



Characteristics and scope of application

- Filler metal for heat resistant CrNi-steels and Ni-alloys
- Recommended for matching and dissimilar welds of 300 series stainless steels and mild steels
- High impact strength at -196°C

Standard designations

DIN EN ISO 18274	AWS A5.14	DIN Mat.-No.
S Ni 6082 (NiCr20Mn3Nb)	ERNiCr-3	2.4806

Typical chemical composition of filler metal

	C	Si	Mn	Cr	Ni	Nb	Fe
Mass %	0.02	0.15	3.0	19.5	Bal.	2.5	< 0.5

All weld metal properties (min. values at rt)

Heat treatment	Yield strength	Tensile strength	Elongation	Impact toughness	
	R _{p0.2}	R _m	A ₅	ISO-V	
as welded	400 MPa	620 MPa	35%	150 J	80 J / -196°C

Welding instructions

Polarity	Shielding gas acc. to DIN EN ISO 14175
DC / +	I1, I3, Z (ArHeHC-30/2/~0.1)
DC / -	I1, I3, R1 (max. 5% H ₂)
Low heat input and interpass temperature < 120°C. Stringer bead technique recommended.	
Base materials	
2.4816 – NiCr15Fe – Alloy 600 – UNS N06600	
Austenitic CrNi – steels group 8.1 acc. to ISO 15608	
1.5415 – 16Mo3 – ASTM A 672	
1.0254 – P235TR1 – ASTM A 106	

Packaging (tolerances acc. to DIN EN ISO 544)

Approvals on request

Diameter (mm)		Kg
1.6 / 2.0 / 2.4 / 3.2	X 1000 mm	5 / 10
0.8 / 1.0 / 1.2	BS 300 spool	15
1.6 / 2.4 / 3.2	K 415 / K 435 spool	25