

Classifications TIG rod

EN ISO 24373	AWS A5.7	Material-No.
S Cu 6560 (CuSi3Mn1)	ER CuSi-A	2.1461

Characteristics and field of use

UTP A 384 is especially suited for joints of coated steel plates according to the TIG welding for repair welding of motor vehicle bodies and plate constructions of all sorts. The alloy is also especially suited for hot galvanized and hot dip galvanized plates. Same joints on copper-silicon and copper-manganese alloys according to DIN 1766, as for example CuSi2Mn, CuSi3Mn, CuMn5, brass and red brass (tombac).

The low hardness of UTP A 384 allows a relatively easy machining of the visible weld seam in comparison to the iron base weld metal.

Typical analysis of rod and wire in %

Si	Mn	Cu	Sn	Fe
3.0	1.0	balance	< 0.2	< 0.3

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	%			
120	350	40	80	3 – 4	965 – 1035

Welding instructions

Clean weld area thoroughly. Welding parameters have to be optimised for each usage. Pay attention to a low heat input. (short arc / TIG pulsed arc)

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