UTP 3127 LC

Low-carbon, fully austenitic stick electrode with high nickel content. Corrosion resistant

Standards :

Material-No. : ~1.4563
DIN EN 1600 : E 27 31 4 Cu LR
AWS A5.4 : E 383-16

Application field

UTP 3127 LC is suited for joining and surfacing of base materials of the same and of similar nature.

Mat. No.	DIN	Mat.-No.	DIN
1.4500	G-X7 NiCrMoCuNb 25 20	1.4539	X2 NiCrMoCu 25 20 5
1.4505	X5 NiCrMoCuNb 20 18	1.l4563	X1 NiCrMoCu 31 27
1.4506	X5 NiCrMoCuTi 20 18		

Properties of the weld metal

Like the base material 1.4563 this alloy distinguishes itself by high resistance against phosphoric acid and organic acids. Due to the addition of Cu besides Mo it shows extremely low corrosion rates, particularly when used in sulphuric acid. Due to the high Mo-content of more than 3,0 % in combination with approx. 27 % Cr, the stick electrode **UTP 3127 LC** distinguishes itself by resistance against stress corrosion crakking, crevice corrosion and pitting in media containing chloride ions.

Welding properties

The stick electrode can be welded in all positions except vertical-down. It has a stable arc. Easy and thorough slag removal. The seam has a finely rippled, smooth and regular structure.

Mechanical properties of the weld metal

Yield strength $R_{p0,2}$ MPa	Tensile strength R_m MPa	Elongation A %	Impact strength K_v Joule
> 350	> 600	> 30	> 50

Weld metal analysis in %

C	Si	Mn	Cr	Mo	Ni	Cu	Fe
< 0,03	< 0,9	1,5	27,0	3,5	31,0	1,3	balance

Welding instructions

Usual weld seam preparation. The welding zone must be free from residues, such as grease, paint or metal dust. String beads are welded, max. weaving width 2,5 x diameter of the electrode core wire. Use smallest possible stick electrode diameter. Dry the stick electrodes for 2 hours at 120 - 200° C before use.

Current type DC (+) / AC

Welding positions

Availability / Current adjustment

Stick electrodes	Ø mm x L	2,5 x 300	3,2 x 350
Amperage	A	50 – 70	70 – 100

Approvals

TÜV (No. 09466)