

Cu-based covered electrode

Classification

AWS A5.6 :ECuSn-C
 DIN 1733 :E L-CuSn-7

Temperature Range

Pressure parts
 Oxidation resistance

General description

Electrode for joining and surfacing of pure copper and copper alloys, steel, cast steel, grey cast iron such as piston arms, sprockets, guides, turbine and centrifugal blades, ship screw propellers, motor collectors etc. Suitable for surfacing weld on above materials. For surfacing application, the initial runs should be welded at the lowest possible amperage. To obtain the typical mechanical properties, preheat the workpiece to 350°C and maintain this heat throughout the welding operation. Used with (DC+).

Welding positions



ISO/ASME PA/1G PB/2F PC/2G

Current type

AC/DC electr. +

Chemical composition (w%), typical, all weld metal

C	Mn	Sn	Fe	P
rest	0.05	7.0	0.2	0.1

Mechanical properties, all weld metal

Condition	0.2% Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Hardness HB
Typical values after welding	130	290	-	110

Packaging, available sizes and identification

Diameter (mm)	3.2	4.0
Length (mm)	350	350
	93	83
	2.5	3.2

Identification Imprint: Elecu® BCuSn Tip colour:

Eleni® BCuSn : rev.EN 20

Materials to be welded

UNS	Alloy DIN	Material	W.Nr.
C70600	CuNi90/10	CuNi10Fe1Mn	2.0872
C71500	CuNi70/30	CuNi30Mn1Fe	2.0882

Calculation data

Size Diam.x length (mm)	Current range type (A)	Curren t	Arc time - per electrode at max.current - (s)*	Energy		Dep.rate H (kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal (pcs)	kg Electrodes/ kg weldmetal (1/N)
				E (kJ)					
3.2x350	80-100	DC+							
4.0x350	110-130								

* stub end = 35 mm

Application advice

Heat treatment of electrode before weldign during 1h at 300-350°C.