

Exaton NiCrMo-4

NiCrMo-4 is a low carbon nickel-chrome-molybdenum alloy of type alloy C-276. It is a versatile alloy with excellent wet corrosion resistance in oxidizing and especially in reducing media. However, in oxidizing chloride containing environments alloy UNS N06022 (2.4602) is preferred where Sanicro 54 (NiCrMo-10) is a better matching welding consumable. Applications for NiCrMo-4 are found in aggressively corrosive media such as chemical processing plants, pollution control, pulp and paper production, waste treatment and for the recovery of sour natural gas.

NiCrMo-4 is used for joining alloy UNS N10276 (2.4819) and other nickel-chrome-molybdenum alloys. It can also be used for dissimilar metal joining of nickel alloys, stainless steels and low-alloy steels. NiCrMo-4 can be used for surfacing low alloyed steels.

Applications for NiCrMo-4 are found in cryogenics, components in pulp and paper plants such as bleaching vessels, flue gas scrubber systems, components in sour-gas service, sulphuric acid coolers, chlorine gas, hypochlorite and chlorine dioxide atmosphere. NiCrMo-4 is also used in combustion-resistant components for high pressure oxygen service. It is used for MIG/MAG welding.

Classifications Wire Electrode	SFA/AWS A5.14 : ERNiCrMo-4 EN ISO 18274 : S Ni 6276 (NiCr15Mo16Fe6W4) Werkstoffnummer : ~2.4819
Approvals	CE EN 13479

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

Alloy Type	Nickel alloy - 16% Cr - 16% Mo - 5% Fe - 3.5 % W - Low C
Shielding Gas	M12 (EN ISO 14175)

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	170 J (126 ft-lb)
As Welded	-110 °C (-166 °F)	150 J (111 ft-lb)
As Welded	-196 °C (-321 °F)	140 J (104 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
0.01	0.5	0.04	0.001	0.005	58	16	16	0.02	0.03

Typical Weld Metal Analysis %

Co	Fe	W
0.01	6	3.6

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
0.007	0.5	0.02	0.002	0.005	58	16	16	0.03	0.02

Typical Wire Composition %

Co	Fe	W
0.02	5.8	3.7

Recommended Welding Parameters

Wire Diameter	Current	Voltage	Wire Feed Speed
0.8 mm (0.030 in.)	40-120 A	15-19 V	4.0-8.0 m/min (157-315 in./min)
1.2 mm (0.047 in.)	150-260 A	24-29 V	3.0-10.0 m/min (118-394 in./min)
1.6 mm (1/16 in.)	230-350 A	25-30 V	3.0-5.0 m/min (118-197 in./min)