperature fluctuations in the melt
- › High compatibility with all BÜHNEN melters
- › Reduces adhesive cracking
- › Prevents downtimes caused by an empty tank
- › Integration in existing systems possible
- › Reduces the risk of injury to personnel through burns
- › Alarm system with optical and acoustic signals
- › Closed system prevents the adhesive from becoming dirty

Technical data

Dimensions	195 x 215 x 255 mm
	(Control box and loading unit)
Adhesive form	Granulate or pillows up to 10 mm
Adhesive delivery rate	400 kg/h*
Maximum conveyor distance	25 m*
Maximum delivery height	8 m*
Compressed air supply	5 - 6 bar, compressed air hose, min 10/8 mm
Air consumption	360 l/min when filling
Power supply	230 V

Option: Container for granules with a capacity of 75 kg granulate
*depending on the shape, size and weight of the adhesives





Heatable hoses for melters

008

Heatable hoses from BÜHNEN are manufactured using high-quality materials and thus set standards for a long service life and high operational reliability with precise temperature control. By heating the hot-melt adhesive in the hose, a constant temperature is guaranteed and precise processing is ensured.

Flexible lengths

BÜHNEN hoses always fit! Every hot-melt adhesive application system requires the right hoses in different lengths and nominal widths (= diameter of the hose inner core).

In addition, the hoses are available in versions with different temperature sensors (PT100, Ni120, FeCuNi, NTC), as well as in various connector variants and a wide variety of screw connections. .

BÜHNEN hoses are not only suitable for BÜHNEN application systems. We also supply compatible hoses for Nordson, Meltex, Robatech and ITW Dynatec systems.

Standard lengths:

1.2 m, 1.5 m, 1.8 m, 2.4 m, 2.5 m, 3 m, 3.6 m,
4 m, 4.2 m, 4.5 m, 4.8 m, 5 m, 6 m

Other lengths available on request.

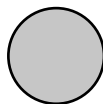
Standard nominal widths:



NW06



NW08



NW10

Other diameters available on request.

Construction

In order to withstand high temperatures, we use a PTFE inner hose for our heatable hoses. This is sheathed in a VA protective braid, so that it can withstand correspondingly high pressures.

The next step is to wind the heating cables and the temperature sensor. Further protection is provided by insulation made of heat-resistant felt tape. The control lines follow and then further insulation made of felt tape. A corrugated thermoplastic elastomer (TPE) hose serves to protect the thermal insulation. The assembly of the heatable hoses is completed with high-quality end caps, resilient plug connections and electrical connections.

Areas of application

The heatable hoses serve as a heated and flexible transport route for hot-melt adhesives from a melter to the application head or to the hand gun. They are also used where moving system parts are connected and the heated hot-melt adhesive is to be fed in using a robot or manual hand movement.



BÜHNEN hoses components / construction / accessories



More protection

Do you have special requirements for the protection of the heated hoses due to your environmental conditions? Then BÜHNEN is exactly the right place for you!

Individuality

Hoses can be matched to the various types of hot-melt adhesive.

High temperature

For processing hot-melt adhesives up to 250 °C (e.g. PA).

PUR Version

Ideal for processing PUR hot-melt adhesives: As an individual part, the inner core can be replaced by you if necessary.



Standard

Thermoplastic Elastomer (TPE) for NW06 and NW08.



Splash water protection

A special (IP65 standardised) protection, for use e.g. in the beverage industry.



Braid sheathing

Polyamide braid and heatresistant silicone foam as from NW10.



VA sheathing

For particularly extreme loads on the outer jacket.

Heatable hoses for melters

008

The heatable KS hoses serve as a heated and flexible transport path for hot-melt adhesives from a melter to an application head (bead or spray). The heatable HP hoses serve as a heated and flexible transport path for hot-melt adhesives from a melter to a hand gun).



KS heatable hoses for application heads

Advantages and equipment features

- › Supply voltage:
230 V AC / 50-60 Hz, special voltage available on request
- › Power consumption per meter: Depends on length and diameter
- › Temperature sensor: PT100, Ni120, NTC, FeCuNi or on request
- › Operating temperature: 200 °C standard, 250 °C high temperature
- › Nominal size of the inner core (DN):
DN 6, 8, 10, 12, 16, 20, 25 or on request
- › Length: 1.2 m to 6 m or on request
- › External protective braid:
Corrugated hose, polyamide braid or metal braid
- › Thermal insulation: Heat-resistant, close-cell silicone foam hose or felt
(depending on temperature)
- › Pressure hose: PTFE core with protective metal braiding
- › Operating pressure: 80 – 240 bar depending on the nominal size of
the inner core and the pressure class (T1, T2 or T3)
- › Connection fittings: Different UNF threads depending on the nominal
size or customer- specific fittings
- › Bending radius: 75 – 250 mm depending on the nominal size
- › Integrated spray air line:
Available as an option for spray application heads
- › Heating hose end caps:
Silicone rubber cap or hard cap with cable strain relief
- › Electrical plug connections and head connections:
14-pin circular plug and socket,
12-pin plug and socket (Nordson compatible), all Harting plugs
and sockets available on request



HP heatable hoses for hand guns

Advantages and features

- › Supply voltage:
230 V AC / 50-60 Hz, special voltage available on request
- › Power consumption per meter: Depends on length and diameter
- › Temperature sensor: PT100, Ni120, NTC, FeCuNi or on request
- › Operating temperature: 200 °C standard, 250 °C high temperature
- › Nominal size of the inner core (DN): DN 6, 8 or 10
- › Length: 1.2 m to 6.0 m or on request
- › External protective braid: Corrugated hose or polyamide braid
- › Thermal insulation: Heat-resistant, close-cell silicone foam hose or felt
(depending on temperature)
- › Pressure hose: PTFE core with protective metal braiding
- › Operating pressure: 175 – 240 bar depending on the nominal size of
the inner core (only pressure class T1) when using a BÜHNEN
handgunmax. 40 bar permitted
- › Connection fittings: UNF 9/16"18" thread
- › Bending radius: 75 – 120 mm depending on the nominal size
- › Integrated spray air line: Available when used with a spray hand gun
- › Heating hose end caps: Silicone rubber cap or hard cap with cable
strain relief
- › Electrical plug connections and head connections:
14-pin circular plug and socket,
12-pin plug and socket (Nordson compatible), all Harting plugs
and sockets available on request



HB 4000 melters

009



Gear pump melters

009

HB 4000 series for EVA-, PO-, PA- and pressure-sensitive hot-melt adhesives

HB 4000 – The flexible modular melters

The 4000 series of melters can be precisely tailored to the individual requirements of the most diverse production areas. The modular solution impresses with its efficiency and cost-effectiveness. The components used are based on elements from well-known manufacturers. Proven industrial electrical components from Lenze, Siemens, Festo and Weidmüller are integrated in this series.

The advantages

The series has a large number of optional accessories. Talk to your local sales representative about the technical supplements you require. The options here are a just a selection:

- › Granules conveyor
- › Level monitoring by means of signal lights and/or signal horn, or as potential-free contact.
- › Hot-melt adhesive flow meter
- › Different pump sizes available
- › Temperature reduction or logo module with reduction logic
- › High-temperature version up to 230 °C
- › Spray air attachment kit



Maintenance-friendly design with good accessibility to pump, drive, filter and bypass valve



HB 4100 for EVA, PO and PSA hot-melt adhesives

EVA, PSA and PO hot-melt adhesives can be heated up quickly in the 9-litre tank. The adhesives can be gently processed in the form of granules, blocks or pillows. Temperature reduction is available as an option. The temperature reduction can be activated by the operator. The melter has a large-volume device filter which ensures a long service life.

Advantages and equipment features

- › Compact size and maintenance-friendly design
- › Easy cleaning thanks to the non-stick coating in the melting tank
- › Optimal heat transfer to the hot-melt adhesive in the aluminium tank
- › Uniform delivery through precise gear pump technology
- › Maintenance-free 3-phase pump drive (Lenze)
- › Automatic start protection of the pump
- › Optional: Temperature reduction

Technical data HB 4100

Dimensions	710 x 390 x 420 mm
Weight	50 kg
Operating voltage	3 / N / PE 400 V, 50-60 Hz
Working temperature	0 - 190 °C
Temperature sensor	PT100, FeCuNi and Ni120
Hose connection	1-4
Melting capacity	5 kg/h*
Pumping system	Gear pump
Usable tank volume	9 litres
Noise emission	60 dBA

* Depending on temperature and adhesive viscosity





HB 4200 for EVA-, PO- and PSA-hot-melt adhesives

The melter with a non-stick coated aluminium tank enables hot-melts to be melted gently in the usual temperature range. The adhesive is conveyed by means of a gear pump.

