AS Bronz

Coated Electrode for Copper and Its Alloys

Classification

AWS A5.6 : ECuSn-C
DIN 1733 : EL-CuSn 7
Werkstoff-Nr : 2.1025

General Description

AS Bronz is especially designed for the welding of bronze and brass materials. It gives a filler metal of the tin-bronze type. It is possible to weld in all positions except overhead and vertical upwards.

Chemical Composition (w%), Typical, All Weld Metal

Mn	P	Sn	Cu
0.50	0.10	7	balance

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 160 N/mm²
Tensile Strength : 260 N/mm²
Elongation (L=5d) : 20 %
Hardness : 90 HB

Approvals

GOST, SEPRO

Applications and Materials to be Welded

It is used for the joining and build up welding of copper and its alloys; for the joining of copper and bronze materials with steels and joining of steel casts with cast irons. It is ideal for the copper plating of cast iron and steel parts. If machinability is not considered after welding, it should also be used for the welding of cast iron parts.

It is suitable for the build up welding and joining of machine parts; especially turbine and centrifugal vanes, ship propellers, valve seats, couplings, piston arms and gears. Electrode should be nearly vertical to the work piece and the arc length should be short. To attain the best possible joining, a preheating of 300°C should be applied to copper and bronze parts.

Copper-Tin Wrought Alloys

DIN 17662	W. Nr.
CuSn 2	2.1010
CuSn 4	2.1016
CuSn 6	2.1020
CuSn 8	2.1030

Copper-Tin Cast Alloys

DIN 1705	W. Nr.
G-CuSn2ZnPb	2.1098
G-CuSn5ZnPb	2.1096
G-CuSn6ZnNi	2.1093

Welding Parameters / Packing and Diameter Informations / Welding Positions

Current Type and Polarity : DC (+)

Diameter [mm]	Length [mm]	Current [A]	Electrode Weight [g/100 pcs]	Box Weight [kg] Quantity [pcs/box]	Export Box Box Weight [kg]
3.25	350	90 - 130	3520	2.6 / 75	2.5
4.00	350	130 - 160	5180	2.6 / 50	2.5
5.00	350	160 - 240	6600	2.3 / 35	2.5


1G/PA


2F/PB