UTP 320

Basic-coated bronze stick electrode with 13% Sn

Material-no.	DIN 1733
2.1027	EL-CuSn13

Characteristics and field of use

UTP 320 is suitable for joining and surfacing 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 easily weldable with easy slag removal. The corrosion resistance is corresponding to identical or similar base metals. Seawater-resistant. Very good gliding properties.

Typical analysis in %

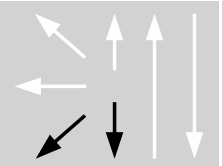
Cu	Sn
87	13

Yield strength $R_{P0,2}$	Hardness	Electrical conductivity	Melting range
MPa	HB	S x m / mm^2	°C
approx. 350	approx. 140	3 - 5	825 - 990

Welding instruction

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

Welding positions



Current type DC (+)

Recommended welding parameters

Electrodes Ø x L [mm]	2.5 x 350	3.2 x 350	4.0 x 450
Amperage [A]	60 – 80	80 – 100	100 – 120

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.