

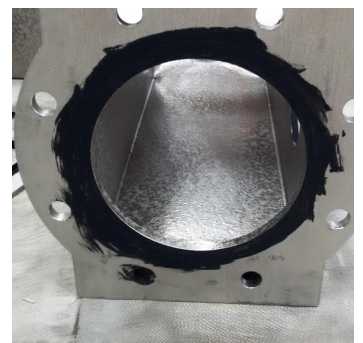
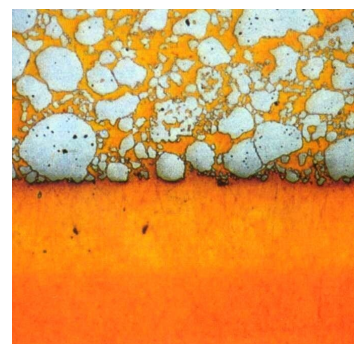
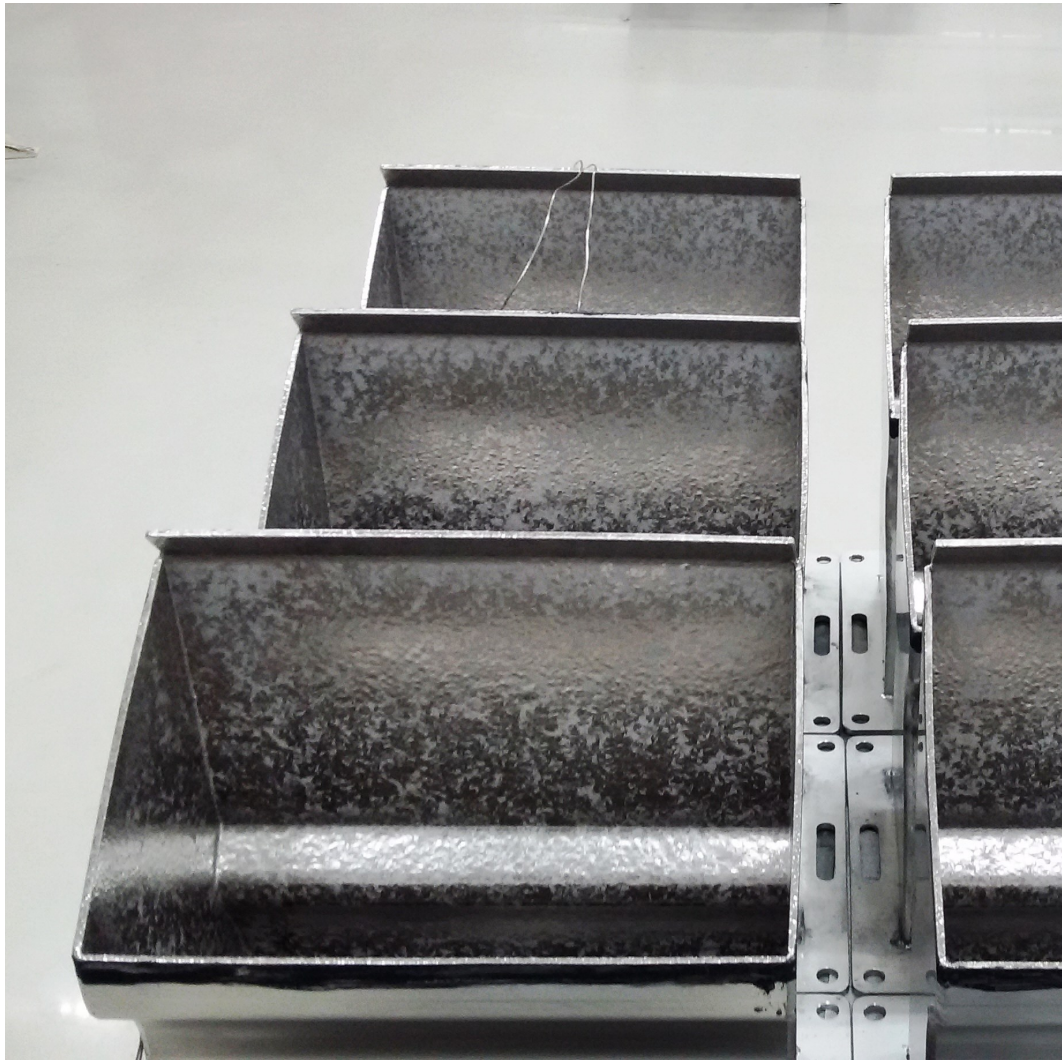
BrazeCoat® - If toughness is required

