UTP 6222 Mo

Basic coated NiCrMo-stick electrode for corrosion and heat resistant materials

Standards :

Material-No.	:	2.4621
EN ISO 14172	:	E Ni 6625 (NiCr22Mo9Nb)
AWS A5.11	:	E NiCrMo-3

Application field

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 (NiCr 22Mo 9 Nb), 1.4876 (X30 NiCrAlTi 32 20), 1.4529 (X2 NiCrMoCu 25 20 5).

Properties of the weld metal

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

Mechanical properties of the weld metal

Yield strength $R_{p0,2}$ MPa	Tensile strength R_m MPa	Elongation A %	Impact strength Kv Joule +20° C	Impact strength Kv Joule –196° C
> 450	> 760	> 30	> 75	45

Approximate weld metal analysis in %

C	Si	Mn	Cr	Mo	Ni	Nb	Fe
0,03	0,4	0,6	22,0	9,0	balance	3,3	1,5

Welding instruction

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

Current type DC (+)

Welding positions

Availability / Current adjustment

Stick electrodes	Ø mm x L	2,5 x 250	3,2 x 300	4,0 x 350	5,0 x 400
Amperage	A	50 – 70	70 – 95	90 – 120	120 – 160

Approvals

TÜV (No. 03610), DNV, ABS, GL, BV