UTP A 068 HH

nickel alloys

Classifications

solid wire

EN ISO 18274	AWS A5.14	Material-No.
S Ni 6082 (NiCr20Mn3Nb)	ER NiCr-3	2.4806

Characteristics and field of use

UTP A 068 HH is predominantly used for joining identical or similar high heat resistant Ni-base alloys, heat resistant austenites, and for joining heat resistant austenitic-ferritic materials such as

2.4816	NiCr15Fe	UNS N06600
2.4817	LC- NiCr15Fe	UNS N10665
1.4876	X10 NiCrAlTi 32 20	UNS N08800
1.6907	X3 CrNiN 18 10	

Also used for joinings of high C content 25 / 35 CrNi cast steel to 1.4859 or 1.4876 for petrochemical installations with service temperatures up to 900 °C.
Furthermore UTP A 068 HH can be used for repair welding of hardly weldable steels such as heat-treatable steels or tool steels. Additionally mixed joints of austenitic and ferritic materials with elevated service temperatures can be welded.

The welding deposit is hot-cracking-resistant and does not tend to embrittlement.

Typical analysis in %

C	Si	Mn	Cr	Ni	Nb	Fe
< 0.02	< 0.2	3.0	20.0	balance	2.7	0.8

Mechanical properties of the weld metal

Yield strength $R_{p0.2}$	*Tensile strength R_m*	*Elongation A*	*Impact strength K_V*	
MPa	*MPa*	*%*	*J (RT)*	*– 196 °C*
> 380	> 640	> 35	160	80

Welding instructions

Clean weld area thoroughly. Keep heat input as low as possible and interpass temperature at approx. 150 °C.

Approvals

TÜV (No. 00882), KTA, ABS, DNV GL

Form of delivery and recommended welding parameters

Wire diameter [mm]	*Current type*	*Shielding gas (EN ISO 14175)*		
0.8	DC (+)	I 1	I 3	Z-ArHeHC-30 / 2 / 0.05
1.0	DC (+)	I 1	I 3	Z-ArHeHC-30 / 2 / 0.05
1.2	DC (+)	I 1	I 3	Z-ArHeHC-30 / 2 / 0.05
1.6	DC (+)	I 1	I 3	Z-ArHeHC-30 / 2 / 0.05