b&s innova

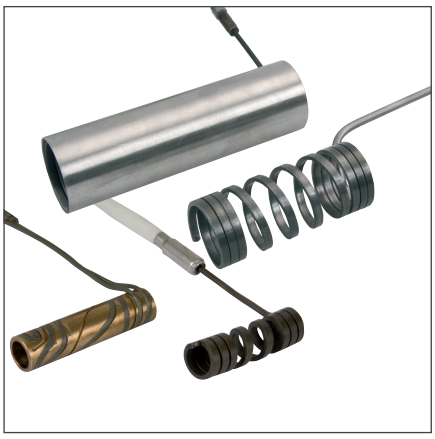
innovative heating solutions

heatcart

High density cartridge heater

Diameter	2,8 – 32 mm
Length	max. 3000 mm
Voltage	max. 480 V
Surface Load	max. 40 W/cm²
Sheath temperature	max. 750˚C

- ☐ temperatures until 750°C
- ☐ exclusively with polished surface
- ☐ gas-thick and liquid-closer welded cartridge ground
- ☐ possibility of an individual and reproducable power distribution
- ☐ on request with integrated thermocouple grounded or not grounded
- ☐ also with integrated PT100 possible
- ☐ optionally premanufactured connectors
- ☐ special customer sizes possible
- ☐ observance of VDE 0721
- ☐ with quality mark of VDE or UL as per request



heatcoil

Coil heater

Rectangular [mm]

1,0 x 1,6	1,3 x 2,3	1,8 x 3,2
2,2 x 4,2	3,0 x 3,0	4,6 x 9,0

Round [Ø mm]

1,3	1,8	3,3	4,0

Length	max. 3000 mm
Voltage	24 – 250 V
Surfaxe load	max. 15 W/cm²
Sheath temperature	max. 750˚C

- ☐ firm seat on metallic body
- ☐ steady temperature distribution by individual power distributions
- ☐ with integrated thermocouple or with together coiled thermocouple
- ☐ unheated length as per customer request also in the middle
- ☐ as an outside- and inside heating applicable
- ☐ humidity-thick connection head by use of a special sealing

heatsens

Temperature sensor

Ø Temp. sensor	ab 1,0 mm
Ø PT 100	ab 1,5 mm
Sheath material	CrNi-Stahl 1.4541
Isolation	MgO
Max. temp.	Fe-CuNi 600˚C (J-Typ)
	Ni-CrNi 750˚C (K-Typ)
High voltage test	500 V
Insulation resistance	> 50 MΩ

- ☐ high measuring exactness about a large temperature area
- ☐ low response times
- ☐ customised solutions
- ☐ connections leads also possible with protection sleeves

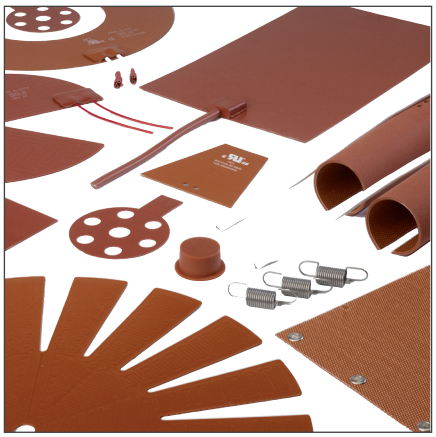
heatband

Band heaters

Diameter	28 – 110 mm
Height	20 – 80 mm
Voltage	max. 250 V
Surface load	max. 10 W/cm²

Sheath temperature
max. 300˚C brass
max. 500°C stainless steel

- ☐ low place need
- ☐ protected against plastics
- ☐ mechanically very robust connection
- ☐ long state times
- ☐ integrated thermocouple possible
- ☐ steady temperature distribution



heatmat

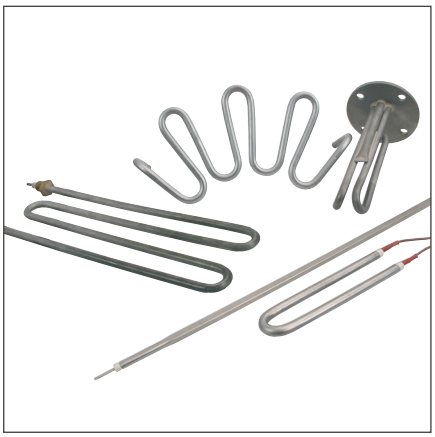
Heating foils

b&s innova GmbH & Co. KG is specified on production of heatmat heating foils. All heating foils can be produced in nearly every form and size. Recesses, drillings and individual power distributions can be carried out. By individual interpretations of the heating circles we can guarantee steady temperature courses above the whole heating mat.

- ☐ steady temperature distribution
- ☐ reproduceable power distributions
- ☐ high power density
- ☐ permit complicated forms and individual construction form
- ☐ low wall thickness possibly
- ☐ small bending radius
- ☐ fast heating by low thermally effective mass
- ☐ agile control behaviour
- ☐ with licensing UL/CSA possibly

Max. temperature of the materials

Silicone	+200 °C
High temp. silicone	+230 °C
Captone	+200 °C
Polyester	+120 °C
Micanit	+300 °C



heattube

Tubular heater

Rectangular [mm]
6 x 6 8 x 8

Round [Ø mm]
3,0 4,0 5,0 6,5 8,5 10,0 16,0

Length	max. 4000 mm
Voltage	max. 500 V
Surface load	max. 10 W/cm²
sheath temperature	max. 750˚C

- ☐ straight or individuell bendable
- ☐ with one- or two page connections
- ☐ different connection options
- ☐ with slightly bendable sheath for the individual adaptation
- ☐ different sheath materials
- ☐ also as a finned tubular heater possible

heatcast

Heated nozzle for die casting

The B&S Innova heatcast is a closed heating system of warm chamber machines.

