

Exaton Ni56

Exaton Ni56 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 Exaton Ni56 is a better matching welding consumable. Applications for Exaton Ni56 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.

Exaton Ni56 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. Exaton Ni56 can be used for surfacing low alloyed steels.

Applications for Exaton Ni56 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. Exaton Ni56 is also used in combustion-resistant components for high pressure oxygen service.

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	170 J
As Welded	-110 °C	150 J
As Welded	-196 °C	140 J

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	40-120 A	15-19 V	4.0-8.0 m/min
1.2 mm	150-260 A	24-29 V	3.0-10.0 m/min
1.6 mm	230-350 A	25-30 V	3.0-5.0 m/min