

Classifications

TIG rod

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 according to EN ISO 15792-1 (min. values at RT)

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. 00883), KTA, ABS, DNV GL

Form of delivery and recommended welding parameters

Rod diameter x length [mm]	Current type	Shielding gas (EN ISO 14175)
1.6 x 1000	DC (–)	I 1 R 1
2.0 x 1000	DC (–)	I 1 R 1
2.4 x 1000	DC (–)	I 1 R 1
3.2 x 1000	DC (–)	I 1 R 1