G-TECH 308LR

SMAW

AUSTENITIC STAINLESS STEELS
308L

DESCRIPTION

Rutile coated electrode for 308 austenitic stainless steels base materials

Its rutile coating ensures excellent weldability in all positions, except for vertical down, and a high resistance to cracking providing smooth arc transfer. High current carrying capacity, minimum spatter formation and virtually self-cleaning slag produce a concave bead with minimal ripple as well as a smooth and clean weld profile. These electrodes are used to weld 18Cr/8Ni stainless steels. Mainly applications include food industries, pharmaceutical equipment and general fabrication. Typical service temperatures are -100°C to 400°C.

SPECIFICATIONS

EN ISO 3581-A	E 19 9 LR 12	**AWS A5.4**	E308L-17
Certifications	CE, TUV	**Shielding**	-
Positions	PA, PB, PC, PD, PE, PF	**Current**	DC+, AC
Packaging Type	Carton box		

ASME QUALIFICATIONS

F-No (QW432)	5
A-No (QW442)	8

FERRITE

3-12 FN

PREN

18.83

HARDNESS

76HRB

CHEM. COMP. %

	DEFAULT
C	0.02
Mn	0.6
Ni	10.5
Cr	18.5
P	0.02
S	0.01
Mo	0.1
Si	0.8
Cu	0.1

MECHANICAL PROPERTIES

	MIN. PER STANDARD	PRODUCT
Tensile strength R_m MPa	510	520
Yield strength $R_{p0.2}$ MPa	320	320
Elongation A (L_0=5d_0) %	30	35
Impact Charpy ISO-V	-	50J @ 20°C
Impact Charpy ISO-V	-	40J @ -196°C

WELDING PARAMETERS

	2.5 mm	3.2 mm	4.0 mm	5.0 mm
Ampere	50A - 75A	80A - 110A	110A - 150A	160A - 210A
Voltage	-	-	-	-
Packaging	56 pcs/kg	28 pcs/kg	19 pcs/kg	12 pcs/kg
Packaging Type	Carton box	Carton box	Carton box	Carton box

NOTES

Pcs/kg is indicative, actual number may vary ± 5%.

DAIKO

308L

DESCRIPTION

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.

DAIKO