Advantages and equipment features

- › Compact size and maintenance-friendly design
- › Easy cleaning thanks to the non-stick coating in the melting tank
- › Optimal heat transfer to the hot-melt adhesive in the aluminium tank
- › Uniform delivery through precise gear pump technology
- › Maintenance-free 3-phase pump drive (Lenze)
- › Automatic start protection of the pump
- › High-quality standard electrical and pneumatic components (Siemens, Möller, Lenze, Weidmüller, Festo)

Technical data HB 4200

Dimensions 660 x 340 x 710 mm
 Weight 70 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C
 Temperature sensor PT100, FeCuNi and Ni120
 Hose connections 1 - 4
 Over-temperature protection .. Yes, limited to 260 °C
 Melting capacity 15 kg/h*
 Pump system 1 - 2 gear pumps
 Usable tank volume 18 litres
 Noise emission 60 dBA

* Depending on temperature and adhesive viscosity



HB 4450 for EVA-, PO-, PSA- and PA-hot-melt adhesives

Heated hot-melt adhesive applicator with a 45-litre aluminum storage tank. Suitable for processing of, amongst other things, EVA, PO, PA and pressure-sensitive hot-melts in the form of granules, pillows or blocks up to 190 °C. Optionally available as a high-temperature version up to 230 °C

Advantages and equipment features

- › Conveying capacity from 10 kg/h up to 160 kg/h
- › Collision protection
- › Temperature reduction as a "Stand-by" function
- › Service-friendly single-channel PID temperature controller with self-optimization
- › Uniform delivery through precise gear pump technology
- › Replaceable melting tank heater
- › Maintenance-free 3-phase pump drive
- › Aluminium tank as progressive melting area
- › V2A tank attachment
- › Working temperature 0 – 190 °C
- › Optional: High-temperature version up to 230 °C

Technical data HB 4450

Dimensions 890 x 710 x 1000 mm
 Weight 100 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C, HT: 0 - 230 °C
 Temperature sensor PT100, FeCuNi and Ni120
 Hose connections 1 - 4
 Overtemperature protection .. Yes, limited to 260 °C
 Melting capacity 30 kg/h*
 Pump system 1 - 4 gear pumps
 Usable tank volume 45 litres
 Noise emission 60 dBA

* Depending on temperature and adhesive viscosity

Application areas



Packaging



Electronic industry



Automotive



Display



Textile industry



Construction industry



Concrete industry



Furniture industry





HB 4650 for EVA-, PO-, PSA- and PA-hot-melt adhesives

The melter with the 65-litre tank has a compact and maintenance-friendly design. The large-volume device filter has a long service life. The filter block is made of high-strength aluminium. Due to the possibility of using up to four gear pumps, the individual production conditions can be addressed. Optionally available as a high-temperature version up to 230 °C.

Advantages and equipment features

- › Conveying capacity from 10 kg/h up to 160 kg/h
- › Start protection
- › Temperature reduction as a "Stand-by" function
- › Service-friendly single-channel temperature controller with self- optimization
- › Uniform delivery through precise gear pump technology
- › Replaceable melting tank heater
- › Maintenance-free 3-phase pump drive
- › Aluminium tank as progressive melting area
- › V2A tank attachment
- › Working temperature 0 – 190 °C
- › Optional: High-temperature version up to 230 °C

Technical data HB 4650

Dimensions 840 x 680 x 1350 mm
 Weight 110 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C, HT: 0 - 230 °C
 Temperature sensor PT100, FeCuNi and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 50 kg/h*
 Pump system 1 - 4 gear pumps
 Usable tank volume 65 litres
 Noise emission 60 dBA

* Depending on temperature and adhesive viscosity



HB 4800 for EVA-, PO-, PSA- and PA-hot-melt adhesives

Blocks, large pillows and large amounts of granules can be melted in the 80-litre stainless steel melting tank. Up to 4 gear pumps can be installed and enable a delivery rate of 300 kg/h. The adhesive conveyance by means of a precision gear pump and special maintenance-free AC/converter drive, as well as a start-up safeguard and a temperature reduction as a "stand-by" function, ensure optimal operating efficiency. Optionally available as a high-temperature version up to 230 °C.

Advantages and equipment features

- › Conveying capacity from 10 kg/h up to 300 kg/h
- › Start protection
- › Temperature reduction as a "Stand-by" function
- › Service-friendly single-channel PID temperature controller with self- optimization
- › Uniform delivery through precise gear pump technology
- › Replaceable melting tank heater
- › Maintenance-free 3-phase pump drive
- › Aluminium tank as progressive melting area
- › V2A tank attachment
- › Working temperature 0 – 190 °C
- › Optional: High-temperature version up to 230 °C

Technical data HB 4800

Dimensions 875 x 800 x 1250 mm
 Weight 120 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C, HT: 0 - 230 °C
 Temperature sensor PT100, FeCuNi and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 60 kg/h*
 Pump system 1 - 4 gear pumps
 Usable tank volume 80 litres
 Noise emission 60 dBA

* Depending on temperature and adhesive viscosity



HB 4130 for EVA, PO, PSA and PA hot-melt adhesives

Heated hot-melt adhesive applicator with a 130 litre aluminium storage tank. Gear pump sizes from 10 to 300 kg/h can be used. Suitable for processing EVA, PO, PA and pressure-sensitive hot-melt adhesives in the form of granules, pillows or blocks up to 190 °C. Optionally available as a high-temperature version up to 230 °C.

Advantages and equipment features

- › Conveying capacity from 10 kg/h to 300 kg/h
- › Start protection
- › Temperature reduction as "stand-by" function
- › Service-friendly single-channel PID temperature controller with self-optimisation
- › Uniform delivery through precise gear pump technology
- › Replaceable melting tank heater
- › Maintenance-free three-phase pump drive
- › Aluminium tank as progressive melting area
- › V2A tank attachment
- › Working temperature 0 – 190 °C
- › Optional: High-temperature version up to 230 °C

Technical data HB 4130

Dimensions 990 x 610 x 1460 mm
 Weight 130 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C, HT: 0-230 °C
 Temperature sensor PT100, FeCuNi and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 70 kg/h*
 Pump system 1 - 4 gear pumps
 Usable tank volume 130 litres
 Noise emission 60 dBA

* Depending on temperature and adhesive viscosity

Adhesive selection

Typ	Base	Form	Description
D1544.1	PSA	Pillow	Pressure-sensitive hot-melt adhesive for fixation and assembly In many industrial branches, e.g. Insulation fixing on carrier materials, fixation of insulating materials and for upholstered furniture
B0715	PO	Cartridge, Pillow	The all-rounder among PO hot-melt adhesives for industry and craft, suitable for bead and spray, concrete industry
B1063.1	PO	Granulate, Pillow	Universal: Suitable for bead and spray Insertion systems for suitcases and general EPS bonding for the purpose of insulation, shutter construction, suitcase manufacture
B3771	PO	Granulate	White bio-based hot-melt adhesive fabric for industrial applications in the packaging industry, e.g. coated cardboard and fast carton erectors
B3706	PO	Pillow	Very good oxidation stability, avenia, concrete industry

Base: PA - Polyamide, PO - Polyolefin, PSA – PSA - Hot-melt adhesive

Delivery forms:

- 1 – Cartridge
- 4 – Granulate
- 6 – Pillow

Application areas



Gear pump melters

009

HB 4000 series für PA hot-melt adhesives



HB 4070 for PA hot-melt adhesives

The melter has a 7-litre stainless steel tank and enables hot-melt adhesives to be melted gently in the form of granules, pillows or blocks up to 190 °C. The use of two different tank materials with different thermal conductivity protects the hot-melt adhesive from thermal stress. Optionally available as a high-temperature version.

Advantages and equipment features

- › Non-stick coating in the melting tank
- › Progressive melting tank with stainless steel container
- › Bypass valve
- › Conveying capacity from 10 kg/h up to 40 kg/h
- › Hose connections 1 – 4

Technical data HB 4070

Dimensions 740 x 395 x 420 mm
Weight 50 kg
Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
Working temperature 0 - 190 °C, HT: 0 - 230 °C
Temperature sensor PT100, FeCuNi and Ni120
Hose connections 1 - 4
Over-temperature protection . . Yes, limited to 260 °C
Melting capacity 4 kg/h*
Pump system 1 gear pump
Usable tank volume 7 litres
Noise emission 60 dBA

* Depending on temperature and adhesive viscosity



HB 4150 for hot-melt adhesives

Heated hot-melt adhesive applicator with a 15-litre stainless steel storage tank. The use of two different tank materials with different thermal conductivity protects the hot-melt adhesive from thermal stress. Suitable for processing PA hot-melt adhesives in the form of granules, pillows or blocks up to 190 °C. Optionally available as a high-temperature version up to 230 °C.

Advantages and equipment features

- › Non-stick coating in the melting tank
- › Progressive melting tank with stainless steel container
- › Bypass valve
- › Conveying capacity from 10 kg/h up to 80 kg/h
- › Hose connections 1 – 4
- › Up to 2 gear pumps possible

Technical data HB 4150

Dimensions 700 x 390 x 420 mm
Weight 60 kg
Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
Working temperature 0 - 190 °C, HT: 0 - 230 °C
Temperature sensor PT100, FeCuNi and Ni120
Hose connections 1 - 4
Over-temperature protection . . Yes, limited to 260 °C
Melting capacity 12 kg/h*
Pump system 1 - 2 gear pumps
Usable tank volume 15 litres
Noise emission 60 dBA

* Depending on temperature and adhesive viscosity



HB 4250 for PA hot-melt adhesives

Heated hot-melt adhesive applicator with a 25 litre stainless steel storage tank. By using two different tank materials with different thermal conductivity, the hot-melt adhesive is protected from thermal stress. Suitable for processing, amongst other things, PA hot-melt adhesives in the form of granules, pillows or blocks up to 190 °C. Optionally available as a high-temperature version up to 230 °C.

Advantages and equipment features

- › Non-stick coating in the melting tank
- › Progressive aluminium melting tank with stainless steel tank extension
- › Bypass valve
- › Conveying capacity from 10 kg/h up to 80 kg/h
- › Hose connections 1 – 4
- › Up to two gear pumps possible

Technical data HB 4250

Dimensions 800 x 445 x 770 mm
 Weight 80 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C, HT: 0 - 230 °C
 Temperature sensor PT100, FeCuNi and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 20 kg/h*
 Pump system 1 - 2 gear pumps
 Usable tank volume 25 litres
 Noise emission 60 dBA

* Depending on temperature and adhesive viscosity

Adhesive selection

Type	Base	Form	Description
C0874 C0874S	PA	Stick, Granulate	Low pressure injection moulding of electrical components, cable ducts and connector shapes. Securing of electrical components on circuit boards, as well as enameled wires on spools/coils. Also available in black.
C1404	PA	Granulate	For the roof tile industry as spacer or scratch protection for roof tile surfaces that are glazed or varnished.
C1429.2	PA	Granulate	For the roof tile industry as spacers or scratch protection for roof tiles with anti-dirt coating, varnish or glaze on the top surface of the roof tile.
C2417	PA	Granulate	Very suitable for bonding of core packages in the foundry industry, but also when used in wood processing. Has a high initial strength.

