

## Classifications

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

## Characteristics and typical fields of application

Solid wire type ERNiCr-3 for joining identical or similar highly heat-resistant Ni-base alloys, heat-resistant austenites, and for joining heat-resistant austenitic-ferritic materials.

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.

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.

## Base materials

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


## 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

## Operating data

	Polarity	DC +	Dimension mm
	Shielding gas (EN ISO 14175)	I 1, I 3, Z-ArHeHC-30/2/0.05	0.8
			1.0
			1.2
			1.6

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