UTP 776 KB

Basic coated NiCrMo stick electrode

Classifications

Material-No.	AWS A5.11 / SFA-5.11	EN ISO 14172
2.4887	E NiCrMo-4	E Ni 6276 (NiCr15Mo15Fe6W4)

Characteristics and typical fields of application

Joint welding of matching base materials, as Material-No. 2.4819 (NiMo16Cr15W) and surfacing on low-alloyed steels. It is employed primarily for welding components in plants for chemical processes with highly corrosive media, but also for surfacing press tools, punches etc. which operate at high temperatures.

In addition to its exceptional resistance to contaminated mineral acids, chlorine-contaminated media, and chloride containing media, it resists strong oxidisers such as ferric and cupric chlorides and is one of the few materials which will resist wet chlorine gas.

The stick electrode can be welded in all positions except vertical-down. Stable arc, easy slag removal.

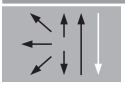
Typical analysis

	C	Si	Mn	Cr	Ni	Mo	W	Fe
wt.-%	< 0.02	< 0.2	0.6	16.5	bal.	16.5	4.0	5.0

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
u	> 450	> 720	> 30	> 70

Operating data



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

Dimension mm	Current A
2.5 × 250	50 – 70
3.2 × 300	70 – 100
4.0 × 350	90 – 130

Welding instructions

For avoidance of intermetallic precipitation the stick electrode should be welded with lowest possible heat input and minimum interpass temperature. Beam width of the prepared seam approx. 70º, root gap approx. 2 mm. Weld stick electrode with slight tilt and with a short arc. String beads are welded. The interpass temperature of 150º C and a max. weaving width 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 stick electrode carrier.

Approvals

TÜV (Nr. 05257)