UTP A 068 HH

Solid Wire, nickelbase alloyed

Classifications

Material-No.	AWS A5.14 / SFA-5.14	EN ISO 18274
2.4806	ER NiCr-3	S Ni 6082 (NiCr20Mn3Nb)

Characteristics and typical fields of application

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 ºC. 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

	C	Si	Mn	Cr	Ni	Nb	Fe
wt.-%	< 0.02	< 0.2	3.0	20.0	bal.	2.7	0.8

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

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J	
	MPa	MPa	%	J [RT]	-196°C
	> 380	> 640	> 35	160	80

u untreated, as-welded

Operating data

Polarity	DC +
Shielding gas (EN ISO 14175)	I 1, I 3, Z-ArHeHC-30/2/0,05

Dimension mm
0.8
1.0
1.2
1.6

Welding instructions

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

Approvals

TÜV (00882), ABS, DNV GL, CE