

Classifications

fully austenitic CrNi stick electrode

EN ISO 3581-A

AWS A5.4

Material-No.

E 25 20 R 32

E 310-16

1.4842

Characteristics and field of use

The rutile-coated stick electrode UTP 68 H is suitable for joining and surfacing of heat resistant Cr-, CrSi-, CrAl-, CrNi-steels / cast steels. It is used for operating temperatures up to 1100 °C in low-sulphur combustion gas. Application fields are in the engineering of furnaces, pipework and fittings.

UTP 68 H is weldable in all positions except vertical down. Fine droplet. The surface of the seams is smooth and finely rippled. Easy slag removal free from residues.

Base materials

Material-No.	DIN	Material-No.	DIN
1.4710	G-X30 CrSi 6	1.4837	G- X40 CrNiSi 25 12
1.4713	X10 CrAl 7	1.4840	G- X15 CrNi 25 20
1.4762	X10 CrAl 24	1.4841	X15 CrNiSi 25 20
1.4828	X15 CrNiSi 20 12	1.4845	X12 CrNi 25 21
1.4832	G-X25 CrNiSi 20 14	1.4848	G- X40 CrNiSi 25 20

Joining these materials with non- and low alloyed steels is possible.

Typical analysis in %

C	Si	Mn	Cr	Ni	Fe
0.10	0.6	1.5	25.0	20.0	balance

Mechanical properties of the weld metal

Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A	Impact strength K_V
MPa	MPa	%	J
> 350	> 550	> 30	> 47

Welding instructions

Weld stick electrode with slight tilt and with a short arc. Re-dry the stick electrodes 2 h / 120 – 200 °C.

Welding positions


Current type DC (+) / AC

Form of delivery and recommended welding parameters

Electrodes $\varnothing \times L$ [mm]	1.5 x 250*	2.0 x 250*	2.5 x 250	3.2 x 350	4.0 x 400
Amperage [A]	25 – 40	40 – 60	50 – 80	80 – 110	130 – 140

*available on request