Base: PA - Polyamide

Delivery forms:

2 – Stick

4 – Granulate

Application areas



Electronic industry



Automotive



Construction industry

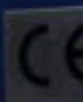


Concrete industry





BÜHNEN
4004



Gear pumps melters

009

HB 4000 Serie for PUR- / POR-hot-melts

HB 4000 - The flexible modular melters

The HB 4000 series melters for PUR- and POR-hot-melt adhesives combine innovative technology with an impressive level of reliability.

The advantages lie in the processing of high-quality components, which leads to significantly lower operating costs, a longer service life and increased production reliability in series production.

The melters for the reactive adhesives are equipped with a compressed air dryer as standard. This protects the moisture-curing PUR or POR hot-melt adhesive from premature chemical reactions. The integrated compressed air dryer only requires compressed air from the compressed air network. This eliminates the use of nitrogen. The adhesives can be refilled without interrupting production, as the melters have a progressive melting range. An amount of homogeneous liquid hot-melt adhesive is available at all times.

All standard container shapes from 2 to 10 kilos can be processed in the system, depending on the design of the melter.

Of course, all the features of the HB 4000 are included in the systems for the reactive adhesives.

The advantages

The series has a large number of optional accessories. Talk to your local sales representative about the technical supplements you need. The options presented here are just a selection:

- › Granule conveyor
- › Level monitoring by means of signal lights and/or signal horn or as a potential-free contact
- › Hot-melt adhesive flow meter
- › Different pump sizes available
- › Temperature reduction or logo module with reduction logic
- › High-temperature version up to 230 °C
- › Spray air attachment kit



Maintenance-friendly design with good accessibility to the pump drive, filter and bypass valve

Application areas



Electronic industry



Automotive



Construction industry



Concrete industry



Foam materials



Furniture industry



HB 4004 for PUR- and POR-hot-melt adhesives

The melter has a 4-liter non-stick coated melt tank with a buffer volume. This enables uninterrupted operation when filling adhesive. The HB 4004 can be configured with gear pumps of different sizes. The conveying capacity of the gear pump is 10 to 40 kg/h, depending on the size.

The system, which can be hermetically closed, is suitable for processing PUR- or POR-hot-melt adhesives.

Advantages and equipment features

- › 4l non-stick coated tank
- › Temperature reduction as a „standby“ function
- › Over and under temperature protection
- › Conveying capacity from 10 kg/h to 40 kg/h
- › Bypass valve
- › Airtight sealable tank cap
- › Integrated compressed air dryer

Technical data HB 4004

Dimensions 720 x 360 x 510 mm
 Weight 50 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 230 °C
 Temperature constant +/- 0.5 °K
 Temperature sensor PT100 and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 2 kg/h*
 Pump system Gear pump
 Usable tank volume 4 liters
 Noise emission 60 dBA
 Hot-melt adhesives PUR, POR

* Depending on temperature and adhesive viscosity



HB 4008 for PUR- and POR-hot-melt adhesive

The melter has an 8-liter non-stick coated melt tank with a buffer volume. This enables uninterrupted operation when filling adhesive. The HB 4008 can be configured with gear pumps of different sizes. The conveying capacity of the gear pump is 10 to 40 kg/h, depending on the size.

The system, which can be hermetically closed, is suitable for processing PUR- or POR-hot-melt adhesives.

Advantages and equipment features

- › 8l non-stick coated tank
- › Temperature as a “standby” function
- › Over and under temperature protection
- › Conveying capacity from 10 kg/h to 40 kg/h
- › Bypass valve
- › Airtight sealable tank cap
- › Integrated compressed air dryer

Technical data HB 4008

Dimensions 755 x 360 x 705 mm
 Weight 75 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 230 °C
 Temperature constant +/- 0.5 °K
 Temperature sensor PT100 and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 4 kg/h*
 Pump system Gear pump
 Usable tank volume 8 liters
 Noise emission 60 dBA
 Hot-melt adhesives PUR, POR

* Depending on temperature and adhesive viscosity



HB 4022 for PUR and POR hot-melt adhesives

The melter has a 22-litre non-stick coated melt tank with a buffer volume. This enables uninterrupted operation when filling adhesive. The HB4022 can be configured with gear pumps of different sizes. The delivery capacity of the gear pump is 10 to 80 kg/h, depending on the size.

The system, which can be hermetically closed, is suitable for processing PUR or POR hot-melt adhesives.

Advantages and equipment features

- › 22l non-stick coated tank
- › Temperature reduction as a "stand-by" function
- › Over and under temperature protection
- › Conveying capacity from 10 kg/h up to 80 kg/h
- › Bypass valve
- › Airtight sealable tank cap
- › Integrated compressed air dryer

Technical data HB 4022

Dimensions 940 x 480 x 1220 mm
 Weight 130 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C
 Temperature sensor PT100 and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 16 kg/h*
 Pump system 1 - 2 gear pumps
 Usable tank volume 22 litres
 Noise emission 60 dBA
 Hot-melt adhesives PUR, POR

* Depending on temperature and adhesive viscosity

Adhesive selection

Type	Base	Form	Description
E0931.2	PUR	Cartridge, Hobbock, Pull-ring tin	Constructive bonding with high demands on strength and temperature behaviour.
B1452.1	POR	Cartridge, Drum, Pull-ring tin	For bonding of low-energy surfaces with high demands on the cohesion behaviour.
E3315	PUR	Cartridge, Hobbock, cardboard sleeve	Particularly suitable for surface lamination and light assembly bonding. Labelling H351 is not required due to the reduced MDI content of < 1 %
F3490B	Detergent	Cartridge	Cleaning of melters when using reactive PUR hot-melt adhesives, blue.

Base:

PUR - Reactive polyurethane

POR - Reactive polyolefin

Detergent - EVA copolymer

Delivery forms:

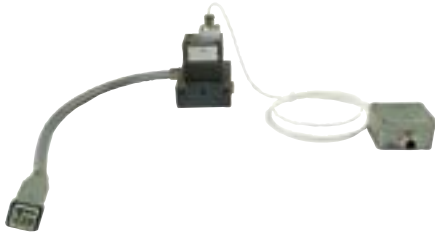
7 - Cartridge (diameter ca. 47 mm, 215 mm long)

9 - Containers of 2 - 200 kg (Alu. bag, bucket, pull-ring tin, hobbock)



Melters

Accessories HB 4000



Heated flow meter

The heated flow meter records the quantity of hot-melt adhesive that is applied from the hot-melt adhesive applicator.

To do this, the heated measuring cell of the flow meter is placed in the adhesive flow between the outlet of the application device and the heatable hose. Another option is to integrate the measuring cell between the application head and the heatable hose. The heated cell forms increments, which send these signals to an external evaluation unit, where they are shown on a display.

To be observed with heated flow meters:

1. A heating circuit for the measuring cell must be provided on the application device.
2. In order to use a suitable flow meter, the viscosity and desired flow rate must first be communicated.

The amount of adhesive conveyed is shown on a display. This can either be integrated in the control cabinet door of the melter or as an external display in a separate box.

Advantages and equipment features

- › Heated quantity measuring unit
- › 0.2 – 10 l/min
- › PT100 sensor



Level control with potential-free contact

The Teflon probe is used in the melting tank. The necessary bore hole is made during the manufacturing process of the melter. Depending on the customer's application, the Teflon probe is inserted into the melting tank individually according to customer specifications and the required melting capacity. Subsequent installation in an already installed system is therefore very complex. The active zone on the switching amplifier is calibrated by the customer with the hot-melt used. The drop-out delay must then be set, in order to give a signal to the output of the switching amplifier.

Advantages and equipment features

- › Output: Potential-free relay contact
- › Teflon probe Ø G 3/4"
- › Drop-out delay adjustable from 0.1 – 5 sec.

Technical data

Operating voltage 240 V AC, 50 – 60 Hz
Operating temperature up to 250 °C



Optional:

Level control with visual and acoustic warning

The level control is equipped with a warning lamp and a horn, which give a visual and acoustic warning if the hot-melt adhesive level in the tank drops critically.

Technical data

Operating voltage 240 V AC, 50 – 60 Hz
Operating temperature Up to 250 °C



Speed display for gear pump

The speed (rpm) display is built into the control cabinet door and is clearly visible. It serves as a visual check of the motor speed set by the potentiometer. The display shows the actual speed of the motor that operates the built-in gear pump. The higher the speed, the faster the motor rotates, the harder the gear pump works that supplies the adhesive.

Advantages and equipment features

- › Easy to read
- › Installed in control cabinet door
- › Display in revolutions per minute (rpm)
- › Display from frequency converter



Spray air attachment kit with solenoid valve

The spray air attachment kit is available in the following variants:

- › Single with solenoid valve in 230V or 24V version
- › 2-fold with solenoid valve in 230V or 24V version
- › 4-fold with solenoid valve in 230V or 24V version in a separate control cabinet.

The spray air attachment kit is used for spray applications when working manually with hand guns or automatically using a spray application head. One spray air attachment kit is required for each hand gun/application head.

It is usually used together with a heatable hose. The spray air attachment kit allows the spray air pressure to be set separately. The setting option is 0.5 – 6.0 bar.

The spray air is preheated. The preheated spray air increases the open time of the hot-melt adhesive used. With the use of the spray air attachment kit, the spray application can be optimised.

Advantages and equipment features

- › For hand gun or application head spray
- › Setting a separate spray pressure
- › Spray air is heated
- › Available in different variants



Electronic pressure display

The electronic pressure display in combination with the pressure transmitter records the pressure of the hot-melt adhesive.

A pressure sensor is integrated into the pump block to monitor the system pressure of the melter. This measures the values in the pressure transmitter.

