

Classifications

EN ISO 2560-A	AWS A5.1
E 42 3 B32 H10	E 7018

Characteristics and field of use

UTP 614 Kb is a double coated stick electrode with a universally suited application field. It is used in industry, trade, as well as in production and repair welds for diverse base materials. Due to a special coating formula UTP 614 Kb shows a smooth and finely rippled weld seam, a stable arc, easy slag removal, and a very slight increase of the weld, as well as a notch-free seam. The weld metal is little affected by steel impurities. Due to the double coating the stick electrode is excellently suited for root- and out-of-position welding. Recovery 120%, H₂ content < 8 ml/100g.

Base materials

Unalloyed construction steels	
S235JRG2 – S355J2; E295, E335, St35, St 45, St 35.8, St45.8, St50-2	
Boiler steels	P235GH, P265GH, P295GH
Fine-grained	steels up to S355N
Shipbuilding	steels A – E, AH - EH
Cast steels	C 35, GS-38, GS-45

Typical analysis in %

C	Si	Mn	Fe
0.06	0.7	0.9	balance

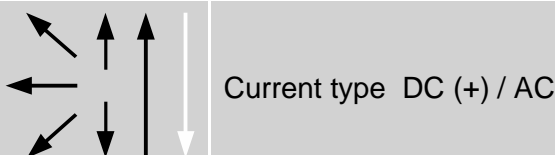
Mechanical properties of the weld metal

Yield strength R _{PO,2}	Tensile strength R _m	Elongation A	Impact strength K _V in J	
MPa	MPa	%	RT	-30°C
> 420	> 510	> 22	> 100	> 47

Welding instruction

Ignite the electrode and stay at the ignition point until the electric arc is fully stabilised. Keep a short arc during the welding process. Hold stick electrode vertical to the weldment with slight weaving. Redrying: 2 – 3 h at 250 – 300°C. Only use dry stick electrodes.

Welding positions



Approvals

TÜV (No. 10571), DB (No. 10.138.03), BV, DNV, ABS, LR

Recommended welding parameters

Electrodes Ø x L [mm]	2.5 x 350	3.2 x 350	3.2 x 450	4,0 x 450	5.0 x 450
Amperage [A]	60 – 90	100 – 140	100 – 140	140 – 180	190 – 250