

UTP 39

Standards :

Material-No.	:	2.1363
DIN 1733	:	EL-CuMn2
AWS A5.6	:	ECu (mod.)

Basic coated pure copper stick electrode

Application field

The pure copper stick electrode **UTP 39** is suitable for joining and surfacing all commercial pure copper grades according to DIN 1787 such as

Material-No.	Short mark
CW008A	Cu-OF
CW021A	Cu-HCP
CW023A	Cu-DLP
CR024A	Cu-DHP

Properties of the weld metal

UTP 39 yields a poreless, well deoxidized crack-proof weld metal. Its corrosion resistance is equal to that of the best commercial copper grades.

Mechanical properties of the weld metal

Yield strength $R_{p0,2}$ MPa	Elongation A_5 %	Hardness HB	El. conductivity $\frac{S \cdot m}{mm \approx}$	Melting range ° C
> 200	> 35	approx. 60	approx. 20	1000 - 1050

Weld metal analysis in %

Cu	Mn
> 97	1,5

Welding instruction

Clean welding zone thoroughly. Preheating of copper to 400 – 600° C depending on the wall thickness, and keep temperature during welding. Keep the arc short with steep (vertical up) stick electrode guidance. Choose the biggest possible diameter of the stick electrode. Apply only dry stick electrodes. Rebaking for 2 – 3 h 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 – 90	80 – 100	110 – 130

* available on request