

TECHNICAL DATA

Standards

DIN Material Nr. 1.4551

EN ISO 14343-A :	G 19 9 Nb Si
AWS A5.9 :	ER347Si

General Properties / Field of Applications

DSI M 347 is a Laser Welding Wire with austenitic delta ferrite structure for use in all industries, for similar steels and also steels of higher quality. Carbonized and ferritic 13% Cr-steels are welded e.g. chemical apparatus for different industries. Excellent lubricity and conveying properties. IK-resistant up to 400°C operating temperature. Tough at low temperatures down to -120°C.

Mechanical Properties

Yield strength Rp0.2	[MPa] / [N/mm ²]	440
Tensile strength Rm	[MPa] / [N/mm ²]	640
Elongation A (L ₀ = 5d ₀)	[%]	32
Intergranular corrosion resistance	[°C]	400
Cold-tough resitant	[°C]	-120

Chemical Composition (Standard Values in %)

C	Si	Mn	Cr	Ni	Nb
0.04	0.8	1.3	19.2	9.8	0.6

Compatible Materials (Selection)

Stainless austenitic Cr-Ni steel/cast steel e.g. 1.4306 X2CrNi19-11 / 1.4301 X5CrNi18-10
1.4311 X2CrNi18-10 / 1.4312 GX10CrNi18-8 / 1.4541 X6CrNiTi18-10 /
1.4546 X5CrNiNb18-10 / 1.4550 X6CrNiNb18-10 / ASTM A 182 Gr. F304, F304L, F321, F347
A 403 Gr. WP304, WP304L / A 813 Gr. TP304L, 304, TP321, TP347, A 988 UNS 30400

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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