

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

ASME IIC SFA 5.9 / AWS A 5.9:	ER308H
EN ISO 14343-A:	W 19 9 H / G 19 9 H
EN ISO 14343-B:	SS308H
Equivalent material number:	1.4302
ASME IX Qualification	QW432 F-N° 6 QW442 A-N° 8

DESCRIPTION

- GTAW rod / GMAW stainless steel solid wire
- 19% chromium - 9% nickel with controlled carbon to 0.04-0.08%
- For service temperatures up to 750°C
- Highly resistant to sigma-phase embrittlement

APPLICATIONS

WA TSS/MSS 308H are suitable for welding heat and creep resisting austenitic steels such as 304H and derivatives that operate at temperatures up to 750°C.

Examples:

AISI	UNS	Material number	EN Symbol
304H	S30409	1.4948	X6 CrNi 18-11
321H	S32109	1.4941	X8 CrNiTi 18-10
347H	S34709	1.4961	X8 CrNiNb 16-13

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.06	1.80	0.4	20.0	9.6	0.1	0.1	0.008	0.020

Typical ferrite level: 5 FN


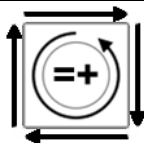
MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
550	320	35	+20°C: 40

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Rm [MPa]	Rp0.2% [MPa]	As [%]	CVN [J]
630	460	40	+20°C: 90

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.