

Exaton 316LSi

316LSi is suitable for joining stainless Cr-Ni-Mo and Cr-Ni steels, stabilized or non-stabilized, e.g. ASTM 316, 316L and 316Ti as well as 304, 304L, 321 and 347, for service temperatures up to 400°C (750°F). It is also used for welding of stainless Cr-steels with max 19% Cr. It is used for MIG/MAG welding.

Classifications Wire Electrode	EN ISO 14343-A : G 19 12 3 L Si SFA/AWS A5.9 : ER316LSi Werkstoffnummer : 1.4430
Approvals	CE EN 13479

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Austenitic (with appr. 8 % ferrite) 19 % Cr - 12 % Ni - 3 % Mo - Low C - High Si
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	340 MPa	400 MPa	-
As Welded	400 MPa	560 MPa	37 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C	120 J
As Welded	-60 °C	95 J
As Welded	-110 °C	70 J
As Welded	-196 °C	45 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.02	1.8	0.8	0.015	0.015	12	18.5	2.7	0.1

Wire Composition

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N	Nb	Ti	FN WRC-92	Co
<0.025	1.7	0.8	<0.015	<0.02	11.7	18.4	2.6	0.13	0.05	0.02	0.01	9	0.06

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm (0.030 in.)	40-120 A	15-19 V	4.0-4.0 m/min (157-157 in./min)	0.0-0.0 kg/h (0-0 lb/h)
1.0 mm (0.040 in.)	60-220 A	15-28 V	4.0-4.0 m/min (157-157 in./min)	0.0-0.0 kg/h (0-0 lb/h)
1.2 mm (0.047 in.)	150-260 A	24-29 V	3.0-3.0 m/min (118-118 in./min)	0.0-0.0 kg/h (0-0 lb/h)
1.6 mm (1/16 in.)	230-350 A	25-30 V	3.0-3.0 m/min (118-118 in./min)	0.0-0.0 kg/h (0-0 lb/h)