

Technical data sheet <small>011121MBA</small>	Stainless steel filler metal – Solid wire WA TSS/MSS 308L	
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CLASSIFICATION

ASME IIC SFA 5.9 / AWS A 5.9:	ER308L
EN ISO 14343-A:	G 19 9 L / W 19 9 L
UNS Number:	S30883
Equivalent Material number:	1.4316
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- Solid GTAW rod / GMAW solid wire for welding austenitic Cr-Ni-Mo stainless steels
- 19% chromium - 9% nickel - low carbon deposit

APPLICATIONS

WA TSS/MSS 308L is 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 (% by weight)

C	Mn	Si	Cr	Ni	Mo
0.010	1.60	0.50	20	10	0.1

All-weld metal typical ferrite level: 5 FN

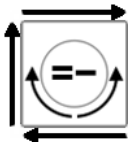
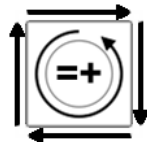
MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

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

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
600	420	35	-196°C: 60

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

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.