



DAIKOWT 308LSi



AUSTENITIC STAINLESS STEELS
308L

DESCRIPTION

Rod for base materials in 304L with silicon

These rods are used for welding 18/8 stainless steels. The main applications include the food industry, pharmaceutical equipment, and general fabrication. Typical service temperatures range from -100 °C to 400 °C. The higher silicon content compared to standard 308L increases the weld pool fluidity and improves bead appearance. A higher silicon content enhances wettability and allows for faster wire feed speeds compared to standard 308L products.

SPECIFICATIONS

EN ISO 14343-A	W 19 9 L Si	AWS A5.9	ER308LSi
Certifications	CE	Shielding	11
Positions	PA, PB, PC, PD, PE, PF	Current	DC-
Packaging Type	5kg carton tube		

ASME QUALIFICATIONS

F-No (QW432)	6
A-No (QW442)	8

FERRITE

3-12 FN

PREN

20.33

HARDNESS

76HRB

CHEM. COMP. %

DEFAULT

C	0.01
Mn	1.7
Ni	10
Cr	20
P	0.015
S	0.01
Mo	0.1
Si	0.8
Cu	0.15

MECHANICAL PROPERTIES

	MIN. PER STANDARD	PRODUCT
Tensile strength R _m MPa	510	570
Yield strength R _{p0.2} MPa	320	435
Elongation A (L ₀ =5d ₀) %	25	40
Impact Charpy ISO-V	-	70J @ -196°C
Impact Charpy ISO-V	-	-

WELDING PARAMETERS

	1.6 mm	2.4 mm
Ampere	80A - 100A	110A - 160A
Voltage	-	-
Packaging	Ø 1,0÷4,0 mm	Ø 1,0÷4,0 mm
Packaging Type	5kg carton tube	5kg carton tube



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DESCRIPTION

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APPLICATION

The 308L subfamily is specifically designed for the welding of 18/8 series stainless steels, including 301, 302, 303, and 304LN that contain nitrogen, as well as titanium-stabilized steels such as 321. The operating temperature range generally extends from -100°C to about 400°C. These consumables are ideal for a variety of applications ranging from the food sector to breweries, pharmaceutical equipment, construction and general building, to nuclear engineering. However, 308L products are not suitable for use with 304/304H steels in structural applications requiring high temperatures; for these needs, it is recommended to consult technical sheets C-10 and C-12. Similarly, for cryogenic applications (-196°C), it is advisable to refer to technical sheet B-37. No preheat is necessary and the maximum interpass temperature is set to 250°C; also, no post-weld heat treatment (PWHT) is required.

ALLOY TYPE

308L austenitic stainless steels for joining 304L base materials.

MICROSTRUCTURE

Austenite with a controlled level of ferrite, normally in the range 3-12FN depending on the application.

MATERIALS

EN W.Nr.: 1.4306 (X2CrNi19-11), 1.4301 (X5CrNi18-10), 1.4311 (X2CrNiN18-10), 1.4308 (X5CrNi19-10), 1.4541 (X6CrNiTi18-10), 1.4543 (X 3 CrNiCuTi 12-9), 1.4561 (X1CrNiMoTi18-13-2), 1.4550 (X6CrNiNb18-10)+

ASTM: 304L, 304, 304LN, CF3, CF8, 321, 347

UNS: S30403, S30400, S30453, S32100, S34700

WELDING & PWHT

Supply of welding consumables with optimized performance for strength and durability, including special alloys for high-temperature applications.