The measured values are shown on the display in the control cabinet door. In the case of melters with PLC control and touch panel, the display is integrated in the touch panel.



Container for granulate adhesives

Open storage of granulate adhesive poses the risk of contamination, which can damage pumps, nozzles and other components of your melters. With our rollable adhesive container, you prevent contamination from dust and foreign matter and at the same time you can easily move large quantities of granulate between several tank systems.

The container has the capacity of at least 75 kg and has a slide-in foil for the adhesive data sheet.

Advantages and equipment features

Rollable container for dry and clean storage of approx. 75 kg of granulate.

- › Simple mobile use
- › Avoidance of contamination
- › Protects your valuable melters



Gear pump melters

HB 4000 bag melter series for PUR- / POR hot-melt adhesives

HB 4000 – The flexible modular melters

The BÜHNEN bag melter is a maintenance-friendly, adhesive-friendly melter. The material to be melted is processed directly from the bag. This minimises contamination of the device. The bag melter works with a buffer volume for uninterrupted operation. This means that work can continue during the refilling process without production downtime.

In the case of melt-on-demand, the material to be melted is processed in two stages. As required, the adhesive block is pressed through a melting grid by a piston and flows into a reservoir. When this is filled, the melting grid is automatically switched off. Due to the needs-based melting, the adhesive in the reservoir has a constant viscosity. This achieves a continuous production quality.

There are no residues remaining in the adhesive bag. The entire content of the bag is melted. The pressed packaging has only a small volume of waste.

Advantages and equipment features

- › Gear pumps from 10-80 kg/h capacity available
- › Maintenance-friendly thanks to the modular design
- › Easily removable protective cover and tool-free reservoir access
- › Simple operation - high quality electrical and hydraulic components from Siemens, Möller, Lenze, Weidmüller and Festo
- › No unnecessary thermal stress on the adhesive thanks to melt-on-demand
- › Airtight, no contact of the reactive adhesive with the outside air
- › No compressed air dryer required



Adhesive selection

Type	Base	Form	Description
E0931.2	PUR	Cartridge, Hobcock, Pull-ring tin	Constructive bonding with high demands on strength and temperature behaviour.
B1452.1	POR	Cartridge, Drum, Pull-ring tin	For bonding low-energy surfaces with high demands on cohesive behaviour.
E3315	PUR	Cartridge, Hobcock, Cardboard sleeve	Particularly suitable for surface lamination and light assembly bonding. Labelling H351 is not required, due to the reduced MDI content of < 1%
F3490B	Detergent	Cartridge	Cleaning of melters when using reactive PUR hot-melt adhesive, blue

Base:

PUR – Reactive polyurethane

POR – Reactive polyolefin

Detergent – EVA copolymer

Delivery forms:

7 – Cartridge (diameter ca. 47 mm, 215 mm long)

9 – Containers from 2 - 200 kg

(Aluminium bag, bucket, pull-ring tin, hobcock)

Application areas



Electronic industry



Automotive



Construction industry



Foam materials



Furniture industry



HB 4020 BS for PUR and POR hot-melt adhesives

The melter has a non-stick coating in the melt tank, storage tank, lid, register plate and reservoir. The reservoir allows uninterrupted operation when refilling adhesive. The HB 4020 is delivered with a gear pump. The conveying capacity of the pump is configured according to individual requirements (10 / 20 / 40 kg/h).

The system, which can be air-tightly closed, is suitable for processing reactive PUR or POR hot-melt adhesives.

Advantages and equipment features

- › 2 kg container
- › Compact and maintenance-friendly design
- › Temperature reduction as "stand-by" function
- › Over and under temperature protection
- › Conveying capacity from 10 kg/h up to 40 kg/h
- › High-quality electrical and pneumatic components from Siemens, Möller, Lenze, Weidmüller and Festo
- › Replaceable tank heater
- › Large-volume device filter with a long service life

Technical data HB 4020 BS

Dimensions	990 x 490 x 1520 mm
Weight	80 kg
Operating volume	3 / N / PE 400 V, 50 - 60 Hz
Working temperature	0 - 190 °C
Temperature sensor	PT100 and Ni120
Hose connections	1 - 4
Over-temperature protection	Yes, limited to 260 °C
Melting capacity	0.5 - 4 kg/h*
Pump system	1 gear pump
Reservoir volume	0.2 litre
Container	2 kg and 2.5 kg, Ø approx. 125 x 270 mm high
Hot-melt adhesives	POR, PUR

* Depending on temperature and adhesive viscosity



HB 4180 BS for PUR and POR hot-melt adhesives

The melter has a non-stick coating in the melt tank, storage tank, lid, register plate and reservoir. The reservoir allows uninterrupted operation when refilling adhesive. The HB 4180 can be configured with different size gear pumps. The conveying capacity of the gear pump sizes is 10 to 80 kg/h, depending on the size.

The system, which can be air-tightly closed, is suitable for processing reactive PUR or POR hot-melt adhesives.

Advantages and equipment features

- › 18 kg container
- › Compact and maintenance-friendly design
- › Temperature reduction as "stand-by" function
- › Over and under temperature protection
- › Conveying capacity from 10 kg/h up to 80 kg/h
- › High-quality electrical and pneumatic components from Siemens, Möller, Lenze, Weidmüller and Festo
- › Replaceable tank heater
- › Large-volume device filter with a long service life

Technical data HB 4180 BS

Dimensions	940 x 480 x 1120 mm
Weight	250 kg
Operating volume	3 / N / PE 400 V, 50 - 60 Hz
Working temperature	0 - 190 °C
Temperature sensor	PT100 and Ni120
Hose connections	1 - 4
Over-temperature protection	Yes, limited to 260 °C
Melting capacity	1 - 30 kg/h*
Pump system	1 - 2 gear pumps
Reservoir volume	1.1 litre
Container	18 kg, Ø approx. 280 x 370 mm high
Hot-melt adhesives	POR, PUR

* Depending on temperature and adhesive viscosity

Gear pump melters

009

HB 4000 Drum melter series for PUR / POR and pressure-sensitive hot-melt adhesives

HB 4000 – The flexible modular melters

When processing large quantities of hot-melt adhesive, the drum has proven to be the ideal form of delivery. The drum melters from the HB 4000 series are designed in such a way that only the contact surface of the adhesive is melted. The thermal load is thus reduced to a minimum. Different melting plates are used depending on the melting capacity and thermal conductivity of the material to be melted. Melting capacities of 5 - 200 kg/h can be achieved through different geometries of the melting plates. The melting plates have a durable endless sealing ring.

The drum is ventilated automatically via a button. The three-phase motors with gear pump sizes from 5 - 320 kg/h conveying capacity guarantee a continuous application of the melted material. The pressure is regulated by a pneumatic bypass valve. All standard 20 kg and 200 kg drums can be processed in the systems, depending on the design.

Tandem drum melter

Tandem drum melters can be used for applications with very high continuous demands. Switching from the empty to the full drum takes place automatically via a distributor block. A further option is to feed the hot-melt adhesive from a drum melter into a buffer device.

Advantages and features

- › Easy and convenient drum change within a few minutes
- › Low residual quantity in the drum
- › Two-handed operation for raising and lowering the drum
- › Clean change: The exchange drawer supplied as standard prevents the hot adhesive from dripping off when changing the drum.
- › Easily replaceable surface heating in the melting plate
- › Easy cleaning of the melting plate
- › Good accessibility
- › High-quality electrical and pneumatic components from Siemens, Möller, Lenze, Weidmüller and Festo



Smooth melting plate

- › With a smooth surface for a low melting capacity:
 - HB 4020 FS - approx. 5 kg/h,
 - HB 4200 FS - approx. 5 - 20 kg/h
- › Low residual quantity in the drum



Axial-rib melting plate

- › With a smooth surface for a medium melting capacity:
 - HB 4020 FS - approx. 12 kg/h,
 - HB 4200 FS - approx. 10 - 60 kg/h



Fine-rib melting plate

- › With a very large surface for a very high melting capacity:
 - HB 4020 FS - approx. 20 kg/h,
 - HB 4200 FS - approx. 20 - 200 kg/h

Adhesive selection

Type	Base	Form	Description
E0931.2	PUR	Pull-ring tin	Constructive bonding with high demand on strength and temperature behaviour.
B1452.1	POR	Pull-ring tin, Drum	For bonding low-energy surfaces with high demands on cohesion behaviour.
E3315	PUR	Cardboard sleeve, Hobbock	Particularly suitable for surface-lamination and light assembly bonding. Labelling H351 is not required due to the reduced MDI content of < 1%.
E2456UVM	PUR	Cardboard sleeve, Hobbock	For assembly and construction bonding exposed to high temperatures. Available in black and white.

Base: PUR - Reactive polyurethane, POR - Reactive polyolefin

Delivery forms: 9 - containers from 2 - 200 kg

Application areas



Packaging



Electronic industry



Automotive



Construction industry



HB 4020 FS for PUR, POR and pressure-sensitive hot-melt adhesives

The drum melter has an automatic air vent and an endless sealing ring for seamless sealing of the melting plate. Commercially available 20kg containers can be processed in the HB 4020 FS. The conveying capacity of the pump can be configured using various sizes. Optimum operating safety is guaranteed by the clearly visible operating status displays and the two-handed operation.

The system, which can be air-tightly sealed, is suitable for processing reactive PUR or POR hot-melt adhesives.

