

## Exaton 19.9.L (GMAW)

Exaton 19.9.L is suitable for joining stainless steels of the 18Cr/8Ni/ELC and 18Cr/8Ni/Nb types for service temperatures up to 350°C (662°F). It is also suitable for welding equipment intended to be used in cryogenic applications down to 4°K (-269°C) Typical cryogenic applications: 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, lateral expansion and other characteristics. The controlled chemical composition and ferrite content are optimized for resistance to microfissuring, and balanced minor additions of certain elements for optimum arc stability, fluidity and low spatter. It is used for joining and overlay welding with MIG/MAG, plasma and hot wire TIG and mechanized TIG.

Spezifikationen	
<b>Klassifikationen</b>	EN ISO 14343-A : G/W/P 19 9 L SFA/AWS A5.9 : ER308L Werkstoffnummer : ~ 1.4316
<b>Zulassungen</b>	CE : EN 13479 UKCA : EN 13479 VdTÜV : 00064(GTAW) VdTÜV : 01339

Zulassungen basieren auf dem Werksstandort. Bitte kontaktieren Sie ESAB für weitere Informationen.

<b>Legierungstyp</b>	Austenitic (with approx. 8 % ferrite) 19% Cr - 9% Ni - Low C
<b>Schutzgas</b>	M12, M13 (EN ISO 14175)

Typische Festigkeitseigenschaften			
Zustand	Streckgrenze	Zugfestigkeit	Dehnung
Unbehandelt	420 MPa	570 MPa	41 %
As Welded+	310 MPa	410 MPa	29 %
As Welded++	290 MPa	440 MPa	25 %

Typische Kerbschlagzähigkeit		
Zustand	Prüftemperatur	Kerbschlagarbeit
Unbehandelt	20 °C	150 J
As Welded+	-196 °C	90 J
Unbehandelt	-196 °C	80 J
Unbehandelt	-269 °C	40 J

Drahtzusammensetzung									
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.019	1.7	0.4	0.012	0.022	10.6	19.8	0.2	0.2	0.06

Drahtzusammensetzung				
Nb	Ti	Co	FN deLong	FN WRC-92
0.02	0.004	0.07	6	7

Typische Schweißgutrichtanalyse %									
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<b>Shielding Gas - M13</b>									
0.021	1.6	0.3	0.010	0.021	10.5	19.5	0.2	0.16	0.08

Typische Schweißgutrichtanalyse %				
Nb	Ti	Co	FN deLong	FN WRC-92
<b>Shielding Gas - M13</b>				

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### Typische Schweißgutrichtanalyse %

Nb	Ti	Co	FN deLong	FN WRC-92
0.01	0.003	0.08	4	5

### Schweißparameter

Drahtdurchmesser	Strom	Volt	Drahtvorschubgeschwindigkeit
0.8 mm	40-120 A	15-19 V	4.0-8.0 mm/min
1.0 mm	60-220 A	15-28 V	4.0-12.0 mm/min
1.2 mm	150-260 A	24-29 V	3.0-10.0 mm/min
1.6 mm	230-350 A	25-30 V	3.0-5.0 mm/min