Technical data sheet 011121MBA	Stainless steel filler metal – Solid wire # WA TSS/MSS 308LSi	Welding Alloys

CLASSIFICATION

ASME IIC SFA 5.9 / AWS A 5.9:	ER308LSi
EN ISO 14343-A:	W 19 9 L Si / G 19 9 L Si
EN ISO 14343-B:	SS308LSi
Equivalent material number:	1.4316
UNS Number:	S30883
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

The low silicon grade (Si ≤ 0.65 %) is available on request

DESCRIPTION

- GTAW rod / GMAW stainless steel solid wire
- 19% chromium - 9% nickel - low carbon deposit
- Higher silicon content improves wetting

APPLICATIONS

WA TSS/MSS 308LSi are suitable for welding stainless steels with an alloy content between 16 to 21% Cr and 8 to 13% Ni, stabilised or not.

Examples:

AISI	UNS	Material number	EN Symbol
302	S30200	1.4300	X12 CrNi 18 8
304	S30400	1.4301	X5 CrNi 18-10
304L	S30403	1.4306	X2 CrNi 19-11
304LN	S30453	1.4311	X2 CrNiN 18-10
305	J92701	1.4312	GX10 CrNi 18-8
308	S30800	1.4303	X4 CrNi 18-12
321	S32100	1.4541	X6 CrNiTi 18-10
347	S34700	1.4550	X6 CrNiNb 18-10

TYPICAL WIRE ANALYSIS (weight %)

C	Mn	Si	Cr	Ni
0.010	1.60	0.50	20	10

All-weld metal typical ferrite level: 5 FN

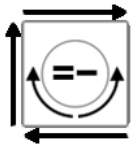
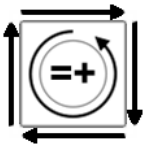
MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A_5 [%]	CVN [J]
510	320	30	-196°C: 32

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2%[MPa]	A_5 [%]	CVN [J]
600	420	37	- 196°C: 40

SHIELDING GAS – OPERATING CONDITIONS – WELDING POSITIONS

GTAW		GMAW	
Shielding gas according to EN ISO 14175	Welding positions Current type	Shielding gas according to EN ISO 14175	Welding positions Current type
I1 (100 % argon)		M12 mixed gas (Ar + 0.5-2.5% CO_2) M13 mixed gas (Ar + 0.5-3% O_2)	

PACKAGING

Spools	Ø mm	0.8	1.0	1.2	1.6
Rods	Ø x1000 mm	1.6	2.0	2.4	3.2

Other diameters are available on request