

Exaton Ni54

Exaton Ni54 is a nickel-chrome-molybdenum alloy of type alloy C-22. It is a versatile alloy with excellent wet corrosion resistance in oxidizing and reducing media. It has better overall corrosion resistance than other Ni-Cr-Mo 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. Applications for Exaton Ni54 are found in aggressively corrosive media such as chlorination systems, geothermal wells, HF furnace scrubbers, pesticide production, phosphoric acid production, SO cooling towers and for weld overlays on valves.

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. It is used for surfacing low alloyed steels.

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. It is used for MIG/MAG welding.

Классификация сварочной проволоки	SFA/AWS A5.14 : ERNiCrMo-10 EN ISO 18274 : S Ni 6022 (NiCr21Mo13Fe4W3) Werkstoffnummer : 2.4602
Одобрения	CE EN 13479

Одобрения на материалы выдаются с привязкой к заводу изготовителю. Подробную информацию можно получить в представительствах ESAB.

Механические свойства при растяжении

Состояние	Предел текучести	Предел прочности при растяжении	Удлинение
После сварки	500 MPa	770 MPa	50 %

Типичные свойства образца с V-образным надрезом по Шарпи

Состояние	Температура испытания	Работа удара
После сварки	20 °C	150 J
После сварки	-196 °C	80 J

Хим. состав проволоки

C	Mn	Si	S	P	Ni	Cr	Mo	V	Co
<=0.015	<=0.50	<=0.08	<=0.010	<=0.020	56	21.5	13.5	<=0.35	<=2.5

Хим. состав проволоки

Fe	W
<=4	3

Данные наплавки

Диаметр проволоки	Current	Voltage	Wire Feed Speed
1.2 mm	150-260 A	24-29 V	3.0-10.0 m/min