Advantages and equipment features

- › 20 kg container
- › Compact and maintenance-friendly design
- › Non-stick coating and drip protection for clean drum changes
- › Drag chain protectively guides cables and hoses
- › Conveying capacity from 5 kg/h up to 40 kg/h
- › High-quality electrical and pneumatic components from Siemens, Möller, Lenze, Weidmüller and Festo
- › Automatic venting of plate underside and pumps
- › Exchangeable heater in the melting plate

Technical data HB 4020 FS

Dimensions 1400 x 510 x 1950 mm
 Weight 240 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C
 Temperature sensor P.T100 and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 5 - 25 kg/h*
 Pump system 1 gear pump
 Container size 20 litres, Ø 275 x 366 mm high
 Noise emission 60 dBA
 Hot-melt adhesives PUR, POR, PSA

* Depending on temperature and adhesive viscosity



HB 4200 FS for PUR, POR and pressure-sensitive hot-melt adhesives

The drum melter has an automatic air vent and an endless sealing ring for seamless sealing of the melting plate. The HB 4200 FS can be used to process hot-melt adhesive from smooth-walled 200-litre containers. The conveying capacity of the pump can be configured using various sizes. Optimum operating safety is guaranteed by the clearly visible operating status displays and the two-handed operation.

The system, which can be air-tightly sealed, is suitable for processing reactive PUR or POR hot-melt adhesives.

Advantages and features

- › 200 litre container
- › Compact and maintenance-friendly design
- › Drip protection for clean drum changes
- › Drag chain protectively guides cables and hoses
- › Conveying capacity from 10 kg/h up to 320 kg/h
- › High-quality electrical and pneumatic components from Siemens, Möller, Lenze, Weidmüller and Festo
- › Exchangeable heater in the melting plate made of high-strength aluminium
- › Automatic venting of plate underside and pumps

Technical data HB 4200 FS

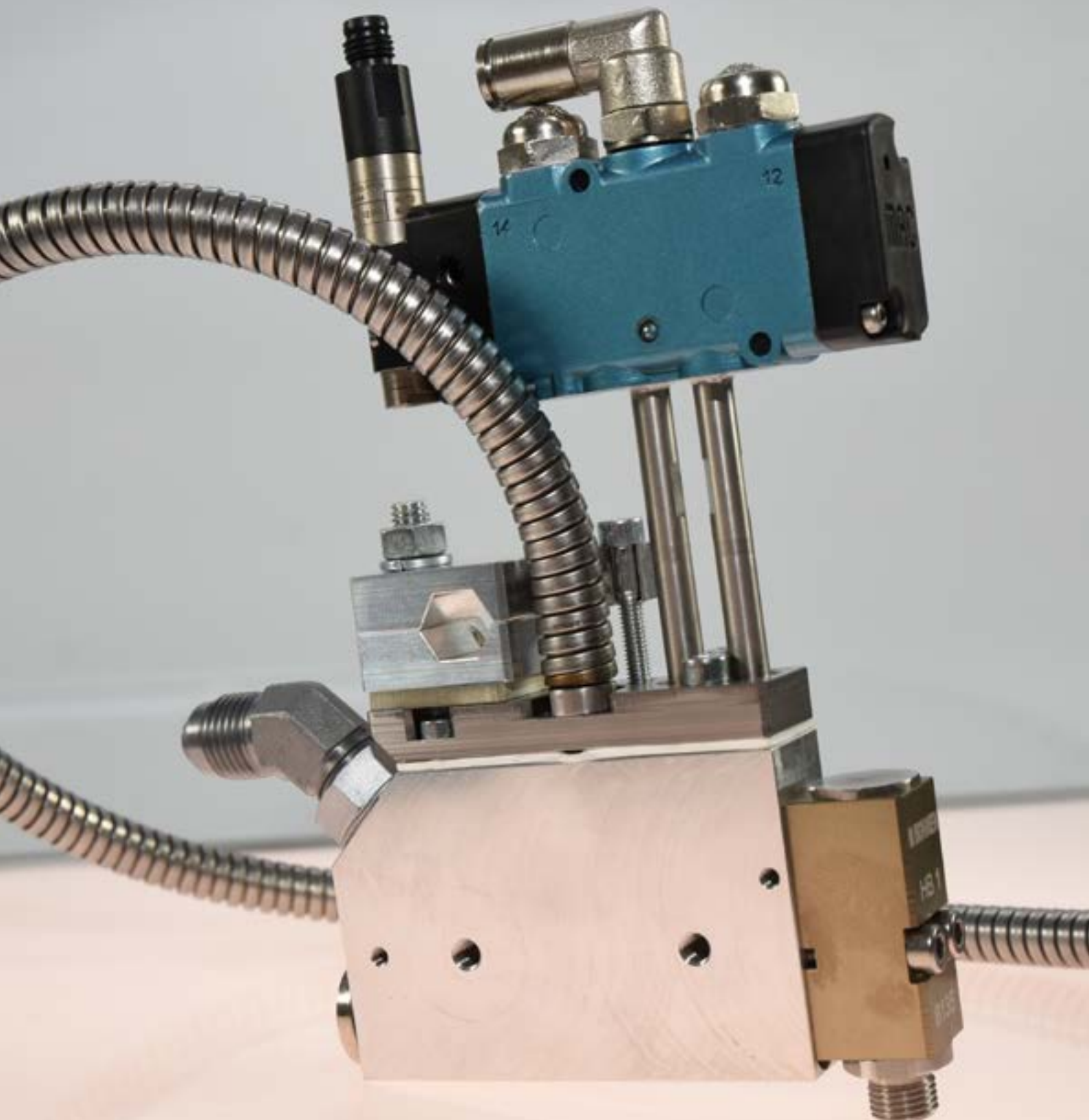
Dimensions 1820 x 710 x 2750 mm
 Weight 580 kg
 Operating voltage 3 / N / PE 400 V, 50 - 60 Hz
 Working temperature 0 - 190 °C
 Temperature sensor PT100 and Ni120
 Hose connections 1 - 4
 Over-temperature protection . . Yes, limited to 260 °C
 Melting capacity 5 - 200 kg/h*
 Pump system 1 - 2 gear pumps
 Container size 200 litres, Ø 571 x 875 mm high
 Noise emission 60 dBA
 Hot-melt adhesives PUR, POR, PSA

* Depending on temperature and adhesive viscosity



Application heads

010



Bead application head

Application heads are used in automated processes. They are then part of a production line and driven, for instance, by a linear path control. The desired application pattern determines the system and thus also the application head used. Application heads are usually permanently installed and the work-piece is passed under them. Depending on their arrangement, linear beads or dots are applied. According to requirements, one or more application heads are installed in the system. The hot-melt adhesive can be applied from above, horizontally or, in special cases, upside-down.

HB 11

HB 11 Micro application head–
Fast cycle times, little space
required

With its narrow module, the HB 11 is used for particularly fast cycle times. The HB 11 is compatible with Nordson and Robatech. The application head is delivered without a nozzle.

Advantages and equipment features

- › Incl. 24 V solenoid valve
- › Incl. Module HB 1 with UNF 3/8" thread for use with standard nozzles
- › Compact structural width for tight places: only 18 mm
- › PT100, Ni120 or NTC
- › Air-opening / air-closing
- › Head holder for 11 - 15 mm round bars
- › With integrated filter (100 mesh)
- › Hose connection SA 8
- › Optional: Inline filter, M8 plug for solenoid valve, insulation

Technical data

Dimensions 170 x 18 x 130 mm
Heating capacity 160 W
Temperature range max. 195 °C
Max. pressure 80 bar
Nozzle thread UNF 3/8"
Number of modules 1



Video HB 11

HB 20

HB 20 Application head with insulation

The HB 20 is excellent for the application of highly viscous hot-melt adhesives. The fine adjustment of the needle stroke enables the application quantity to be precisely dosed. The application head is delivered without a nozzle.

Advantages and equipment features

- › Incl. solenoid valve plug for HB 6000 and HB 5010
- › Incl. 1 module with UNF 3/8" thread or use with standard nozzles
- › Incl. energy-saving insulation
- › PT100
- › Air-opening / spring-closing
- › Head holder for 7 - 12 mm round bars
- › Hose connection SA 8
- › Optional: Inline filter, cable harness for HB 4000, 230 V version

Technical data

Dimensions 210 x 50 x 80 mm
Heating capacity 150 W
Temperature range max. 200 °C
Max. pressure 100 bar
Nozzle thread UNF 3/8"
Number of modules 1



DK 1/30 HT



DK 1/30 HT - High temperature

Due to the use of high-quality seals, temperatures of up to 250 °C are possible. The DK 1/30 HT is often used to process polyamide hot-melt adhesives. Its modular structure makes it easy to maintain. The application head is delivered without a nozzle.

Advantages and equipment features

- › High temperature version up to 250 °C
- › Incl. solenoid valve and solenoid valve attachment kit
- › Incl. 1 module with UNF 3/8" thread for the use of standard nozzles
- › PT100
- › Air-opening / air-closing
- › Head holder for 10 mm round bar
- › Needle stroke adjustment
- › Airtech 230 V
- › Hose connection SA 8
- › Optional: Airtech 24 V

Technical data

Dimensions 102 x 46 x 137 mm
 Heating capacity 200 W
 Temperature range 50 - 250 °C
 Max. pressure 120 bar
 Nozzle thread UNF 3/8"
 Number of modules 1



Accessories



Brass nozzle MS-VA

The standard nozzle MS-VA is made of brass with an inserted stainless steel capillary. Bead application

Dot application

Ø 0.3 mm

Ø 0.4 mm

Ø 0.6 mm

Ø 0.8 mm

Ø 1.0 mm

Ø 1.2 mm

Ø 1.5 mm

Ø 2.0 mm

Ø 2.5 mm

Thread: UNF 3/8"



Long nozzle, steel

Bead application

Dot application

Ø 0.6 mm

Ø 0.8 mm

Ø 1.0 mm

Ø 1.2 mm

Ø 1.5 mm

Ø 2.0 mm

Ø 3.0 mm

Thread: UNF 3/8"



Stainless steel nozzle VA-LL

Without inserted capillary, good adhesive flow, precise application

Bead application

Dot application

Ø 0.2 mm

Ø 0.25 mm

Ø 0.3 mm

Ø 0.35 mm

Ø 0.4 mm

Ø 0.45 mm

Ø 0.5 mm

Ø 0.55 mm

Ø 0.6 mm

Ø 0.7 mm

Ø 0.8 mm

Ø 0.9 mm

Ø 1.0 mm

Thread: UNF 3/8"



Nozzle cleaning needles (Pack of 6)

Each set contains six nozzle cleaning needles. The needles within the set are all of the same size.



