

NEW PRODUCT

Materials define the edge of innovation

BRAZING

MATERIALS

From raw materials to final delivery, we offer end-to-end brazing solutions
—powered by rich resources, innovation, and speed.

CONCEPTS

We comprehensively and one-stop supply nickel-based, copper-based, and aluminum-based welding materials, as well as thermal conductive and heat dissipation materials, produced in-house by our powerful partners. Focusing on the compounding technology that is the core of brazing materials, we achieve precise, innovative, and high-quality welding, and provide technical support throughout the entire process, from material selection to the optimization of welding conditions.

PRODUCTS



Nickel Brazing Materials

BNi2, BNi6, BNi7, BNi15,
BNi16, L925, L1040



Copper Brazing Materials

B-Cu1, B-CuSn8,
B-CuSn12, B-CuPSnNi



Aluminum Brazing Materials

4047, 4045, 4343

APPLICATIONS

Heat Tubes
EGR Coolers, EGR Components
Heat Exchanger Components
Heat Exchangers for Gas Water Heaters
Oil Coolers
Electronic/Electrical Components
Aviation Turbine Blades and Jet Engine Components
Medical Equipment / Precision Instruments
Joining Ceramics and Metals, Joining Superalloys
Cutting Tools, Drilling Tools, Edged Tools
and others



Nickel-based Brazing Materials

Nickel Brazing Material (BNi2)						Form				
BNi2	Ni	Cr	Si	B	Fe	Paste	Powder	Foil	Wire	Ring
	82.5%	7%	4.5%	3%	3%	●	●	●		

Brazing of stainless steel is performed under a vacuum environment or protective atmosphere. It is a technique widely adopted for joining heat exchangers such as automotive EGR coolers. The brazing material composition contains boron as a melting point depressant, enabling low-temperature brazing. This suppresses inter-diffusion with the base material, making it suitable for brazing thin workpieces.

Nickel Brazing Material (BNi6)					Form				
BNi6	Ni		P		Paste	Powder	Foil	Wire	Ring
	89%		11%		●	●			

The composition of BNi6 contains phosphorus as a melting point depressant, achieving a low melting point. It is mainly used for brazing thin-walled stainless steel components

Nickel Brazing Material (BNi7)				Form				
BNi7	Ni	Cr	P	Paste	Powder	Foil	Wire	Ring
	76%	14%	10%	●	●	●		

The composition of BNi7 is Ni 76%, Cr 14%, P 10%, and the forms are paste, powder, foil, wire, and ring.

Nickel Brazing Material (BNi15)					Form				
BNi15	Ni	Cr	Si	P	Paste	Powder	Foil	Wire	Ring
	60%	30%	4%	6%	●	●			

The composition of BNi15 is Ni 60%, Cr 30%, Si 4%, P 6%, and the forms are paste, powder, foil, wire, and ring.

Nickel Brazing Material (BNi16)					Form				
BNi16	Ni	Cr	Si	P	Paste	Powder	Foil	Wire	Ring
	58.5%	29%	6.5%	6%	●	●			

Silicon (Si) and Chromium (Cr) work together to form a dense complex oxide layer (e.g., Cr₂O₃-SiO₂), enhancing the stability of the joint in high-temperature oxidizing environments and corrosive conditions.

Nickel Brazing Material(L925)						Form				
L925	Ni	Cr	Si	P	Others	Paste	Powder	Foil	Wire	Ring
	69.5%	21%	0.5%	8%	Bal Bal Barium Iodide		●	●		

The composition of L925 is Ni 69.5%, Cr 21%, Si 0.5%, P 8%, Others Bal Barium Iodide, and the forms are paste, powder, foil, wire, and ring.

Nickel Brazing Material (L1040)						Form				
L1040	Ni	Cr	Si	P	Others	Paste	Powder	Foil	Wire	Ring
	66.5%	25%	1.5%	6%	Bal Bal Barium Iodide		●	●		

Applied to brazing of stainless steel, heat-resistant steel, and components operating in high-temperature environments (e.g., diffusers and heat exchangers for aircraft engines). The adoption of foil material (thickness 0.05–0.2mm) reduces material loss by up to 40% and improves manufacturing efficiency. After brazing, a brazed joint (porosity ≤0.2%, tensile strength ≥350MPa) can be easily obtained.



Copper-based Brazing Materials

Copper-based Brazing Materials(B-Cu1)				Form				
B-Cu1	Cu			Paste	Powder	Foil	Wire	Ring
	≥ 99.95%			●	●			

It achieves high joint strength and no post-weld residue for stainless steel, carbon steel, and cast iron.

Copper-based Brazing Materials(B-CuSn8)				Form				
B-CuSn8	Cu	Sn	P	Paste	Powder	Foil	Wire	Ring
	91-92%	7.5-8.5%	≤0.4%	●	●		●	●

A phosphor bronze-based brazing material for joining ferrous metals, stainless steel, and dissimilar metals.

Copper-based Brazing Materials(B-CuSn12)			Form				
B-CuSn12	Cu	Sn	Paste	Powder	Foil	Wire	Ring
	88%	12%	●	●		●	●

For dissimilar metal brazing of copper and stainless steel.

Copper-based Brazing Materials(B-CuPSnNi)					Form				
B-CuPSnNi	Cu	Ni	Sn	P	Paste	Powder	Foil	Wire	Ring
	78%	6%	9.5%	6.5%	●	●	●		

For joining copper to copper.



Aluminum-based Brazing Materials

Aluminum-based Brazing Materials (4047)			Form				
4047	Al	Si	Paste	Powder	Foil	Wire	Ring
	88%	12%	●	●		●	●

Aluminum-Silicon eutectic material with a melting temperature of approximately 580°C can be strengthened by transformation heat treatment and thermal holding.

Aluminum-based Brazing Materials (4045)			Form				
4045	Al	Si	Paste	Powder	Foil	Wire	Ring
	90%	10%	●	●		●	●

Melting temperature 575 ~ 590°C, capable of strengthening by transformation heat treatment and thermal holding.

Aluminum-based Brazing Materials (4343)			Form				
4343	Al	Si	Paste	Powder	Foil	Wire	Ring
	92.5%	7.5%	●	●		●	●

Melting temperature 575 ~ 615°C, capable of strengthening by transformation heat treatment and thermal holding.

Nickel Phosphorus Alloy



Nickel Phosphorus Alloy(Ni-P Alloy)			Form
Ni-P Alloy	Ni	P	Block
	81.5%	18.5%	

Supermicro Spherical Powder



Supermicro Spherical Powder (Copper Powder for Cold Spray)		Form
Copper Powder for Cold Spray	Cu	Powder
	≥ 99.95%	

It has a special particle size distribution and is applicable to the cold spray process for communication striplines and automotive components.

Supermicro Spherical Powder (Powder for Laser Cladding)	Form
BNi7 and BNi15 powders can be provided according to the specifications for laser cladding.	Powder

Supermicro Spherical Powder (Copper Alloy Powder for Bearing Bushings)					Form
Copper Alloy Powder for Bearing Bushings	Cu	Ni	Sn	Fe	Powder
	86.7%	6%	5.7%	1.6%	

Applicable to the sintering of plate material for bearing bushings, and customization is possible upon request.

Graphene



Graphene Oxide	Form
Graphene Oxide Paste	Paste
Graphene Oxide Powder	Powder
Reduced Graphene Oxide Powder (RGO Powder)	Powder