



Characteristics and scope of application

- Filler metal for Alloy 625 and other corrosion resistant alloys for application in oxidizing and reducing environments
- Recommended for joining of matching and dissimilar corrosion resistant alloys, mild steels and 9% Ni steels for cryogenic applications
- Cladding of mild steels and creep resistant CrMo steels

Standard designations

DIN EN ISO 18274	AWS A5.14	DIN Mat.-No.
S Ni 6625 (NiCr23Mo9Nb)	ERNiCrMo-3	2.4831

Typical chemical composition of filler metal

	C	Si	Mn	Cr	Ni	Mo	Nb	Al	Ti	Fe
Mass %	0.03	0.25	0.2	22	Bal.	9.0	3.5	0.2	0.2	< 0.5

All weld metal properties (min. values at rt)

Heat treatment	Yield strength	Tensile strength	Elongation	Impact toughness	
	Rp0.2	R _m	A ₅	ISO-V	
as welded	65 ksi	110 ksi	30%	80 J	60 J / -321°F

Welding instructions

Polarity	Shielding gas acc. to AWS A5.32
DC / +	SG-A, SG-AHe, SG-A-G (He 30% - H 2% - C ~0.1)
DC / -	SG-A, SG-AHe, SG-AH (max. 5% H ₂ DC / -)

Low heat input and interpass temperature < 248°F. Stringer bead technique recommended. Reducing shielding gases are preferable for welding of corrosion resistant alloys.

Base materials

2.4856 – NiCr22Mo9Nb – Alloy 625 – UNS N06625

1.4529 – X1NiCrMoCuN 25-20-7 – Alloy 926 – UNS N 08925

1.5415 – 16Mo3 – ASTM A 672

1.0254 – P235TR1 – ASTM A 106

Packaging (tolerances acc. to AWS A5.02)

Approvals on request

Diameter (in)		lbs/PU
1/16 - 1/8	X 36 in	11 / 22
0.035 – 0.045	BS 300 spool	33
0.06 – 1/8	K 415 / K 435 spool	55