Heated Hoses KS Bead

Heatable hose for spray application heads in combination with melters.



Pattern control system

The pattern control system enables automated operation. It autonomously controls the solenoid valves on the application heads.

Application areas



Packaging



Electronic industry



Automotive



Filter industry



Textile industry



Construction industry



Concrete industry



Furniture industry

Surface application heads

010

Surface application heads are a special form of bead application head. Instead of a nozzle, an adhesive distributor is flange-mounted, which applies the adhesive over the entire surface in very thin layers of a certain width. While bead or spray application heads are always at a certain distance from the workpiece, a surface application head is in contact with the substrate. As the substrate rubs against the application head, the lip is not made of brass or aluminium but of steel. This application is mainly used in the packaging industry for the production of enveloped with self-sealing closures.

HB 20 BS

HB 20 BS - Application width up to 20 mm

The HB 20 BS surface application head is equipped with a wide-slot module, which enables a maximum application width of 20 mm. Alternatively, a module with an application width of maximum 30 mm can be selected. The surface application head is supplied without a spacer plate.

Advantages and equipment features

- › Incl. solenoid valve connector for HB 6000 and HB 5010
- › Incl. 1 wide-slot module
- › PT100 or Ni120
- › Air opening / Spring closing
- › Head holder for 7 - 12 mm round bar
- › Hose connection SA 8
- › Optional: Inline filter

Technical data

Dimensions 256 x 44 x 80 mm
 Heating capacity 180 W
 Temperature range max. 200 °C
 Max. pressure 100 bar
 Application width 15 - 20 mm
 Number of modules 1



HB 45 BS

HB 45 BS - Application width up to 35 mm

The HB 45 BS is used to apply an adhesive film up to 35 mm wide. The mouthpiece is adapted to the feeding of cardboard. Due to the special contour on the mouthpiece, the head is less prone to failure and has less wear. The control element has a larger needle hole of 3mm, which enables an increased output rate. The surface application head is supplied without a spacer plate.

Advantages and equipment features

- › Including 1 module
- › Layer thickness from 0.1 to 2 mm
- › Max. application width from 10 mm to 35 mm
- › Standard PT100 (others available on request)
- › Air opening / Air closing for excellent tear-off behaviour
- › Head holder for 12 mm round bar
- › Hose connection SA 8
- › Optional: Inline filter, Ni120 / NTC version

Technical data

Dimensions 239 x 63 x 93 mm
 Heating capacity 200 W
 Temperature range max. 50 - 200 °C
 Max. pressure 100 bar
 Application width 10 - 35 mm
 Number of modules 1



FLK 2/60

FLK 2/60 – Application width up to 60 mm

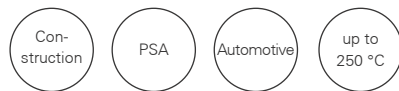
The high-temperature application head with two modules. The maximum application width of the adhesive is 60 mm. The adhesive is delivered via a heatable hose and distributed to two modules via drill-holes. The surface application head is supplied including a spacer plate.

Advantages and equipment features

- › Maximum application width 60 mm
- › Incl. two modules and 24 V solenoid valve
- › Incl. spacer plate with 0.5 mm layer thickness
- › PT100
- › Air opening / Air closing
- › Head holder for 10 mm round bar
- › Upper/Head valve Airtech 230 V
- › Incl. filter 315 µ

Technical data

Dimensions 114 x 93 x 145 mm
Heating capacity 175 W
Temperature range 50 - 250 °C
Max. pressure 120 bar
Application width 60 mm
Number of modules 2



Application areas



Packaging



Self-adhesive closure



Automotive



Filter Industry



Foam materials



Construction industry



Concrete industry



Furniture industry

Accessories



Spacer plates

(others on request)

Spacer plates HB 20 BS

Application width

20 mm

Layer thickness 0.5 mm



Spacer plates

(others on request)

Spacer plates HB 30 BS

Application width

30 mm

Layer thickness 0.5 mm



Spacer plates

Spacer plates HB 45 BS

Application width

35 mm

Layer thickness 0.5 mm

Spray application heads

If workpieces need to be bonded together over a large area, spray applications are used. The requirements of the application determine the type of application head used. Cycle times are longer than with bead application heads. The build-up of the spray pattern requires a certain amount of time. The achievable spray width always depends on the hot-melt adhesive used. A thin thread of adhesive is deflected to the side by an air vortex, carried along and applied in a circular form to the workpiece. In this way, a flat application pattern is achieved. The spray application enables a low adhesive consumption, as the entire surface is not wetted, but only spirals are applied.

HB 30

HB 30 Spray - Spray application up to 50 mm

The HB 30 Spray is used if spray widths of up to 50 mm are required. The application head has passive air preheating, which prevents excessive cooling of the adhesive. The application head is delivered without a nozzle.

Advantages and equipment features

- › Incl. Solenoid valve plug for HB 6000 and HB 5010
- › Incl. 1 module with UNF 1/2" thread
- › PT100
- › Air-opening / spring-closing
- › Integrated filter
- › Head holder for 12 mm round bar
- › Hose connection SA 8
- › Optional: 230 V version, cable harness for HB 4000

Technical data

Dimensions 269 x 44 x 85 mm
 Heating capacity 360 W
 Temperature range max. 200 °C
 Max. pressure 100 bar
 Nozzle thread UNF 1/2"
 Number of modules. 1



Video HB 30



Spray application head

Spray application head with integrated air preheater - Spray application up to 300 mm

The spray application head has a control module for spray nozzles. The spray width is 10 - 300 mm. The head contains an integrated filter. A heating circuit is always required to control the integrated air preheater, as well as an adapter cable, depending on the length of the heated hose.

Alternatively, a temperature control box can be used to control the air preheater. The application head is supplied without a nozzle.

Advantages and equipment features

- › Incl. 1 module B600 with union nut to secure the nozzle
- › MAC 24 V solenoid valve
- › PT100
- › Air-opening / spring-closing
- › Integrated filter
- › Head holder for 12 mm round bar
- › Hose connection SA 8
- › Optional: temperature control box, adapter cable

Technical data

Dimensions 115 x 272 x 68 mm
 Heating capacity 480 W
 Temperature range 190 °C
 Max. pressure 100 bar
 Nozzle thread. UNF 3/8"
 Number of modules. 1



Video
 Spray application head



Accessories



Spray nozzle MS

Spray application in the version with 7 boreholes

60° spraying angle

Ø 0.2 mm

Ø 0.25 mm

Ø 0.3 mm

Ø 0.35 mm

Ø 0.4 mm

Ø 0.45 mm

Ø 0.5 mm

Ø 0.55 mm

Ø 0.6 mm

Ø 0.7 mm

Ø 0.8 mm

Ø 0.9 mm

Ø 1.0 mm

Ø 1.2 mm

Ø 1.5 mm

Ø 2.0 mm

Thread:

UNF 1/2" x 20



Spray nozzle MS WIDE

Spray application in the version with 12 boreholes

90° spraying angle

Ø 0.2 mm

Ø 0.25 mm

Ø 0.3 mm

Ø 0.35 mm

Ø 0.4 mm

Ø 0.45 mm

Ø 0.5 mm

Ø 0.55 mm

Ø 0.6 mm

Ø 0.7 mm

Ø 0.8 mm

Ø 0.9 mm

Ø 1.0 mm

Ø 1.2 mm

Ø 1.5 mm

Ø 2.0 mm

Thread:

UNF 1/2" x 20



Spray nozzle B 600

clockwise rotation Nozzle cap without thread, for module

B 600

Ø 0.7 mm

Ø 1.0 mm

without thread



Pattern control system

The pattern control system enables automated operation. It autonomously controls the solenoid valves on the application heads.



Heated Hoses KS Spray

Heatable hose for spray application heads in combination with melters.



Adapter cable for temperature control box

Adapter cable for the spray application head with integrated air preheater

Length:

3.0 m

5.0 m

7.0 m

Application areas



Packaging



Electronic industry



Automotive



Filter industry



Textile industry



Construction industry



Concrete industry



Furniture industry





Compatible spare parts

With the one4all products you get 100 % compatible spare parts for the manufacturers Nordson, Robatech, HHS, ITW Dynatec and Meltex. The products offered are not original goods from the manufacturer. The high-quality products are manufactured in Europe.

In our compatible range you will find various application heads, modules, pumps, heatable hoses, nozzles, filters, sleeves, solenoid valves, and much more. The number of available products is extremely large. We will be happy to make you an individual offer.

Maintenance / Service of third-party systems

We offer a qualified customer service to ensure the longevity of our own application technology and products. You can also make use of this service for system technology from other manufacturers. A competent customer service team is ready to solve your concerns. Regular maintenance prevents unplanned downtime and avoids production stops. Our technicians check and optimise device-specific features. The technology is also cleaned during this operation.



Solenoid valves

The solenoid valves can convert the electrical signal from a controller and release, block or vent compressed air. They are available in different wattage versions, as well as in structural modifications.



In-line filters, sieves and head filters

The one4all In-line filters protect the application head and the nozzle from contamination. They are mounted between the application head and the heatable hose. Replacement sieves and head filters are available as accessories.



Nozzles and spacer plates

The one4all nozzles (bead and spray) and the spacer plates are ideally matched to your application and ensure a controlled flow of hot-melt adhesive.



Heating cartridges and sensors

The heating cartridges ensure rapid and even heating. Temperature sensors are resistance thermometers for measuring the temperature.



Tank filters and sieves

The one4all tank filter filters dirt out of the tank before it can get into the heatable hose.



Adapter and hose connections

The adapters are used to connect the melter and heatable hose or to connect the application head and hose.