Improving component functionality and surface protection



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perfecting materials



BrazeCoat® reduces your machine downtime, maintenance and inspection effort

- High economic efficiency due to superior wear resistance
- High security due to homogeneous structure and low porosity of the layer
- Excellent adhesion by a metallurgical bond to the base material
- Applicable for complex geometries; creation of structured and functional surfaces close to final geometry; internal coating of tubes and ducts
- Complete service, from consulting to coating of your components

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BrazeCoat® M

In the BrazeCoat® M process, flexible preforms (mats) made of polymer-bonded carbides and braze alloy powders (e.g. NiCrBSi) are precisely cut to size and placed in layers on the substrate. The finished coating is then produced in a high-temperature furnace process at approx. 1100°C by infiltrating the carbide network through the molten braze alloy and joining it onto the base material at the same time.

With the BrazeCoat® M process, layer thicknesses of between 1 and 3 mm can be produced, depending on part geometry and size. In exceptional cases, these can also be thinner or thicker. The composite layer produced in this way is contour-accurate and sharp-edged. Typical applications of BrazeCoat® M coatings can be found in areas where severe abrasive wear or a combination of abrasive and corrosive wear occurs.

The BrazeCoat® M process demonstrates a high degree of effectiveness, particularly in conveyor technology: for example, contour-accurate wear protection on conveyor belt scrapers and grinding plates. On components such as pump housings, mixer blades or extruders, several times longer service lives have been achieved.

BrazeCoat® S

In the BrazeCoat® S process, the surfaces of highly stressed components are protected against wear by applying a suspension of mixed hard material and braze alloy which subsequently is consolidated in a furnace process. The BrazeCoat® S coating thicknesses are between 0.05 and 0.3 mm, depending on part geometry and size.

The layers produced are dense, smooth and almost pore-free (<1%). Mechanical finishing is not required for many applications. Due to the high hard material content and uniform distribution, the composite layers achieve high hardness values up to 65 HRC.

Wear tests, performed in laboratory as well as on the component under operating conditions, indicated a significantly higher resistance to abrasive wear compared to nitrided, borated or thermally sprayed coatings.

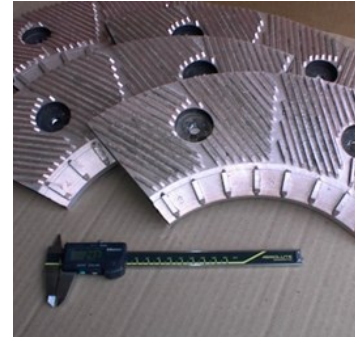
The BrazeCoat® S process is successfully implemented to protect fan wheels, mill housings and rotors, but also cylinders, pistons and piston rods in hydraulics and pneumatics, where a high degree of wear attack occurs at the same time and a narrowly tolerated functional dimension must be maintained.

The internal coating of pipes and pipe bends with diameters from 50 to 200 mm offers new possibilities in the application of bulk material conveying.

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INNOBRAZE GmbH
für Löt- und Verschleißtechnik



Whether electronic chip or power plant: Listemann offers material innovation for product and production in the fields of aerospace, energy and environmental technology, mechanical engineering as well as tool and mould making. Other demanding industries such as semiconductor or medical technology also benefit from our range of products. Our thermal processing technologies enable components to be manufactured more efficiently and their service life to be extended. In this way, we secure competitive advantages for our customers.

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