UTP 6222 Mo

Basic coated NiCrMo-stick electrode

Classifications

Material-No.	AWS A5.11 / SFA-5.11	EN ISO 14172
2.4621	ENiCrMo-3	E Ni 6625 (NiCr22Mo9Nb)

Characteristics and typical fields of application

UTP 6222 Mo is particularly suited for joining and surfacing on nickel alloys, austenitic steels, low temperature nickel steels, austenitic-ferritic-joints and claddings of the same or similar nature, like 2.4856 (NiCr22Mo 9 Nb), 1.4876 (X30 NiCrAlTi 32 20), 1.4529 (X2 NiCrMoCu 25 20 5).

The weld metal is heat resistant and suitable for operating temperatures up to 1000 ºC. It must be noted that a slight decrease in ductility will occur if prolonged heat treatment is given within the temperature range 600 – 800 ºC. Scale-resisting in low-sulphur atmosphere up to 1100 ºC. High creep strength.

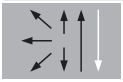
Typical analysis

	C	Si	Mn	Cr	Ni	Mo	Nb	Fe
wt.-%	0.03	0.4	0.6	22.0	bal.	9.0	3.3	<1

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J		
	MPa	MPa	%	J	-196°C	
u	>450	>760	>30	>75	>45	>75

Operating data



Polarity	DC +
Redrying	250 - 300°C / 2 - 3 h

Dimension mm	Current A
2.5 × 300	50 – 65
3.2 × 350	70 – 95
4.0 × 350	90 – 120
5.0 × 400	120 – 160

Welding instructions

Opening angle of the prepared seam approx. 70º, root gap approx. 2 mm. Weld stick electrode with slight tilt and short arc. String beads are welded. The interpass temperature of 150º C and a max. weaving with 2,5 x diameter of the stick electrode core wire should not be exceeded. Redry the stick electrodes 2 – 3 hours at 250 – 300º C before use and weld them out of a warm electrode carrier.

Approvals

TÜV (No. 03610), DNV, ABS, BV