

Ni-base solid wire

Classification

AWS A5.14/A5.14M	:ERNiCrMo-3
EN 18274	:S Ni 6625 (NiCr22Mo9Nb)

General Description

Solid wire for welding of nickel alloys
Extreme resistance to various corrosion forms
High chromium and molybdenum content

Shielding gas (acc. EN)

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

Approvals

TÜV

GMAW +

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

C	Mn	Si	Cr	Ni	Mo	Nb	Fe
0.02	0.06	0.07	21.9	64	9	3.5	0.4

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	520	800	35	130	100
after welding	GMAW	I1	AW	520	770	34	80	60

Materials to be welded

Material grades	DIN/EN	W.Nr.	ASTM/ACI	UNS
NiCrMo-steel type 625	X1NiCrMoCuN 25-20-6	1.4529	Alloy 925	N08925
and welding dissimilar	X1NiCrMoCu 25-20-5	1.4539	Alloy 904L	N08904
high NiCrMo-steels	X1CrNiMoCuN 20-18-7	1.4547	Alloy 254	S31254
for corrosion and	X2NiCrAlTi 32-20	1.4557	Alloy 800L	N08800
heat resisting purposes	G-X10NiCrNb 32-20	1.4859		
	X10NiCrAlTi 32-20	1.4876	Alloy 800/800H	N08800/-10
	NiCr22Mo6Cu	2.4618	Alloy G	N06007
	NiCr22Mo7Cu	2.4619	Alloy G-3	N06985
	NiCr21Mo6Cu	2.4641	Alloy 825hMo	N08821
	NiCr20CuMo	2.4660	Alloy 20	N08020
	NiCr15Fe	2.4816	B168-Alloy 600	N06600
	NiCr22Mo9Nb	2.4856	B443-Alloy 625	N06625
	NiCr21Mo	2.4858	B424-Alloy 825	N08825
Low alloyed steel	NiCr20Ti	2.4951	Alloy 75	N06075
	NiCr20TiAl	2.4952	Alloy 80A	N07080
	10Ni14 (3.5% Ni)	1.5637	ASTM A333 Grade 3	-
	12Ni19, X12Ni5	1.5680	-	K41583
9% Ni steel for tanks with CNG	X8Ni9	1.5662	A353/A353M	-
	X8Ni9/8%Ni	1.5662	A553/A553M Type I/II	-/K71340

Packaging, available sizes and identification

Process	Unit:	Sizes, mm						
		0.8	1.0	1.2	1.6	2.0	2.4	3.2
GTAW	2 and 10 kg tube				X	X	X	X
GMAW	15 kg spool S200		X					
	15 kg spool BS300	X	X	X				

Other sizes and packaging on request

Identification

Imprint: Nichrofer®625

Tip colour:

Nichrofer®625 : rev.EN 20