Ni-base solid rod

Classification

AWS A5.14/A5.14M : ERNiCr-3
ISO 18274 : S Ni 6082 (NiCr20Mn3Nb)

General description

Solid rod for welding nickel based alloys, dissimilar metals and cladding
High resistance to oxidation and high impact toughness at low temperature

Shielding gases (acc. ISO 14175)

I1 Inert gas Ar (100%)
I3 Inert gas Ar+ 0.5-95% He

Approvals

TÜV
+

Chemical composition (w%),Typical, rod

C	Mn	Si	Ni	Cr	Nb	Fe	Cu
0.03	3.0	0.2	bal.	20	2.5	1.0	0.1

Mechanical properties, typical, all weld metal

	Shielding gas	Condition	Yield strength (N/mm^2)	Tensile strength (N/mm^2)	Elongation (%)	Impact ISO-V(J) +20°C	Impact ISO-V(J) -196°C
Typical values	I1	AW	400	680	40	150	120

Materials to be welded

Ni-alloy grades	BS3076	DIN 17744/17465 SEW 595	Mat. Nr	ASTM/ACI B366	UNS
Ni-base high Cr alloyed steel for low and high corrosion searching application					
	Na 14	NiCr15Fe	2.4816	B168-Alloy 600	N06600
		LC-NiCr15Fe	2.4817	Alloy 600L	N06600
		NiCr20Ti	2.4951	Alloy 75	
		NiCr20TiA1	2.4952	Alloy 80A	N07080
	Na 15	X10NiCrAlTi32 20	1.4876	Alloy 800/800H	N0800/10
		NiCr23Fe	2.4851	Alloy 601(H)	N06601
	Na 17	X12NiCrSi36 16	1.4864	330	N08330
		G-X40NiCrNb35 25	1.4852		
		G-X40NiCrSi35 25	1.4857	HP	

Un- and low alloyed heat and creep resistant steel to stainless steel

Application advice

Limit heat-input (HI<1.5kJ/mm) and interpass temperature (Ti<150°C)

Packaging and available sizes

Unit type	Diameter (mm) 2.0	2.4	3.2
2 and 10 kg tube	X	X	X

Other sizes and packaging on request

LNT NiCro 70/19: rev. EN 21

Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes**: Consult information on Welding Safety Sheet, available upon request