

Classifications

AWS A5.11 / SFA-5.11	Material-No.	EN ISO 14172
ENiCrMo-13	2.4609	E Ni 6059 (NiCr23Mo16)

Characteristics and typical fields of application

UTP 759 Kb is employed primarily for welding components in environmental plants and plants for chemical processes with highly corrosive media. Joint welding of matching base materials as Material-No. 2.4605 or similar matching materials as material No 2.4602 NiCr21Mo14W. Joint welding of these materials with low-alloyed steels. Cladding on low-alloyed steels.

In addition to its good resistance to contaminated oxidating mineral acids, acetic acids and acetic anhydrides, hot contaminated sulphuric and phosphoric acid, UTP 759 Kb has an excellent resistance against pitting and crevice corrosion. The special composition of the coating extensively prevents the precipitation of intermetallic phases.

UTP 759 Kb can be welded in all positions except vertical down. Stable arc, easy slag removal.


Typical analysis

	C	Si	Mn	Cr	Ni	Mo	Fe
wt.-%	< 0.02	< 0.2	0.5	22.5	bal.	15.5	1.0

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	>60

Operating data

	Polarity	DC +	Dimension mm	Current A
	Redrying	2h / 250-300°C	2.5 × 250	50 – 70
			3.2 × 300	70 – 100
			4.0 × 350	90 – 130

Welding instructions

Opening angle of the prepared seam approx. 70° C, 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. Re-dry the stick electrodes 2 – 3 hours at 250 – 300° C before use and weld them out of a warm stick electrode carrier.

Approvals

TÜV (Nr. 06687)