

Zinc Cupronickel

Ns10Zn42 (RBCuZn-D)

Material Designation *

AWS	RBCuZn-D
EN	CuZn40Ni10 (Cu 7730)
JIS	/
GB	SCu7730

Chemical Composition

Cu	46.0-50.0	%
Zn	Balance	%
Ni	9.0-11.0	%
Si	0.04-0.25	%



Characteristics

It is copper welding wire containing silicon. The addition of silicon can effectively prevent volatilization of zinc during welding. And it has higher strength than general brass welding wire and better corrosion resistance in sea water and caustic media.

Typical Applications

It is suitable for welding steel, nickel, nickel-based alloys and hard alloys. It is also used for machinery manufacturing, automation industry and steel furniture.

Physical Properties

Density ^①	8.7	g/cm ³
Melting point	890	°C
Thermal conductivity ^①	31	W/m·K
Coefficient of thermal expansion ^②	16.7	10 ⁻⁶ /K
Electrical conductivity ^①	6	%IACS

Note①: Temperature for testing is 20°C.

Note②: Temperature range for testing is 20-300°C.

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Delivery Form

	Packing	Size(ODxDxHeight)	Weight/Length	Diameter
			kg/mm	mm
Spool	D200 (Plastic spool)	$\Phi 200 \times \Phi 52 \times 55$	5.0	$0.8 \leq \Phi \leq 1.6$
	D300 (Plastic spool)	$\Phi 300 \times \Phi 52 \times 100$	12.5	$0.8 \leq \Phi \leq 1.6$
	BS300 (Galvanized steel spool)	$\Phi 300 \times \Phi 52 \times 100$	12.5	$0.8 \leq \Phi \leq 1.6$
Barrel	100kg (Barrel carton)	$\Phi 500 \times \Phi 305 \times 500$	100	$0.8 \leq \Phi \leq 1.2$
	200kg (Barrel carton)	$\Phi 500 \times \Phi 300 \times 750$	200	$0.8 \leq \Phi \leq 1.2$
	200kg (Barrel carton)	$\Phi 660 \times \Phi 440 \times 700$	200	$\Phi = 1.6$
Straight bar	Crate	--	250-3000mm	$1.6 \leq \Phi \leq 7.0$
Coil wire	Kraft/crate	--	10-200	$0.8 \leq \Phi \leq 7.0$

*Composition AWS
Other Physical Properties AWS

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