The heating element passes of a heatcoil coil heater with integrated thermocouple NiCrNi. This coil heater will be coiled on the nozzle body, the stoker is protected against zinc by pressed tube which is welded together with two final caps and the nozzle body after a special procedure.

- ☐ closed system
- ☐ steady temperature distribution
- ☐ reproduceable power distributions
- ☐ with integrated thermocouple NiCrNi
- ☐ small outer diameter
- ☐ with insulations tube for saving energy possible
- ☐ hexagon nut and accessoirs available
- ☐ Coating and treatment of the mass canal for the wear reduction

heatplate

Hot plate

Customised laid out hot plates and heated contours for various industrial applications

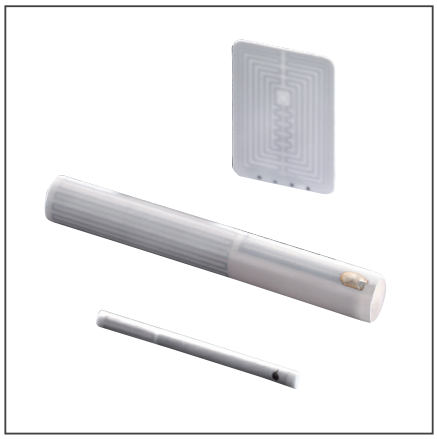
- ☐ 2D and 3D contours possibly
- ☐ freely determinable construction
- ☐ Customer-sided choice of the used heating elements
- ☐ also with heatsens thermocouples or resistance sensor possible
- ☐ with insulation available
- ☐ target temperature until 600 C
- ☐ on request with coated surface
- ☐ with premanufactured connectors possibly
- ☐ recesses and drillings possibly

heatpack

Compact heating elements

The compact heater heatpack exists of a closed stainless steel or brass system with integrated heatube or heatcoil.
This heater is suited very well for uses in a rough production climate in which a mechanically very loadable heating is necessary.

- ☐ protected heating element with optimised temperature distribution
- ☐ protected against plastics
- ☐ optimum inside heating and outside heating by exact tolerances (H7)
- ☐ also with heatsens thermocouples or resistance sensor possible

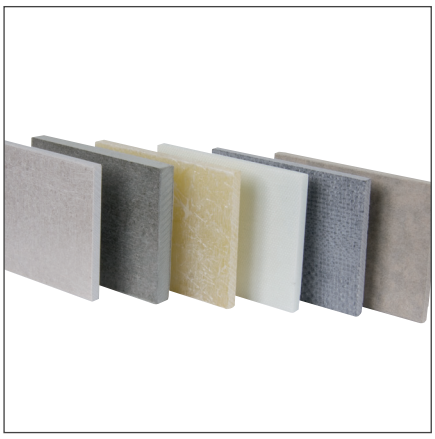


heatflash

Ceramic heater

With the heatflash ceramic heater can be achieved in very short time rates, very high temperatures. This heater can be produced as a plate or in pipe form. It is suited very well as an airflow heater.

- ☐ maximum element temperature 1000°C in the long-term company and change company, for a short time up to 1200°C
- ☐ short warm-up time
- ☐ customised heater‘s geometry possibly
- ☐ outwardly and inside electrically isolating
- ☐ resistant to oxidation and to corrosion
- ☐ adjustably about the whole temperature area
- ☐ high loading capacity



isomat

Insulation plates

Efficient and dependable heat insulation. Our offer encloses heat insulation records (warm insulating plates), insulating materials.

- ☐ high long-term temperature permanence until 1000°C
- ☐ extremely good insulating effect
- ☐ high pressure resistance up to 650 N/mm²
- ☐ chemical resistance by acids and organic solvents
- ☐ customised contours and forms realizable
- ☐ persistent dimension and form stability
- ☐ very high warm insulating property (warm guide number until 0,13 W/mK)

bonispray

High temperature dividing spray

This high temperature dividing spray is suited very well for the installation and removal of high density cartridge heater. It prevents the festival burning of a heating element.

- ☐ well sticking on metallic surfaces
- ☐ good heattransfer
- ☐ protect against corrosion
- ☐ reduces the wear
- ☐ electrically NOT leadingly
- ☐ temperatures until 800°C

www.bs-innova.de

b&s innova GmbH & Co. KG is a specialist for cerium tension technology, innovative and practice oriented heating elements. We offer tailor-made, individual solutions linkedly with a high and customer oriented service consciousness. Their high-class claim obliges us too absolutely to the highest-quality products. With b&s innova GmbH & Co. KG you have a strong and dependable partner at your side.

A competent consultation in the approach of the purchase decision, the adaptable delivery of your complete solution ready with installation as well as an accompanying, professional looking in the use phase are natural for b&s innova GmbH & Co. KG. For our customers, nevertheless, these are determining factors for the removal of market advantages.

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