SUPERCORE 308L & SUPERCORE 308L P

FCAW

RUTILE FLUX CORED WIRES

PRODUCT DESCRIPTION

Flux cored wires – the wires are made with an austenitic stainless steel sheath and rutile flux system. **Supercore 308L** combines easy operability, high deposit quality and exceptional weld bead appearance for downhand and HV welding. **Supercore 308LP** is designed for all-positional welding including fixed pipework.

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

The Supercore 308L wire is not suitable for applications requiring PWHT or solution annealing – for these applications, it is recommended that Supercore 308LP is used.

CLASSIFICATIONS

	Supercore 308L	Supercore 308LP
AWS A5.22M	E308LT0-1/4	E308LT1-1/4
ISO 17633-A	T 19 9 L R C/M 3	T 19 9 L R C/M 2
ISO 17633-B	TS 308L-F C1/M21 0	TS 308L-F C1/M211
Approvals	TÜV, DNV, LRS	TÜV

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	FN
Min.	--	0.5	0.2	--	--	18.5	9.0	--	--	3
Max.	0.04	2.0	1.0	0.025	0.030	20.5	11.0	0.3	0.3	12
Typical	0.03	1.3	0.7	0.02	0.02	19.5	10	0.1	0.1	8

ALL-WELD MECHANICAL PROPERTIES

As welded		Min.	Typical
Tensile strength (MPa)		520	560
0.2% proof strength (MPa)		320	400
Elongation (%)	4d	35	43
	5d	30	42
Reduction of area (%)		--	60
Impact ISO-V(J)	+20°C	--	80
	-110°C	--	40
Hardness (HV)		--	200

OPERATING PARAMETERS

Shielding gas: 80%Ar-20%CO_2 or 100% CO_2 at 20-25l/min. Proprietary gases may be used but argon should not exceed 85%.

Current: DC+ve ranges as below for Ar-20%CO_2. Welding with 100%CO_2 requires approx 3V higher:

Diameter (mm)	amp-volt range	typical	stickout
1.2	120 – 280A, 22 – 34V	180A, 29V	15 – 20mm
1.2P	120 – 250A, 22 – 32V	150A, 25V	15 – 20mm
1.6	200 – 350A, 26 – 36V	250A, 30V	15 – 25mm

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
1.2	15	S300	SC308L-12
1.2	15	S300	SC308LP-12
1.6	15	S300	SC308L-16

FUME DATA (WT % TYPICAL)

Fe	Mn	Ni	Cr^3	Cr^6	Cu	F	OES (mg/m^3)
12	6	1	7	1	<1	12	1