

TECHNICAL DATA

Standards

DIN Material Nr. 1.4332

EN ISO 14343-A :	G 23 12 L Si
AWS A5.9 :	ER309LSi

General Properties / Field of Applications

DSI M 309L Si is a Laser Welding Wire of austenitic chromium-nickel steel with low carbon content. Applicable for corrosion-resistant and dissimilar steel joins. Corrosion resistance already from the first layer (deposition and buffer layers). Resistant to intergranular corrosion up to 300°C.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	320
Tensile strength R_m	[MPa] / [N/mm ²]	510
Elongation A ($L_0 = 5d_0$)	[%]	25
Impact Work KV	[J]	55 at +20°C

Chemical Composition (Standard Values in %)

C	Si	Mn	Cr	Ni
0.03	0.95	1.7	23.5	12.5

Compatible Materials (Selection)

1.4710 G-X 30CrSi 6 / 1.4825 G-X 25CrNiSi 18 9 / 1.4729 G-X 40CrSi 13
1.2780 X 15 CrNiSi 20 12 / 1.4740 G-X 40 CrSi 17 / 1.4828 X 15 CrNiTi 20 12
In specific suitable for dissimilar metal joints (CS-SS), deposition and buffer layers

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

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