

Ni-base solid wire

Classification

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

General Description

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

Shielding gas (acc. EN)

GMAW I1 Inert gas Ar 100%
 I3 Inert gas Ar + > 0-95% He

Approvals

TÜV

GTAW +
 GMAW +

Chemical composition (w%), typical, all weld metal

C	Mn	Si	Cr	Ni	Nb	Fe	Cu
0.03	3.1	0.08	20.5	72.5	2.6	0.8	0.01

Mechanical properties, all weld metal

	Process	Shielding gas	Condition	0.2% Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation (%)	Impact (ISO), J	
							+20 °C	-196 °C
Typical values	GTAW	I1	AW	400	680	40	150	120
after welding	GMAW	I1	AW	390	640	35	150	50

Materials to be welded

Material grades such as:	BS3076	DIN17744/17465 SEW 595	W.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	
		NiCr20TiAl	2.4952	Alloy 80A	N07080
	Na 15	X10NiCrAlTi 32 20	1.4876	Alloy 800/800H	N0800/10
		NiCr23Fe	2.4851	Alloy 601 (H)	N06601
	Na 17	X12NiCrSi 36 16	1.4864	330	N08330
		G-X40NiCrNb 35 25	1.4852		
		G-X40NiCrSi 35 25	1.4857	HP	

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

Application advice

Max. rate of energy input <1,5kJ/mm and temperature between layers below 150°C

Packaging, available sizes and identification

Process	Unit:	Sizes, mm				
		1.0	1.2	2.0	2.4	3.2
GTAW	2 and 10 kg tube			X	X	X
GMAW	15 kg spool B300	X	X			

Other sizes and packaging on request

Identification

Imprint: Nichrofer®X-750

Tip colour:

Nichrofer®X-750 : rev.EN 20