UTP 7013 Mo

Nickel-base stick electrode, 120% recovery

Classifications

EN ISO 14172	AWS A5.11
E Ni 6620 (NiCr14Mo7Fe)	ENiCrMo-6

Characteristics and field of application

The high-efficiency semi-synthetic nickel-base stick electrode UTP 7013 Mo is especially suited for welding cold-tough nickel steels, such as X8Ni9. Recovery is of 120%.

The typical application field is welding of cryogenic gas storage tanks and tankers (9% Ni steels for Liquefied Natural Gas LNG, 5% Ni steels for Liquefied Ethylene Gas LEG).

UTP 7013 Mo is designed for improved weldability on AC-current in all positions except vertical down, including overhead-welding with a stable arc, low spatter, easy slag-removal and good bead appearance.

Typical analysis of all-weld metal (wt.-%)

C	Si	Mn	Cr	Mo	Ni	Nb	W	Fe
0.05	0.5	3.5	15.0	7.0	balance	1.6	1.6	5.0

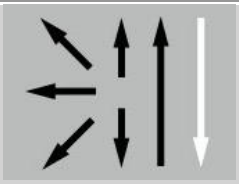
Mechanical properties of the undiluted weld metal at RT

Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A	Impact strength K_V
MPa	MPa	%	J
> 420	> 690	> 35	> 70 (at -196°C)

Welding instructions

The weld zone must be clean and properly degreased. Prior to welding, the stick electrodes must be re-dried for 2-3 hours at 250-300°C. Weld with a short arc and sufficiently high amperage settings. To avoid end crater cracks, the crater must be properly filled, the arc drawn away to the side.

Welding positions



Current type: DC (+) / AC

Recommended welding parameters

Electrodes Ø x L [mm]	2.5 x 300	3.2 x 300	4.0 x 350	5.0 x 400
Amperage [A]	50 – 70	80 – 120	110 – 150	120 - 160

Approvals

BV, DNV-GL

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.