

Classifications

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

Characteristics and field of use

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 in %

C	Si	Mn	Cr	Mo	Ni	W	Fe
< 0,02	< 0,2	0,6	16,5	16,5	balance	4,0	5,0

Mechanical properties of the weld metal

Yield strength $R_{P0,2}$	Tensile strength R_m	Elongation A	Impact strength K_v
MPa	MPa	%	J
> 450	> 720	> 30	> 70

Welding instruction

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. 70°, root gap approx. 2 mm. Weld stick electrode with slight tilt and with a short arc. String beads are welded. The interpass temperature of 150° 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 – 300° C before use and weld them out of a warm stick electrode carrier.

Welding positions



Current type DC (+)

Approvals

TÜV (No. 05257)

Recommended welding parameters

Electrodes $\varnothing \times L$ [mm]	2,5 x 250	3,2 x 300	4,0 x 350
Amperage [A]	50-70	70-100	90-130

