

TECHNICAL DATA

Standards

DIN Material Nr. 1.4430

EN ISO 14343-A :	G 19 12 3 L Si
AWS A5.9 :	ER316LSi

General Properties / Field of Applications

DSI M 316L Si is a Laser Welding Wire of austenitic chromium-nickel-molybdenum steel with low carbon content. Applicable for corrosion-resistant, cryogenic, austenitic Cr-Ni-Mo steels. The welding metal is cryogenic down to -196°C and resistant to intergranular corrosion up to 400°C.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	440
Tensile strength R_m	[MPa] / [N/mm ²]	360
Elongation A ($L_0 = 5d_0$)	[%]	35

Chemical Composition (Standard Values in %)

C	Si	Mn	Cr	Ni	Mo
0.02	0.9	1.8	18.3	11.4	2.6

Compatible Materials (Selection)

1.4306 X2CrNi19-11 / 1.4301 X5CrNi18-10 / 1.4311 X2CrNiN18-10 / 1.4580 / 1.4571
1.4541 X6CrNiTi18-10 / 1.4401 X5CrNiMo17-12-2 / 1.4404 X2CrNiMo17-12-2
ASTM A 182 Gr. F316, F316L, F316LN, F316Ti / A213 Gr. TP316, TP316L, TP316LN
A 403 Gr. WP316, WP316L / A 351 Gr. CFMN / UNS S31600 / UNS S31603

Packaging and available Sizes*

Spool : MA125 mm	Ø mm	0.2 / 0.3 / 0.4 / 0.5 / 0.6 / 0.7 / 0.8 / 1.0 / 1.2
Rod : 500 / 1000 mm	Ø mm	0.2 / 0.3 / 0.4 / 0.5 / 0.6 / 0.7 / 0.8 / 1.0 / 1.2

* Other dimensions available on request

wires@dsilaser.com