

UTP A 387

copper alloys

Classifications

solid wire

EN ISO 24373	AWS A5.7	Material-No.
S Cu 7158 (CuNi30Mn1FeTi)	ER CuNi	2.0837

Characteristics and field of use

UTP A 387 is used for copper nickel alloys with up to 30 % nickel according to DIN 17664, such as CuNi20Fe (2.0878), CuNi30Fe (2.0882). Chemical industry, seawater desalination plants, ship building, offshore technique.

The weld metal of UTP A 387 is resistant to seawater and cavitation.

Typical analysis in %

C	Mn	Ni	Cu	Ti	Fe
< 0.05	0.8	30.0	balance	< 0.5	0.6

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>	<i>El. conductivity</i>	<i>Melting range</i>
MPa	MPa	%	HB	s·m / mm ²	°C
> 200	> 360	> 30	120	3	1180 – 1240

Welding instructions

V-butt weld with 70 ° included angle and root gap of 2 mm. Remove oxide skin to approx. 10 mm to the joint groove also on the backside of the weld.

Approvals

TÜV (No. 01624), GL

Form of delivery and recommended welding parameters

<i>Wire diameter [mm]</i>	<i>Current type</i>	<i>Shielding gas (EN ISO 14175)</i>	
0.8*	DC (+)	I 1	I 3
1.0*	DC (+)	I 1	I 3
1.2	DC (+)	I 1	I 3
1.6*	DC (+)	I 1	I 3

*available on request