Exaton Ni59 (GMAW)

Exaton Ni59 is a nickel-chrome-molybdenum alloy of type alloy 59. 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. Exaton Ni59 has excellent thermal stability compared to other common nickel alloys and has therefore outstanding resistance to intermetallic precipitation during welding. Applications for Exaton Ni59 are found in aggressive and contaminated corrosive media including scrubbers for flue gas desulfurisation (FGD), chemical process plants and in severe offshore and petrochemical environments. Furthermore, Exaton Ni59 can be used in contaminated mineral acid environments such as sulfuric acid, hydrochloric acid, phosphoric acid, nitric acid etc. Components in sulfuric acid coolers, digesters and bleachers. Chemical, petrochemical, marine, pharmaceutical, energy production and pollution control. 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/hyper-duplex stainless steel joints or combinations of these with nickel alloys. Exaton Ni59 is also used for overlay welding and as well as hot wire TIG and mechanical TIG. Exaton Ni59 is approved in ISO15156/MR0175 (highest test level VII in sour-gas environments).

Especificaciones	
Clasificaciones	SFA/AWS A5.14 : ERNiCrMo-13 EN ISO 18274 : S Ni 6059 (NiCr23Mo16) Werkstoffnummer : 2.4605
Aprobaciones	VdTÜV : 09183

Las aprobaciones se basan en la ubicación de la fábrica. Póngase en contacto con ESAB para obtener más información.

Tipo de aleación	Alloyed nickel (Ni + 23 % Cr + 15.5 % Mo)

Propiedades tensoras típicas			
Condición	**Límite de elasticidad**	**Resistencia a la tracción**	**Alargamiento**
Como soldado	470 MPa	760 MPa	48 %

Propiedades de Ensayo de impacto Charpy		
Condición	**Temperatura de ensayo**	**Valor de impacto**
Como soldado	20 °C	190 J
Como soldado	-196 °C	155 J

% Composición hilo (valores típicos)									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Al**	**Co**
<=0.01	<=0.5	<=0.1	<=0.01	<=0.015	59	23	15.5	0.3	<=0.3

% Composición hilo (valores típicos)
Fe
<=0.5

Parámetros de soldadura			
Amperios	**Diámetro del hilo**	**Voltios**	**Velocidad de alimentación de hilo**
150-260 A	1.2 mm	24-29 V	3.0-10.0 mm/min
230-350 A	1.6 mm	25-30 V	3.0-5.0 mm/min