

Classifications

EN ISO 18274	AWS A5.14	Material-No.
S Ni 4060 (NiCu30Mn3Ti)	ER NiCu-7	2.4377

Characteristics and field of use

UTP A 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 A 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.

The weld metal has an excellent resistance to a large amount of corrosive medias, from pure water to nonoxidising mineral acids, alkali and salt solutions.

Typical analysis in %

C	Si	Mn	Cu	Ni	Ti	Fe
< 0,02	0,3	3,2	29,0	balance	2,4	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 [RT]
> 300	> 480	> 30	> 80

Welding instruction

Clean the weld area thoroughly to avoid porosity. Opening groove angle about 70°. Weld stringer beads.

Approvals

TÜV (No. 00249), ABS, GL

Rod diameter x length [mm]	Current type	Shielding gas (EN ISO 14175)
1,6 x 1000	DC (-)	I 1
2,0 x 1000	DC (-)	I 1
2,4 x 1000	DC (-)	I 1
3,2 x 1000	DC (-)	I 1