UTP 320

Basic coated bronze stick electrode with13 % Sn

Standards :
Material-No. : 2.1027
DIN 1733 : EL-CuSn13

Application field

UTP 320 is suitable for joining and building up on copper-tin alloys (bronze) with more than 8 % Sn, copper-zinc alloys (brass), copper-zinc-lead alloys as well as for cladding on steel and cast iron.
Tin bronzes:

Standards	Material-No	Short mark
EN 12449	CW453K	CuSn 8
EN 1982	CB491K	CuSn 5 Zn5Pb5-B
EN 1982	CB493K	CuSn 7 Zn4Pb7-B

Welding characteristics and special properties of the weld metal

UTP 320 is easy weldable and the slag removal is also easy. The corrosion resistance is corresponding to identical or similar base metals. Seawater resistant. Very good gliding properties.

Mechanical properties of the weld metal

Yield strength $R_{p0,2}$ MPa	Elongation A_5 %	Hardness HB	El. conductivity $\frac{S \cdot m}{mm^2}$	Melting range ° C
approx. 350	> 25	approx. 150	approx. 5	825 - 990

Weld metal analysis in %

Cu	Sn
87,0	13,0

Welding instruction

Clean welding area thoroughly. Ignite stick electrode inclined with scratch start. For wall thickness of > 8 mm a preheating of 100 – 250° C is necessary. Hold stick electrode vertically and weave slightly. Use only dry stick electrodes. Re-drying 2 – 3h at 150° C.

Current type DC (+)

Welding positions

Availability / Current adjustment

Stick electrodes	Ø mm x L	2,5 x 350	3,2 x 350	4,0 x 450*
Amperage	A	60 – 80	80 – 100	100 – 120

* available on request