Bead application heads

011

With the one4all application heads you get 100 % compatible products for the manufacturers Nordson, Robatech, HHS, ITW Dynatec and Meltex. The products offered are not original goods from the manufacturer. These high-quality products are manufactured in Europe. The application heads are used in automated processes. They are then part of a production line and are controlled by, for example, a linear path control. The desired application pattern determines the system and thus also the application head. Application heads are usually permanently installed and the workpiece is passed under them. Depending on their arrangement, linear beads or dots are applied. One or more application heads are installed in the system, according to requirements. The hot-melt adhesives can be applied from above, horizontally or, in special cases, upside-down.

HB 11

HB 11 Micro application head – fast cycle times and little space required

The HB 11 with its narrow module is used for particularly fast cycle times. The HB 11 is compatible with Nordson and Robatech. The application head is supplied without a nozzle.

Advantages and equipment features

- › Incl. 24 v solenoid valve
- › Incl. HB 1 module
(with UNF 3/8" thread for the use of standard models)
- › Compact width for cramped space: Only 18 mm
- › PT100, Ni120 or NTC
- › Air opening/Air closing
- › Head holder for 11 – 15 round iron
- › With integrated filter (100 mesh)
- › Hose connection SA 8
- › Optional: Inline filter, M8 connector for solenoid valve, insulation

Technical data

Dimensions 170 x 18 x 130 mm
 Heating capacity 160 W
 Working temperature. max. 195 °C
 Max. adhesive pressure 80 bar
 Nozzle thread. UNF 3/8"
 Number of modules. 1



Video HB 11



B401/44

401/44 Application head

The B401/44 application head is 44 mm wide and has a B400 module. This is air opening and spring closing. It is controlled by a solenoid valve, which, like the matching nozzles, is available separately. The B401/44 model can be used for dot and bead application.

Advantages and equipment features

- › Compatible with Nordson, Robatech, Meltex or HHS
- › Suitable for BÜHNEN melters
- › For dot and bead application
- › Overall width 44 mm
- › PT100, Ni120, FeCuNi or NTC
- › Air opening/Spring closing
- › Incl. B400 module
- › Solenoid valve and nozzle available separately

Technical data

Dimensions 171 x 44 x 67 mm
 Heating capacity 180
 Working temperature. 200 °C
 Max. adhesive pressure. 100 bar
 Nozzle thread. UNF 3/8"
 Number of modules. 1



B401/28-F



B401/28-F, bead or surface application

The B401/28-F application head has a B400 module only 28 mm wide. The module is air opening and spring closing. It is controlled via a solenoid valve. Solenoid, nozzles and spacer plates are available separately. The head can be used for dot and bead application. A version of the application head is available with a BS 20 surface application module.

Available in the B401/28-F version with an integrated filter. The head has a rear hose connection as standard. A version with a hose connection from above is available as an option.

Advantages and equipment features

- › Compatible with Nordson, Robatech or Meltex
- › Suitable for BÜHNEN melters
- › Incl. B400 module
- › PT100, Ni120, FeCuNi or NTC
- › Air opening/Spring closing
- › For dot and bead application with 3/8" UNF thread
- › For surface application incl. BS20 surface module
- › Optional: Version with hose connection from above

Technical data

Dimensions 117 x 28 x 171 mm
 Heating capacity 160 W
 Working temperature. 200 °C
 Max. adhesive pressure 100 bar
 Nozzle thread. UNF 3/8"
 Number of modules. 1



B402-84V



B402-84V

The B402-84V application head has two independently swivelling B400 modules. These enable an adjustable bead spacing of 14 – 60 mm (depending on the distance to the substrate). The modules are air opening and spring closing. Control is by means of two solenoid valves. The solenoid valves and nozzles are available separately.

Advantages and equipment features

- › Compatible with Nordson or Robatech
- › Suitable for BÜHNEN melters
- › For dot and bead application
- › Variable setting of the modules (swivelling)
- › Overall width 84 mm
- › Incl. two B400 modules
- › Control via two solenoid valves
- › Solenoid valves and nozzles available separately

Technical data

Dimensions 105 x 84 x 171 mm
 Heating capacity 300 W
 Working temperature. 200 °C
 Max. adhesive pressure 100 bar
 Nozzle thread. UNF 3/8"
 Number of modules. 2



B404/90-22-22-22(x4)



B404/90-22-22-22(x4)

The application head B404/90-22-22-22 has four B400 modules. These enable four beads of hot-melt adhesive to be applied at the same time. The modules are air opening and spring closing. Control is by means of one or four solenoid valves. The distance between the modules is 22 mm from nozzle tip to nozzle tip.

Advantages and equipment features

- › Compatible with Nordson
- › Suitable for BÜHNEN
- › Including solenoid valves and solenoid valve mounting kits
- › Incl. four modules (with thread UNF 3/8" for use with standard nozzles)
- › PT100 or Ni120
- › Air opening / spring closing
- › Optional: additional application heads with different overall widths and module spacing

Technical data

Dimensions 90 x 83 x 250 mm
 Heating capacity 400 W
 Working temperature. up to 200 °C
 Max. adhesive pressure 80 bar
 Nozzle thread. UNF 3/8"
 Number of modules. 4



Accessories



Brass nozzle MS-VA

Standard nozzle with an inserted stainless steel capillary.

Bead application

Dot application

Ø 0.3 mm

Ø 0.4 mm

Ø 0.6 mm

Ø 0.8 mm

Ø 1.0 mm

Ø 1.2 mm

Ø 1.5 mm

Ø 2.0 mm

Ø 2.5 mm

Thread: UNF 3/8"



Collar nozzle VA

The collar nozzle is made of stainless steel and reduced stringing during application.

Bead application

Dot application

Ø 0.4 mm

Ø 0.5 mm

Ø 0.6 mm

Ø 0.7 mm

Ø 0.8 mm

Thread: UNF 3/8"



Stainless steel nozzle VA-LL

Without inserted capillary, good adhesive flow, precise application

Ø 0.2 mm

Ø 0.25 mm

Ø 0.3 mm

Ø 0.35 mm

Ø 0.4 mm

Ø 0.45 mm

Ø 0.5 mm

Ø 0.55 mm

Ø 0.6 mm

Ø 0.7 mm

Ø 0.8 mm

Ø 0.9 mm

Ø 1.0 mm

Thread: UNF 3/8"



Nozzle-cleaning needles (6-pack)

A set contains six nozzle – cleaning needles. All needles within a set are of the same size.



Heatable hose Bead

Heatable hose for bead application heads in combination with melters.



Linear path control

The linear path control enables automated work. It autonomously controls the solenoid valves on the application heads.

Application areas



Packaging



Electronic industry



Automotive



Filter industry



Textile industry



Construction industry



Concrete industry



Furniture industry



Surface application heads

011

With surface application heads, the hot-melt adhesive is applied in a thin layer and in certain widths over the entire surface. A surface application head always has direct contact to the substrate, both intermittent and continuous application is possible. Different application widths and thicknesses can be achieved by using different spacer plates. The surface application heads are compatible with Nordson, Robatech and ITW-Dynatec. The products offered are not original goods from the manufacturer. The high-quality products are manufactured in Europe.

B45-70

With the B45-70 surface application head, an adhesive film of up to 68 mm wide is applied. It comes in the version NKT0407 with one B45 module or as NKT0619 with two B45 modules. The scope of delivery includes the required number of solenoid valves and accessories. The solenoid valve coil must be activated externally. The surface application head is supplied without a spacer plate. You would like to use the application head, but require a different application width? Feel free to contact us for an independent consultation.



Divergent advantages and features

- › Compatible with Nordson
- › Including 1 – 2 control parts (modules)
- › Air opening / air closing for excellent tear-off behaviour
- › Including solenoid valve/s

Technical data

Dimensions 239 x 70 x 93 mm
 Heating capacity 200 W
 Working temperature max. 50 - 200 °C
 Max. adhesive pressure 100 bar
 Application width up to 68 mm
 No. of modules 1 - 2



Spacer plates

Spacer plate HB 45 BS
 Application width 35 mm
 Layer thickness 0.5 mm

B401/44-BS20

With the B401/44-BS20, a narrower adhesive film of up to 20 mm is applied. The one4all surface application head convinces with its good price-performance ratio. It is equipped with a BS20 module. This is air opening and spring closing. The surface application head is supplied without a solenoid valve and spacer plate. The head can be ordered in different versions, compatible with Nordson and Robatech. The BS20 surface modules with a slot nozzle are available separately on request.



Divergent advantages and features

- › Compatible with Nordson and Robatech
- › Good price-performance ratio
- › Including one BS20 module
- › Air opening / spring closing

Technical data

Dimensions 171 x 44 x 67 mm
 Heating capacity 180
 Working temperature 200 °C
 Max. adhesive pressure 100 bar
 Application width 20 mm
 Number of modules 1



Spacer plates (more on request)

Spacer plate HB 20 BS
 Application width 20 mm
 Layer thickness 0.5 mm



Spacer plates (more on request)

Spacer plate HB 30 BS
 Application width 30 mm
 Layer thickness 0.5 mm

Spray application heads

011

If workpieces have to be bonded together over a large area, this is where spray application heads come into use. The requirements of the application determine the type of application head used. The cycle times are longer than with bead application heads. The build-up of the spray pattern requires a certain amount of time. The achievable spray width always depends on the hot-melt adhesive used. A thin thread of adhesive is deflected to the side by an air vortex, carried along and applied in a circular movement to the workpiece. In this way, a flat application pattern is achieved. The spray application enables a low adhesive consumption, as the entire surface is not wetted, but only spirals applied.

B301-F-TL

Due to its good price-performance ratio, the spray application head B301-F-TL is the standard head for spray applications in the one4all range. Two 180 W heating cartridges are used in the application head, which enable rapid heating to the operating temperature. The ready-to-operate application head must be permanently installed on the head holder. Any possible holding rod must have the same diameter as the clamp bore of the bracket (Ø 12 mm).



