



Characteristics and scope of application

- Wire for Additive Manufacturing of components with high temperature and corrosion resistance.
- Optimized chemical composition for modified material properties compared to standard welding filler metals.

Standard designations

DIN 17744	ASTM B446	DIN Mat.-No.
NiCr22Mo9Nb		2.4856

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	4,0

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 deposited	450 MPa	760 MPa	30%	80 J	60 J / -196°C

Process details

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)

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

Packaging (tolerances acc. to DIN EN ISO 544)

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

Approvals on request