



BRONWELD CuSn

Electrodes MMA [SMAW]

Stopy miedzi

CLASSIFICATION:	APPROVALS:	APPLICATION:	
DIN 1733 : E CuSn-7 AWS A-5.6 : E CuSn-A W.Nr. : 2.1025		Hardfacing and repairing	
<ul style="list-style-type: none">• Electrode for welding and hardfacing of copper and its alloys.• It can also weld copper alloys with steel and cast iron.• Hardfacing on steel and cast iron elements.			
Application			
Repair and surfacing of gears, bearings, pumps, impellers, turbines, valve bodies and defects in new castings. For welding and surfacing on copper and copper alloys. Welding a wide range of bronzes and brasses. A wide range of general manufacturing applications such as sheet metal casting, bars, stampings, valves, pump parts, electrical housing. For applying a sliding surface to steel, improving iron castings, cracked water jackets, engines and cylinder heads.			
Base material			
	DIN	W.Nr.	
Bronze:	CuSn2	2.1010	
	CuSn6	2.1020, 2.1030	
	CuSn10		
Copper			
Grey cast iron			
Brass Cu + 40% Zn			
Bell alloys Cu+20-25%Sn			
Manganese bronzes			
Military alloys BS LG3, LG4, LPB1			
Typical chemical composition %			
Mn 0,10	Cu 93,0	Sn 6,0	P 0,20
Typical mechanical properties			
Tensile strength Rm [N/mm2]	300-350		
Hardness	70-110 HB /		
Heat treatment	Large plates should be preheated to 200-400°C before welding. Bronze alloys should be cooled gradually.		
Welding current			
Welding positions			
Redrying	300°C / 1 h		

Remarks	<p>Recommendations: Thoroughly clean the base material of rust, paint, gaskets, oil, grease and moisture to ensure proper welds and overlays. Due to the high thermal conductivity of copper, preheating and an interpass temperature of 150-200°C for bronze and phosphor bronze and 250-300°C for brass is required for thick components (5mm and over). Materials less than 5 mm thick and steel materials do not require preheating Do not spread the material sideways. The width of the stitch should not exceed the diameter of the electrode. Use hammering if possible as this greatly improves the mechanical properties. Multiphase microstructure with complex eutectoids.</p>
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Welding parameters and packing

Ø	Length [mm]	Welding current [A]	Weight of packet [kg]	Weight of carton [kg]	Pcs/1 kg
2,5	300 /	40-70	5,0	20,0	63
3,2	350 /	80-120	5,0	20,0	31
4,0	350 /	120-150	6,0	20,0	20
5,0	450 /	130-190	6,0	30,0	11

METALWELD-FIPROM POLSKA spółka z o.o.

ul. Mikołajczyka 57, 41-200 Sosnowiec

+48 (32) 297 75 50 - 51

+48 (32) 297 75 88

export@metalweld.pl