

Exaton NiCrMo-3

NiCrMo-3 welding wire is suitable for joining nickel-chromium-molybdenum nickel alloys and chromiumnickel-molybdenum steels with very high corrosion resistance in oxidizing, aqueous and high temperature environments such as 6Mo-steels, UNS N06625 (2.4856) and corresponding grades. It is also suitable for joining stainless steels and nickel alloys for high-temperature service.

NiCrMo-3 can also be used for dissimilar joining of stainless steels to nickel alloys, for overlay welding and is available as both wire and rod.

Applications for NiCrMo-3 are found in cryogenics, components subject to high temperature service up to 980°C (1800°F) such as aircraft ducting, engine exhaust systems, power boilers and recovery boilers and a diversity of seawater applications. The combination of strength and corrosion resistance over a wide range of temperatures is utilized in reaction vessels, line pipe distillation columns and heat exchangers. It is used for TIG welding.

Classifications Wire Electrode	SFA/AWS A5.14 : ERNiCrMo-3 EN ISO 18274 : S Ni 6625 (NiCr22Mo9Nb) Werkstoffnummer : 2.4831
Approvals	BV ERNiCrMo-3 CE EN 13479 VdTUV 19478

Approvals are based on factory location. Please contact ESAB for more information.

Shielding Gas	I1, I3, R1 (EN ISO 14175)
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	650 MPa (94 ksi)	840 MPa (122 ksi)	34 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	150 J (111 ft-lb)
As Welded	-40 °C (-40 °F)	120 J (89 ft-lb)
As Welded	-196 °C (-321 °F)	100 J (74 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
<=0.03	0.1	0.15	0.010	<=0.015	>=60	22	9	0.1	0.5

Typical Weld Metal Analysis %

Ti	Fe	Nb+Ta
0.2	<=1	3.5

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
0.02	0.02	0.1	0.002	0.003	65	22	9	0.1	0.03

Typical Wire Composition %

Nb	Ti	Fe	Nb+Ta
3.4	0.2	0.3	3.5