

UTP A 381

copper alloys

Classifications

TIG rod

EN ISO 24373	AWS A5.7	Material-No.
S Cu 1898 (CuSn1)	ER Cu	2.1006

Characteristics and field of use

UTP A 381 is used for oxygen free copper types according to DIN 1787 OF-Cu, SE-Cu, SW-Cu, SF-Cu. The main applicational fields are in the apparatus- and pipeline construction.

Fluid weld pool.

Typical analysis of rod and wire in %

Si	Mn	Ni	Cu	Sn
0.3	0.25	< 0.3	balance	0.8

Mechanical properties of the weld metal

<i>Yield strength</i> $R_{p0.2}$	<i>Tensile strength</i> R_m	<i>Elongation</i> A_5	<i>Hardness</i> HB	<i>El. conductivity</i> $\frac{S \cdot m}{mm^2}$	<i>Melting range</i> $^{\circ}C$
MPa	MPa	%			
50	200	30	approx. 60	15 – 20	1020 – 1050

Welding instructions

Clean weld area thoroughly. For each application field the parameters must be optimized. In a wall thickness > 3 mm, preheating to maximal 600 °C is necessary.

Form of delivery and recommended welding parameters

<i>Rod diameter x length [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>
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

GTAW – TIG rods

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