UTP 068 HH

basic coated NiCrFe stick electrode

Classifications		
EN ISO 14172	AWS A5.11	Material-No.
E Ni 6082 (NiCr20Mn3Nb)	E NiCrFe-3 (mod.)	2.4648

Characteristics and field of use

UTP 068 HH is predominantly used for joining identical or similar heat resistant Ni-base alloys, heat resistant austenites, cold tough Ni-steel, and for joining heat resistant austenitic-ferritic materials, such as 2.4817 (LC NiCr15Fe), 1.4876 (X10 NiCrTiAl 32 20), 1.4941 (X8 CrNTi 18 10). Specially also used for joinings of high C content 25/35 CrNi cast steel to 1.4859 or 1.4876 for petrochemical installations with working temperatures up to 900° C. The welding deposit is hot cracking resistant and does not tend to embrittlement.

The welding deposit of UTP 068 HH is hot cracking resistant, does not tend to embrittlement and is scale resistant at high temperatures.

Typical analysis in %

C	Si	Mn	Cr	Mo	Nb	Ni	Fe
0,025	0,4	5,0	19,0	1,5	2,2	balance	3,0

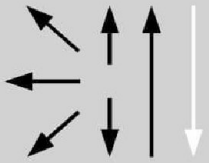
Mechanical properties of the weld metal

Heat-treatment	Yield strength $R_{P0,2}$	Tensile strength R_m	Elongation A	Impact strength K_V	
	MPa	MPa	%	J	–196 °C
As welded	420	680	40	120	80
15 h 650° C / air				120	70

Welding instruction

Hold stick electrode as vertically as possible, only very little weaving. Fill end crater carefully. Interpass temperature max. 150° C. Redry electrode for 2 – 3 h / 250 – 300° C.

Welding positions



Current type DC (+)

Approvals

TÜV (No. 00230), KTA, ABS, GL, BV, DNV

Recommended welding parameters

Electrodes Ø x L [mm]	2,0 x 250	2,5 x 300	3,2 x 300	4,0 x 350	5,0 x 400
Amperage [A]	35 – 50	50 – 70	70 – 95	90 – 120	120 – 160