The hot-melt adhesives are melted in the melter and conveyed to the application head via a heated hose. The application head contains the B200 module (compatible with Nordson H200) and a T-piece for connecting the spray air. The spray pattern can be individually set by turning the screw on the spray air throttle valve. The solenoid valve and matching nozzles are available separately. They can be ordered in different versions compatible with Nordson or Robatech.

Advantages and equipment features

- › Compatible with Nordson and Robatech
- › For spray application
- › With integrated filter

Technical data

Dimensions 44 x 200 x 113 mm
 Heating capacity 360 W
 Working temperature 200 °C
 Max. adhesive pressure 100 bar
 Application width 10 - 40 mm
 Nozzle threads Spray
 Note Nozzle separate



B34S

The B34S spray application head in the compact design is used for the dosed application of hot-melt adhesives. The robust head is equipped with a 0.6 mm spray nozzle as standard. Application takes place as a continuous spray application or as an intermittent adhesive application. The spray head must be screwed tightly to the head holder. Natural vibrations occur when the apparatus is used intermittently, so care must be taken to ensure that the application head is installed firmly and solidly.



The one4all B34S is available with PT100 or Ni120 temperature sensors, optionally also with PT100 in a 230 V version. Other nozzle diameters are available on request.

Advantages and equipment features

- › Compatible with Nordson and Meltex EP34S
- › Incl. air nozzle and union nut

Technical data

Dimensions 30 x 192 x 214 mm
 Heating capacity 200 W
 Working temperature 50 - 195 °C
 Max. adhesive pressure 100 bar
 Application width 10 - 30 mm
 Nozzle threads Spin-spray
 Note for small spray widths



With the one4all modules you get 100 % compatible products for the manufacturers Nordson, Robatech, HHS, ITW Dynatec and Meltex. The products offered are not original goods from the manufacturer. The high-quality goods are manufactured in Europe. The modules are screwed in front of the base body of the application head and are responsible for controlling the flow of hot-melt adhesive. Inside is a piston with a nozzle needle that can open or close the flow of hot-melt adhesive. A distinction is made between air opening/spring closing and air opening/air closing. With the first type, the module is opened by compressed air and closes automatically by a pressure spring after the compressed air is switched off. In the second type, the compressed air is switched over to close.

B400

one4all Module B400

The B400 module has short control air passages. These bring about a fast opening and very precise closing of the piston with the nozzle needle for a clean application of the adhesive. It is a standard module for spot and bead application.



Advantages and equipment features

- › Compatible with Nordson H200 / H400 / Nordson Solid Blue S series
- › Compatible with Robatech AX100 series
- › Compatible with ITW Dynatec
- › Air opening /spring closing
- › Optional: High-temperature version, Zero Cavity, with fine adjustment

B400-LL

one4all Module B400-LL

It is suitable for fast switching cycles with a constant application. Tight tolerance with a matched needle and nozzle assembly eliminates nozzle clogging and results in clean adhesive application. The module is suitable for dot and bead application.



Advantages and equipment features

- › Compatible with Nordson H440 / Nordson Solid Blue A series
- › Compatible with Robatech
- › Air opening/air closing
- › Optional: High-temperature version, Zero Cavity

B200

Spray Module B200

The spray modules are screwed in front of the base body of the application head and are responsible for regulating the flow of hot-melt adhesive. Inside there is a piston with a nozzle needle that can open or close the flow of adhesive. In the case of the B200, the module is opened by compressed air and the pressure spring closes automatically after the compressed air is switched off.



The modules of the B200 series enable a controlled, area-wide and fairly sharp-edged application, as the adhesive emerging from the nozzle is set into a spiral movement by targeted turbulence with compressed air.

Advantages and equipment features

- › Compatible with Nordson H200
- › Standards spray module
- › Incl. 2 cylinder screws (M5)

B34S

Spray Module B34S

The B34S module is used for spray application. It comes with a 0.6 mm material nozzle, including the matching air nozzle (NKT0499) and union nut (NKT0500).

The desired spray pattern can be set by finely adjusting the needle by turning the knurled nut.

Advantages and features

- › Compatible with Nordson and Meltex EP34S
- › Incl. air nozzle and union nut



Heatable hoses

With the one4all heatable hoses you get 100 % compatible products for the manufacturers Nordson, Robatech, HHS, ITW Dynatec and Meltex. The products offered are not original goods from the manufacturer. The high-quality products are manufactured in Europe. The heatable hoses serve as a heated and flexible transport route for hot-melt adhesives, from a melter to the application head. They are also used where moving system parts are connected and the heated hot-melt adhesive is to be fed in by robot or manual movements.



NS30 for bead application heads

Heatable hoses for bead application heads in combination with melters.

Standard: Ni120 sensor, nominal width NW08, outer cap diameter 40 mm, High-Flex version

Optional: Spray version, replaceable inner core (recommended for use with PUR or POR), VA sheathing (for extreme loads on the outer sheath), outer sheath in signal colour (orange)

Advantages and equipment features

- › Compatible with Nordson 2300 / 300 / ProBlue series
- › High-Flex version
- › Up to 200 °C in the standard version
- › Lengths 0.6 m – 10.0 m

Technical data

Lengths 0.6 – 10.0 m
Supply voltage V
Temperature sensor Ni120
Operating temperature up to 210 °C



NS30-SW, splash-proof for bead application heads

Heatable hoses for bead application heads in combination with melters. Only for application heads that also have splash water protection. The hoses are available in different lengths and nominal widths (= diameter of the inner hose core). If you cannot find the length you require here, please contact us. The NS30 hoses have splash water protection IP65.

Standard: Ni120 sensor, nominal width NW08, outer cap diameter 40 mm, High-Flex version

Optional: Spray version, replaceable inner core (recommended for use with PUR or POR), VA sheathing (for extreme loads on the outer sheath), outer sheath in signal colour (orange)

Advantages and equipment features

- › Compatible with Nordson 2300 / 300 / ProBlue series
- › Splash water protection IP65
- › Up to 200 °C in the standard version
- › Lengths 0.6 m – 4.8 m

Technical data

Lengths 0.6 – 4.8 m
Supply voltage 230 V
Temperature sensor Ni120
Operating temperature up to 210 °C



MT

Heatable hoses for bead application heads in combination with melters.

The hoses are available in different lengths and nominal widths (= diameter of the inner hose core). If you cannot find the length you require here, please contact us.

Standard: PT100 or FeCuNi sensor, nominal widths NW08 and NW13, High-Flex version

Optional: Spray version

Advantages and equipment features

- › Compatible with Nordson and Meltex
- › High-Flex version
- › Up to 210 °C in the standard version
- › Lengths 1.8 m – 6.0 m

Technical data

Lengths 1.8 – 6.0 m
Supply voltage 230 V
Temperature sensor PT100 / FeCuNi
Operating temperature up to 210 °C



FB for hand guns, bead/spray

Heatable hoses for the BÜHNEN B 910 hand gun (in Ni120 / NTC version) in combination with third-party melters.

The heatable FB hoses serve as a heated and flexible transport route for hot-melt adhesives from the melter of different manufacturer to a BÜHNEN HB 910 bead or spray hand gun. Depending on the manufacturer, the HB 910 must have a Ni120 / NTC temperature sensor.

The hoses are available in different lengths and nominal widths (= diameter of the inner hose core). If you cannot find the length you require here, please contact us.

Standard: Ni120 sensor, nominal width NW08, inMini version with TPE corrugated protective hose.

Optional: For Robatech available with NTC sensor

Advantages and equipment features

- › Compatible with Nordson 2300 / 300 /DuraBlue series
- › Compatible with Robatech
- › Bead and Spray available
- › Lengths 2.4 m – 7.0 m

Technical data

Lengths... 2.4 – 7.0 m
Supply voltage... 230 V
Temperature sensor... Ni120
Operating temperature ... up to 200 °C



RB

Heatable hoses for bead application heads in combination with melters. The hoses are available in different lengths and nominal widths (= diameter of the inner hose core). If you cannot find the length you require here, please contact us.

Standard: NTC sensor, nominal width NW08, High-Flex version, Harting connector (rectangular) HTS 8-pin

Optional: Spray version, replaceable inner core (recommended for use with PUR or POR), VA sheathing (for extreme loads on the outer sheath), outer sheath in signal colour (orange), splash water protection IP65

Advantages and equipment features

- › Compatible with Robatech Concept series
- › High Flex version
- › Up to 210 °C in the standard version
- › Lengths 0.6 m – 8.0 m

Technical data

Lengths ... 0,6 - 8,0 m
Supply voltage ... 230 V
Temperature sensor ... Ni120
Operating temperature ... up to 210 °C



ITW

Heatable hoses for bead application heads in combination with melters. The hoses are available in different lengths and nominal widths (= diameter of the inner hose core). If you cannot find the length you require here, please contact us.

Standard: PT100 sensor, nominal widths NW06- Euchner version and NW08 - Amphenol version, High-Flex version

Optional: Spray version

Advantages and equipment features

- › Compatible with ITW-Dynatec
- › High-Flex version
- › With Euchner or Amphenol connection
- › Up to 210 °C in the standard version
- › Lengths 1.2 m – 4.8 m

Technical data

Lengths... 1.2 – 4.8 m
Supply voltage... 230 V
Temperature sensor... PT100
Operating temperature ... up to 210 °C





Notes

PAGE 106

The one-stop solution for hot-melt adhesive bonding

- ✓ Only one contact partner for all adhesive enquiries
- ✓ High level of advisory skills to ensure reliable bonding processes
- ✓ Wide offer of hot-melt adhesives for almost any application
- ✓ Extensive range of matching application equipment and accessories
- ✓ Close to customers all over Europe
- ✓ Extensive customer services
- ✓ Rapid delivery, even of small quantities

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