

Exaton 19.12.3.L CRYO

19.12.3.L CRYO is a filler material for joining austenitic stainless steels, e.g. ASTM 316, 316L, as well as 304, 304L, for cryogenic applications and meets the requirements of ASME Section VIII, Division 1, UHA 51 ((a) (4) (-a) (-1)) and others. It is used for service temperatures down to -269°C (-452°F), and ferritic or martensitic stainless steels, with maximum 19% Cr. 19.12.3.L CRYO is available as wire and rods for MIG/MAG, TIG, plasma arc and submerged arc welding (SAW). The grade has been specifically developed for welding in cryogenic applications, typically: manufacturing of dewars, containers, tanks, cryostats, and transfer systems for transportation and storage of LNG, LPG, liquid nitrogen and liquid helium.

The chemical composition is optimized for cryogenic applications in terms of impact strength and other characteristics. It has controlled chemical composition and ferrite content for resistance to microfissuring, and balanced minor additions of certain elements for optimum arc stability and wetting characteristics. Impurity levels are lower in the consumable in order to reduce the risk of hot cracking and to obtain the best arc stability, fluidity, low spatter and wetting properties. It is used for TIG-welding.

Huzalelektróda besorolásai	SFA/AWS A5.9 : ER316L EN ISO 14343-A : W (19 12 3 L) Werkstoffnummer : ~1.4430
Jóváhagyások	CE EN 13479

A minősítési szint a gyártási ország szerint változó lehet. További információért forduljon az ESAB-hoz.

Ötvözettypus	Austenitic (with appr. 2 % ferrite) 19 % Cr - 13 % Ni - 2 % Mo - Low C
Védőgáz	I1 (EN ISO 14175)

Charpy-féle V-horony tulajdonságok

Állapot	Tesztelési hőmérséklet	Ütőmunka érték
Hegesztett állapot	-196 °C	90 J

Varratfém analízis

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
0.01	1.8	0.4	0.001	0.012	13.0	18.5	2.3	0.008	0.03

Varratfém analízis

N	Nb	Ti	Co	FN WRC-92
0.05	0.01	0.002	0.04	3

Huzal összetétel

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
0.02	1.8	0.4	0.003	0.012	13.3	18.5	2.3	0.01	0.06

Huzal összetétel

N	Nb	Ti	Co	FN WRC-92
0.06	0.01	0.005	0.03	2