Aluminum Bronze

AlBz8 (ERCuAl-A1)

Material Designation*

AWS	ERCuAl-A1
EN	CuAl7 (Cu 6100)
JIS	/
GB	SCu6100A

Chemical Composition

Cu	Balance	%
Al	6.0-8.5	%

Characteristics

AlBz8 is a welding material which is aluminum bronze alloy without iron. The fluidity of molten metal is good, and the shape of welding seam is beautiful.

Typical Applications

It is applied in shipbuilding and machinery manufacturing and is suitable for welding of carbon steel and stainless steel. It is also suitable for butt welding of steel and copper and surfacing welding of hydraulic ball bowl and bearing surface.

Physical Properties

Density①	7.78	g/cm^3
Melting point	1040	°C
Thermal conductivity①	69.2	W/m·K
Coefficient of thermal expansion ②	17.1	$10^{-6}/K$
Electrical conductivity①	15	%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(ODxIDxHeight)	Weight/Length	Diameter
			kg/mm	mm
Spool	D200（Plastic spool）	Φ200×Φ52×55	5.0	0.8≤Φ≤1.6
	D300（Plastic spool）	Φ300×Φ52×100	12.5	0.8≤Φ≤1.6
	BS300（Galvanized steel spool）	Φ300×Φ52×100	12.5	0.8≤Φ≤1.6
Barrel	100kg（Barrel carton）	Φ500×Φ305×500	100	0.8≤Φ≤1.2
	200kg（Barrel carton）	Φ500×Φ300×750	200	0.8≤Φ≤1.2
	200kg（Barrel carton）	Φ660×Φ440×700	200	Φ＝1.6
Straight bar	Crate	--	250-3000mm	1.6≤Φ≤7.0
Coil wire	Kraft/crate	--	10-200	0.8≤Φ≤7.0

*Composition AWS
Other Physical Properties AWS

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