UTP A 3422 copper alloys

Classifications	TIG rod
EN ISO 24373	Material-No.
S Cu 6327 (CuAl8Ni2Fe2Mn2)	2.0922

Characteristics and field of use

UTP A 3422 is used for copper-aluminium alloys with Ni and Fe addition. Weld cladding on cast iron materials and steel. Mixed joints of aluminium bronze steel. It is resistant to seawater, and cavitation resistant.

The weld metal of UTP A 3422 is resistant to seawater and cavitation. Good suitability for simultaneous stress strain caused by seawater, cavitation and erosion.

Typical analysis of rod and wire in %

Mn	Ni	Cu	Al	Fe
1.8	2.5	balance	8.5	1.5

Mechanical properties of the weld metal

Yield strength $R_{p0.2}$	*Tensile strength* R_m	*Elongation* A_5	*Hardness*	*El. conductivity* $\frac{S \cdot m}{mm^2}$	*Melting range*
MPa	*MPa*	*%*	*HB*		*°C*
300	650	25	160	5	1030 – 1050

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.

Approvals

GL

Form of delivery and recommended welding parameters

Rod diameter x length [mm]	*Current type*	*Shielding gas (EN ISO 14175)*
2.0 x 1000	DC (–)	I 1
2.4 x 1000*	DC (–)	I 1
3.2 x 1000	DC (–)	I 1

*available on request