

Exaton Ni54



Exaton Ni54 is a NiCrMo alloy of type alloy UNS N06022. It is a versatile alloy with excellent wet corrosion resistance in oxidizing and reducing media. It has better overall corrosion resistance than other NiCrMo alloys such as alloy UNS N10276 (2.4819) and alloy UNS N06626 (2.4856). However, in severely reducing media alloy UNS N10276 is preferred where Exaton Ni56 is a better matching consumable.

Exaton Ni54 is used for joining alloy UNS N06022 (2.4602) and is widely used as overmatching filler material for alloy UNS N10276 (2.4819) and other nickel-chrome-molybdenum alloys for better weld metal properties.

Typical applications for Exaton Ni54 are found in components for organic synthesis, flue gas scrubber systems, electrolytic galvanizing, plate heat exchangers, phosphoric acid production, wet chlorine gas, hypochlorite and chlorine dioxide atmosphere. Exaton Ni54 is also used in combustion-resistant components for high pressure oxygen service and ferric and cupric chloride environments.

Classifications	SFA/AWS A5.11 : ENiCrMo-10 EN ISO 14172 : E Ni 6022
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Welding Current	DC+
Alloy Type	Ni-based CrMo
Coating Type	Basic

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	510 MPa	760 MPa	36 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
ISO		
As Welded	-196 °C	45 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
0.02	0.5	0.15	0.007	0.010	57	21	14.0	0.07	0.04

Typical Weld Metal Analysis %

Co	Fe	W
0.25	4	3

Deposition Data

Diameter	Number of electrodes/ kg weld metal	Fusion time per electrode at 90% I max	Deposition Efficiency %	Deposition Rate @ 90% I max
2.5 x 300.0 mm	103	41 sec	66 %	0.9 kg/h
3.2 x 300.0 mm	56	44 sec	69 %	1.2 kg/h
4.0 x 350.0 mm	30	71 sec	67 %	2.2 kg/h