

## 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.

<b>Классификация сварочной проволоки</b>	SFA/AWS A5.9 : ER316L EN ISO 14343-A : W (19 12 3 L) Werkstoffnummer : ~1.4430
<b>Одобрения</b>	CE EN 13479

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

<b>Тип сплава</b>	Austenitic (with appr. 2 % ferrite) 19 % Cr - 13 % Ni - 2 % Mo - Low C
<b>Защитный газ</b>	I1 (EN ISO 14175)

### Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
После сварки	-196 °C	90 J

### Хим. состав наплавленного металла

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

### Хим. состав наплавленного металла

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

### Хим. состав проволоки

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

### Хим. состав проволоки

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