

UTP A 6225 AI

nickel alloys

Classifications

TIG rod

EN ISO 18274	AWS A5.14	Material-No.
S Ni 6025 (NiCr25Fe10AlY)	ER NiCrFe-12	2.4649

Characteristics and field of use

UTP A 6225 AI is suitable for welding of identical and similar alloys, such as NiCr25FeAlY, Material-No. 2.4633. These alloys are applicable for working temperatures up to 1200 °C, particularly for thermal treatment ovens.

High oxidation resistance at high temperatures (also in cyclic conditions), very good corrosion resistance in carburized medias, excellent high temperature resistance.

Typical analysis in %

C	Si	Mn	Cr	Ni	Ti	Zr	Al	Fe	Y
0.2	0.5	0.1	25.0	balance	0.15	0.05	2.0	10.0	0.08

Mechanical properties of the weld metal

<i>Yield strength $R_{p0.2}$</i>	<i>Tensile strength R_m</i>	<i>Elongation A</i>	<i>Impact strength K_v</i>
<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>J [RT]</i>
500	720	25	50

Welding instructions

Clean the weld area thoroughly (free of oil, scale, markings). UTP A 6225 AI is welded in TIG- and Plasmaprocess (with external cold wire feeding). Use stringer bead technique. Keep heat input as low as possible (TIG max. 6.5 kJ / cm, TIG-Plasma max. 11 kJ / cm) and interpass temperature at max. 150 °C. UTP A 6225 AI should only be welded by using the below recommended gas.

Approvals

TÜV (No. 10145)

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 (-)	N2-ArN-2
2.0 x 1000	DC (-)	N2-ArN-2
2.4 x 1000	DC (-)	N2-ArN-2