SUPEROOT 308L

FLUX CORED TIG WIRE FOR ROOT WELDS WITHOUT BACK PURGE

PRODUCT DESCRIPTION

Flux cored TIG wire **Superoot 308L** is made with a seamless austenitic stainless steel sheath, which results in a robust moisture resistant wire and rutile flux system.

Superoot 308L is designed specifically for situations where it is impractical to apply back-purge for the TIG root run, or where there is an economic benefit in eliminating back-purge.

Metal recovery is 90% with respect to the whole wire.

SPECIFICATIONS

AWS A5.22M	R308LT1-5
BS EN ISO 17633-B	TS308L-RI1

ASME IX QUALIFICATION

QW432	F-No 6
QW442	A-No 6

CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu
Min.	--	0.5	--	--	--	18.0	9.0	--	--
Max.	0.03	2.5	1.2	0.03	0.04	21.0	11.0	0.5	0.5
Typical	0.02	1.7	0.8	0.005	0.020	19.6	10.3	0.1	0.05

Typically 8FN.

ALL-WELD MECHANICAL PROPERTIES

As welded	Typical
Tensile strength (MPa)	640
0.2% proof strength (MPa)	450
Elongation (%) 4d	47

Note: In practice, mechanical properties of the root bead are assessed with the whole joint and subsequent filler.

TYPICAL OPERATING PARAMETERS

	Shielding	Current	Diameter (mm)	Voltage
TIG	Argon*	DC-	2.2	90A, 12V

* No back-purge is required.

Satisfactory application of Superoot 308L requires the use of a keyhole welding technique. Further details are available on request.

PACKAGING DATA

Diameter (mm)	**2.2**
TIG	1 kg tube

FUME DATA

Fume composition (wt%)

Fe	Mn	Ni	Cr^3	Mo	Cu	F	OES (mg/m3)
32	12	8	16	<0.5	< 0.5	--	3.1

SUPEROOT 316L

FLUX CORED TIG WIRE FOR ROOT WELDS WITHOUT BACK PURGE

PRODUCT DESCRIPTION

Flux cored TIG wire Superoot 316L is made with a seamless austenitic stainless steel sheath, which results in a robust moisture resistant wire and rutile flux system. Superoot 316L is designed specifically for situations where it is impractical to apply back-purge for the TIG root run, or to gain the economic benefit of eliminating back-purge. For most applications, the use of a 316L root bead is considered compatible with subsequent filling with 308L, 347 or 316L as appropriate.
Metal recovery is 90% with respect to the whole wire.

SPECIFICATIONS

AWS A5.22M	R316LT1-5
BS EN ISO 17633-B	TS316L-RI1

ASME IX QUALIFICATION

QW432	F-No 6
QW442	A-No 8

CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu
Min.	--	1.0	0.2	--	--	17.0	11.0	2.0	--
Max.	0.03	2.0	1.0	0.025	0.03	20.0	14.0	3.0	0.5
Typical	0.01	1.6	0.8	0.005	0.020	19.2	12.5	2.2	0.05

Typically 5FN.

ALL-WELD MECHANICAL PROPERTIES

As welded	Typical
Tensile strength (MPa)	605
0.2% proof strength (MPa)	450
Elongation (%) 4d	38

Note: In practice, mechanical properties of the root bead are assessed with the whole joint and subsequent filler.

TYPICAL OPERATING PARAMETERS

	Shielding	Current	Diameter (mm)	Voltage
TIG	Argon*	DC-	2.2	90A, 12V

* No back-purge is required.
Satisfactory application of Superoot 316L requires the use of a keyhole welding technique. Further details are available on request.

PACKAGING DATA

Diameter (mm)	2.2
TIG	1 kg tube

FUME DATA

Fume composition (wt%)

Fe	Mn	Ni	Cr^3	Cu	F	OES (mg/m3)	OES (mg/m^3)
30	12	11	15	< 0.5	--	3.3	3.1