bedra- intelligent alloys

As a top international manufacturer of high-quality precision wires of non-ferrous metals, we distinguish ourselves in the market through high quality and smart services. Absolute customer focus. This is a long tradition for us – ever since the company was founded in 1889. Our ability to innovate, along with our well-known reliability, set us apart. These two strengths have made bedra a leader in quality and a leader in the market. Year after year, our plants produce more than 30 million kilometers of precision wire – in over 100 alloy versions. Our business units are:

bedraEDM **bedra**WELDING **bedra**ELAS

We are known for customer-specific solutions across all service areas. Our highly qualified employees play a major role in this. We rely exclusively on high-quality metals for manufacturing our products. This makes our innovative high-tech precision wires absolutely alloy-pure.

bedraWELDING

For more than 130 years bedra has been synonymous with innovative high-tech precision wires. From our plants in Heuchelheim and Herborn, we serve the needs of our customers all over the world. For decades, our bercoweld® series has established itself in the market for copper and copper alloy brazing and welding. More than 20 bercoweld® alloys are impressive proof of our know-how. But we are not resting on our laurels. We are already working today on the innovations for tomorrow. That's why we have expanded our portfolio to include high-quality filler materials made from aluminum alloys. Under the name berAlweld® we now offer wire solutions for welding aluminum alloys. For this purpose, we have combined our experience in wire production with the latest technologies and specialists from the aluminum sector. Therefore, we can now produce aluminum welding wires in the well-known high bedra quality!

Wire solutions for brazing and welding



Whether you prefer MIG/MAG brazing or welding, TIG welding, laser and plasma brazing or wire flame spraying, our bercoweld® and berAlweld® range is as diverse as your applications. This is one of the reasons why renowned companies from the automotive industry, plant engineering or the offshore and onshore sectors rely on our solder wire and welding wire as an elementary component of an innovative joining technology.

At present, our range of solder wire and welding wire includes about 30 alloys of the following material groups:

- low alloyed Copper alloys
- Aluminum bronzes
- Copper-nickel alloys
- Aluminum alloys
- Special alloys

Our applications

Automotive | Construction | Railway track | Industry | Agricultural machinery | Shipbuilding

www.bedra.com

Our bercoweld® highlights



bercoweld® A8 (AlBz8)

- Standard alloy for galvanized sheets and ferritic steels
- Solenoid valves, build-up and join welding on aluminum bronzes
- Suitable for hard brazing and welding of galvanized steels.
- Good corrosion and wear resistance.

bercoweld® S2 (COMAS)

- Reduced Si content for brazing galvanized sheet metal
- Good flowing weld pool, no pore or splatter formation
- Suitable for welding Cu and Cu alloys as well as unalloyed and low-alloyed steels and cast iron.

bercoweld® S3 (CuSi3Mn)

- Welding and brazing wire for galvanized body panels in the automotive industry
- Coatings on low-alloy steels, solenoid valves, switch cabinets

bercoweld® – die Revolution
für blanke Messingdrähte

Product range

Low-alloy copper alloys	bercoweld® K3 (SF-Cu)
	bercoweld® K5 (CSSM)
	bercoweld® K9 (CuAg/W)
	bercoweld® S2 (COMAS)
	bercoweld® S3 (CuSi3Mn)
Tin bronzes	bercoweld® B6 (CuSn6P)
	bercoweld® B8 (CuSn8P)
	bercoweld® B10 (CuSn10MnSi)
	bercoweld® B12 (CuSn12P)
	bercoweld® BS60 (CuSn6MnSi)

Aluminum bronzes	bercoweld® A300 (MAXAL300)
	bercoweld® A35 (AlBz35)
	bercoweld® A52 (AlBz5Ni2)
	bercoweld® A8 (AlBz8)
	bercoweld® A822 (AlBz8MNF)
	bercoweld® A10(AlBz9Fe)
	bercoweld® A922 (AlBz9Ni)
Copper-nickel alloys	bercoweld® N10 (CuNi10Fe)
	bercoweld® N30 (CuNi30Fe)
Special	bercoweld® K1/K2/M122

Packaging



All of our welding and brazing wires are available in all common designs: Spools (plastic or wire basket), barrels, rods, and rings. Upon request, rods are also available in embossed versions – even in the smallest batch sizes and in special alloys according to customer requirements. With our innovative bedrabox you can further increase your productivity. If you opt for welidng wires from the innovative bedrabox, the high filling quantity and continuous wire run-off speed mean that the time-consuming work of changing spools is no longer necessary. So downtimes in production can be enormously reduced. Furthermore, the bedrabox is made of recycled material and contributes to the sustainability.



Our berAlweld® highlights



1000 series

- Pure aluminum AWS 1070 Al 99.7%
- High thermal and electrical conductivity
- Excellent weldability and good weld strength 100 MPa
- Main applications: Electrical wires and thermal components, good resistance to nitro acids.

4000 series

- Silicon (Si) is the alloy's main constituent in this group
- Si content increased the flowability of the individual alloys
- Excellent weldability and good weld strength 120 MPa
- Main application: Automotive industry (body and sheet metal construction) and suppliers

5000 series

- Manganese (Mn) is the alloy's main constituent in this group
- Mn content provides excellent corrosion resistance
- Excellent weldability and good weld strength 250 MPa
- Main application: boat & ship building, railroad car building.

Product range

1000 series	berAlweld® 1070 (Al99,7)
	berAlweld® 1450 (Al99,5Ti)
4000 series	berAlweld® 4043 (AlSi5(A))
	berAlweld® M4047 (AlSi12)

5000 series	berAlweld® 5087 (AlMg4,5MnZr(A))
	berAlweld® 5183 (AlMg4,5Mn0,7(A))
	berAlweld® 5356 (AlMg5Cr(A))
	berAlweld® 5554 (AlMg2,7Mn)
	berAlweld® 5754 (AlMg3)

Accessories

We see ourselves not only as a supplier of a product but of a solution. This also includes the appropriate accessories. With our partner we offer a complete solution that guarantees a smooth running of the barrel.

- With the Maxiglide you can convey wire over a longer distance (up to 40 m) without abrasion. The setup is very simple: quick assembly, flexible use, and compatible for all systems.
- The Twister gently compensates for torsion with a counteraction, while maintaining precision. The installed components and gears help prevent wire tangles and knots.
- A straightener for use with soft wires (aluminum or copper based) optimizes the wire as it is fed into the Maxiglide and wire feed (reducing knot formation) by changing the dressing.

For other solutions, please refer to our accessories brochure.



