

UTP A 34

copper alloys

Classifications

TIG rod

EN ISO 24373	AWS A5.7	Material-No.
S Cu 6100 (CuAl7)	ER CuAl-A 1	2.0921

Characteristics and field of use

UTP A 34 is used for copper aluminium alloys (aluminium bronzes) with 5 – 9 % Al, copper-zinc alloys (brass and special brass). Weld cladding on cast iron materials and steel.

The weld deposit of UTP A 34 is resistant to corrosion and seawater and has good gliding properties metal-metal. UTP A 34 is easy weldable and obtains a clean weld surface.

Typical analysis of rod and wire in %

Mn	Ni	Cu	Al	Fe
< 0.5	< 0.5	balance	8.0	< 0.5

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> $^{\circ}C$
180	400	40	120	8	1030 – 1040

Welding instructions

The weld seam area has to be machined to a metallic bright by grinding, sand blasting or pickling in order to avoid crack formation or the development of pores. To avoid oxyd formation, UTP Flux 34 Sp needs to be deposited onto the base rods prior to the welding process.

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