

Exaton Ni59

Exaton Ni59 is nickel chromium molybdenum alloy of the type UNS N065059. It is a versatile alloy with excellent wet corrosion resistance for the most demanding applications. It combines excellent corrosion resistance in oxidizing and reducing media, has excellent resistance in chloride containing media and to localized corrosion environments. The grade has excellent thermal stability compared to other nickel alloys, and has therefore outstanding resistance to intermetallic precipitation during welding. The microstructure is fully austenitic. Exaton Ni59 is used for joining matching alloys or dissimilar joining to other nickel alloys such as UNS N10276 (2.4819), type UNS N06022 (2.4602), UNS N06625 (2.4856) and N08825 (2.4858). It provides strong, tough, Nb free weld metal for dissimilar welds in super austenitic and super duplex stainless steel joints or combinations of these with nickel alloys. Typical applications are: contaminated mineral acid environments such as sulfuric acid, hydrochloric acid, phosphoric acid, nitric acid etc, components in sulphuric acid coolers, digesters and bleachers, chemical, petrochemical, marine, pharmaceutical, energy production and pollution control.

Especificaciones

Clasificaciones	SFA/AWS A5.11 : ENiCrMo-13 EN ISO 14172 : E Ni 6059 (NiCr23Mo16)
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Corriente de soldadura	DC+
Tipo de aleación	Ni-based CrMo
Tipo de recubrimiento	Basic

Propiedades tensoras típicas

Condición	Límite de elasticidad	Resistencia a la tracción	Alargamiento
ISO			
Como soldado	500 MPa	790 MPa	35 %

Propiedades de Ensayo de impacto Charpy

Condición	Temperatura de ensayo	Valor de impacto
ISO		
Como soldado	20 °C	60 J
Como soldado	-196 °C	40 J

% Análisis metal depositado (valores típicos)

C	Mn	Si	S	P	Ni	Cr	Mo	Fe
0.01	0.2	0.15	0.006	0.006	60	23	16	1

Datos aportación

Diámetro	Amperios	Voltios	Rendimiento (%)	Tiempo de fusión por electrodo al 90 % I máx.	Tasa de deposición al 90 % I máx.
2.5 x 300.0 mm	50-70 A	25 V	60 %	50 sec	0.8 kg/h
3.2 x 350.0 mm	60-90 A	25 V	62 %	63 sec	1.2 kg/h
4.0 x 350.0 mm	80-120 A	27 V	62 %	81 sec	1.4 kg/h