UTP A 80 M

solid wire

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. 00250), ABS, GL

Wire diameter [mm]	Current type	Shielding gas (EN ISO 14175)		
0.8*	DC (+)	I 1	I 3	Z-ArHeHC-30/2/0.05
1.0	DC (+)	I 1	I 3	Z-ArHeHC-30/2/0.05
1.2	DC (+)	I 1	I 3	Z-ArHeHC-30/2/0.05

*available on request