UTP 80 M

basic coated nickel-copper stick electrode

Classifications		
EN ISO 14172	AWS A5.11	Material-No.
E Ni 4060 (NiCu30Mn3Ti)	E NiCu-7	2.4366

Characteristics and field of use

UTP 80 M is suitable for joining and surfacing of nickel-copper alloys and of nickel-copper-clad steels. Particularly suited for the following materials: 2.4360 NiCu30Fe, 2.4375 NiCu30Al. UTP 80 M is also used for joining different materials, such as steel to copper and copper alloys, steel to nickel-copper alloys. These materials are employed in high-grade apparatus construction, primarily for the chemical and petrochemical industries. A special application field is the fabrication of seawater evaporation plants and marine equipment.

UTP 80 M is weldable in all positions, except vertical-down. Smooth, stable arc. The slag is easily removed, the seam surface is smooth. The weld metal withstands sea water.

Typical analysis in %

C	Si	Mn	Ni	Cu	Ti	Al	Fe
< 0,05	0,7	3,0	balance	29,0	0,7	0,3	1,0

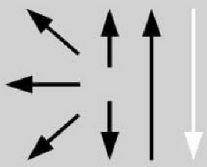
Mechanical properties of the weld metal

Yield strength $R_{P0,2}$	Tensile strength R_m	Elongation A	Impact strength K_V
MPa	MPa	%	J
> 300	> 480	> 30	> 80

Welding instruction

Thorough cleaning of the weld zone is essential to avoid porosity. V angle of seam about 70°, weld string beads if possible.
Weld with dry stick electrodes only! Redry stick electrodes 2 – 3 hours at 200° C.

Welding positions



Current type DC (+)

Approvals

TÜV (No. 00248), ABS, GL

Recommended welding parameters

Electrodes Ø x L [mm]	2,5 x 300	3,2 x 350	4,0 x 350	5,0 x 400
Amperage [A]	55 – 70	75 – 110	90 – 130	135 – 160