

Classifications

EN ISO 24373	Material-No.
S Cu 7061 (CuNi10)	2.0873

Characteristics and field of use

UTP A 389 is used for copper nickel alloys with 5-10 % nickel according to DIN 17664, for example CuNi5Fe (2.0862), CuNi10Fe (2.0872). Main application fields are the chemical plant industry, seawater desalination plants, ship building and offshore technique.

The weld deposit of UTP A 389 is highly corrosion resistant, for example against non-oxidizing, organic acids, salt solutions and seawater.

Typical analysis in %

C	Mn	Ni	Cu	Ti	Fe
< 0.05	0.8	10.0	balance	< 0.05	1.35

Mechanical properties of the weld metal

Yield strength $R_{p0.2}$	Tensile strength R_m	Hardness	El. conductivity $S \cdot m / mm^2$	Melting range
MPa	MPa	HB		° C
> 150	> 300	100	5	1100-1145

Welding instruction

Degrease and clean weld area to metallic bright. Remove oxide skin to 10 mm next to welding groove, also on the backside of the weld. Keep energy input low. The interpass temperature should not exceed 120° C. Preheating and postweld heat treatment are not necessary.

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