Technical data sheet 011121MBA	Cored welding wire # TUBE S D750-G	Welding Alloys

CLASSIFICATION

ASME IIC SFA 5.22 / AWS A 5.22:	EC2594
ASME IIC SFA 5.9 / AWS A 5.9:	EC2594
EN ISO 17633-A:	T 25 9 4 N L M I1 1
EN ISO 17633-B:	TS2594-M I1 1
UNS Number:	S32750
Equivalent Material Number:	1.4410
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Metal cored super duplex stainless steel wire for gas shielded arc welding
- 25% chromium - 10% nickel - 4% molybdenum - low carbon - high nitrogen bearing deposit
- Enhanced productivity, improved weldability, better wetting properties compared to solid wires
- Excellent weld metal quality and X-ray soundness
- Nitrogen free classical shielding gases are used for welding

APPLICATIONS

Welding wrought, forged or cast super duplex stainless steels for service in the as-welded condition.
Heterogeneous welding between super duplex stainless steels and other stainless and mild or low alloyed steels.

Examples:

UNS	Material number	EN Symbol
S32520	1.4507	X2 CrNiMoCuN 25-6-3
S32550	1.4507	X2 CrNiMoCuN 25-6-3
S32750	1.4410	X2 CrNiMoN 25-7-4
S39274, S39277, S39553		
	1.4468	GX2 CrNiMoN 25-6-3
	1.4515	GX2 CrNiMoCuN 26-6-3
	1.4517	GX2 CrNiMoCuN 25-6-3-3
S32760	1.4501	X2 CrNiMoCuWN 25-7-4

TYPICAL ALL-WELD METAL ANALYSIS (Argon shielding)

C	Mn	Si	Cr	Ni	Mo	N	S	P
0.025	1.00	0.80	25.2	9.50	3.90	0.28	0.008	0.015

Typical ferrite level: 45 FN

PRE_N = Cr + 3.3 Mo + 16 N ≥ 40

MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2%[MPa]	A_5 %	CVN [J]
760	550	20	+ 20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2%[MPa]	A_5 %	CVN [J]
870	730	28	+ 20°C : 55

SHIELDING GAS

EN ISO 14175 :	I1	Ar
	M12	Ar + 1 - 3% CO_2
		Ar + 10 - 30 % He + 0.5 - 2 % CO_2

OPERATING CONDITIONS

Current type	Gas flow rate	Stick out	Recovery
DC (+) / pulsed	10 - 20 l/min.	12 - 25 mm	98 %

WELDING POSITIONS

EN ISO 6947: PA, PB.
ASME IX: 1G, 1F, 2F.

TUBE S D 750-G is primarily used in the flat and horizontal positions. However, welds in other positions are also possible using the short-circuiting or pulsed arc modes of transfer.

PACKAGING

Diameter	1.2 mm		1.6 mm
	EN ISO 544 – ASME IIC SFA-5.2 M		
Spool type	S200	BS300	BS300
Weight	5 kg	15 kg	15 kg

Other packaging and other diameters: please consult us