

UTP 613 Kb

Unalloyed and low alloyed steels

Classifications

basic-coated stick electrode

EN ISO 2560-A

AWS A5.1

E 42 5 B42 H5

~ E 7018-1 H4 R

Characteristics and field of use

UTP 613 Kb is a basic-coated stick electrode for construction-, boiler-, tube- and fine-grained steels as well as for steels with up to 0.35 % C-content. It is especially recommended for the base materials as mentioned below.

UTP 613 Kb has a good weldability and a stable arc. The weld metal is resistant to ageing, crack-resistant and is little affected by steel impurities.

Base materials

Construction steels	St 34 - St 60
Fine-grained-steels	St E 255 – 355
Boiler steels	H I - H II, 17 Mn 4
Tube steels	St 35 - St 55, St 35.8, St 45.8
Cast steels	GS 38 - GS 52

Typical analysis in %

C	Si	Mn	Fe
0.07	0.4	1.1	balance

Mechanical properties of the weld metal

<i>Yield strength</i> $R_{p0.2}$	<i>Tensile strength</i> R_m	<i>Elongation</i> A	<i>Impact strength</i> K_V
MPa	MPa	%	J
> 420	> 510	> 25	> 120

Welding instructions

Keep a short arc during the welding process. Weld dry stick electrodes only.
Re-drying: 2 – 3 h / 250 – 300 °C. Preheat weldment if necessary

Welding positions

Current type DC (+)

Approvals

TÜV (No. 00794), DB (No. 10.014.80), ABS, BV, DNV GL

Form of delivery and recommended welding parameters

<i>Electrodes</i> $\varnothing \times L$ [mm]	2.5 x 350	3.2 x 350	4.0 x 350	5.0 x 450
<i>Amperage</i> [A]	80 – 100	110 – 150	140 – 200	170 – 210