

## Classifications

EN ISO 3581-A	AWS A5.4 / SFA-5.4	Material-No.
E 25 20 R 3 2	E310-16	1.4842

## Characteristics and typical fields of application

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 lowsulphur 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

	C	Si	Mn	Cr	Ni	Fe
wt.-%	0.1	0.6	1.5	25.0	20.0	bal.

## Mechanical properties of all-weld metal - typical values (min. values)

Yield strength $R_{p0.2}$	Tensile strength $R_m$	Elongation A ( $L_0=5d_0$ )	Impact energy ISO-V KV J
MPa	MPa	%	
>350	>550	>30	>47

## Operating data

	Polarity	DC + / AC	Dimension mm	Current A
				1.5 x 250*
			2.0 x 250*	40 – 60
			2.5 x 250	50 – 80
			3.2 x 350	80 – 110
			4.0 x 400	130 – 140

\* available on request

## Welding instructions

Weld stick electrode with slight tilt and with a short arc. Redry the stick electrodes 2 h at 120 – 200°C.

## Approvals

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