

UTP A 381

copper alloys

Classifications

solid wire

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 in %

Si	Mn	Ni	Cu	Sn
0.3	0.25	< 0.3	balance	0.8

Mechanical properties of the weld metal

<i>Yield strength $R_{p0.2}$</i>	<i>Tensile strength R_m</i>	<i>Elongation A_5</i>	<i>Hardness</i>	<i>El. conductivity</i>	<i>Melting range</i>
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>HB</i>	<i>s·m / mm²</i>	<i>°C</i>
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>Wire diameter [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>	
1.0*	DC (+)	I 1	I 3
1.2	DC (+)	I 1	I 3
1.6	DC (+)	I 1	I 3

*available on request