

Technical data sheet <small>011121MBA</small>	Stainless steel filler metal – Solid wire WA TSS/MSS 347Si	
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CLASSIFICATION

ASME IIC SFA 5.9 / AWS A 5.9:	ER347Si
EN ISO 14343-A:	W 19 9 Nb Si / G 19 9 Nb Si
EN ISO 14343-B:	SS347Si
Equivalent material number:	1.4551
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 - niobium stabilised - low carbon deposit
- Higher silicon content improves wetting

APPLICATIONS

WA TSS/MSS 347Si are suitable for welding stabilised stainless steels containing 16 to 21% Cr and 8 to 13% Ni

Examples:

AISI	UNS	Material number	EN Symbol
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	Nb	S	P
0.04	1.3	0.8	19.2	9.8	0.6	0.005	0.020

Typical ferrite level: 6 FN

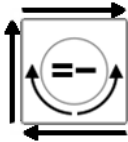
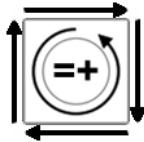
MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
550	350	30	+20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
640	430	35	+20°C: 100

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.