Technical data sheet 011121MBA	Cored welding wire # TUBE S 318L-S	Welding Alloys

CLASSIFICATION

ASME IIC SFA 5.22 / AWS A 5.22:	EC318L
ASME IIC SFA 5.9 / AWS A 5.9:	EC318L
EN ISO 17633-A:	T 19 12 3 Nb M NO 3
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Cored stainless steel wire for submerged arc welding
- 19% chromium - 12% nickel - 3% molybdenum - niobium stabilised deposit
- Enhanced productivity, improved weldability, better wetting properties compared to solid wires
- Excellent weld metal quality and X-ray soundness
- Enhanced wetting properties compared to matching solid wires
- Welding under a flux blanket eliminates the emission of toxic fumes, particularly hexavalent chromium

APPLICATIONS

TUBE S 318L-S is suitable for welding stabilised stainless steels with alloy content between 16 - 21% Cr, 6 -13% Ni and up to 3% Mo. It is also used for corrosion resistant weld overlays

Examples:

AISI	UNS	Material number	EN Symbol
316Ti	S31635	1.4571	X6 CrNiMoTi 17-12-2
316Cb	S31640	1.4580	X6 CrNiMoNb 17-12-2
318	S31640	1.4583	X10CrNiMoNb 18-12

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	Nb	S	P
0.02	1.40	0.55	19.5	12.0	2.90	0.45	0.008	0.020

Typical ferrite level: 10 %

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
520	350	25	+20°C: 47

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2%[MPa]	A_5 [%]	CVN [J]
620	480	32	+20°C: 60

FLUX DESCRIPTION

	WA FLUX 325	WA FLUX 385	WA FLUX 415	WA ULTRAFLUX
EN ISO 14174 class	S A AB 1 65	S A AF 2 64	S A FB 1 55	S A FB 1 55

PACKAGING

Diameter	2.0 mm - 3.2 mm
Standard packaging	EN ISO 544 - ASME IIC SFA-5.2 M
	Coil: B450
Weight	25 kg

Other packaging and other diameters: please consult us