

<b>Technical data sheet</b>  <small>011121MBA</small>	<b>Stainless steel filler metal – Solid wire</b>  <b>WA TSS/MSS 309LSi</b>	
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### CLASSIFICATION

ASME IIC SFA 5.9 / AWS A 5.9:	ER309LSi
EN ISO 14343-A:	W 23 12 L Si / G 23 12 L Si
EN ISO 14343-B:	SS309LSi
Equivalent material number:	1.4332
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
- 23% chromium - 12% nickel - low carbon deposit
- Higher silicon content improves wetting

### APPLICATIONS

WA TSS/MSS 309LSi are:

- Suitable for cladding carbon and low alloy steels.
- Designed for dissimilar welds between stainless steels type 304, 304L, 316, 316L, 318, 316Ti, 321, 410 or ferritic stainless steels type 1.4713, 1.4724, 1.4742, 3Cr12, to non or low alloyed CMn steels, for service temperatures up to 400°C.

#### Examples:

ISO/TR 15608: Groups 1, 2, 3 and 4 to groups 7, 8 and 10.  
Group 7 to groups 8 and 10.

### TYPICAL WIRE ANALYSIS (weight %)

C	Mn	Si	Cr	Ni	S	P
0.02	1.80	0.90	23.3	13.0	0.008	0.015

Typical ferrite level: 20 FN

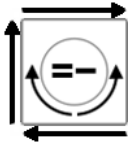
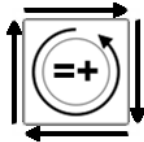
### MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A <sub>5</sub> [%]	CVN [J]
520	320	25	+ 20°C: 40

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES (GMAW)

Rm [MPa]	Rp0.2% [MPa]	A <sub>5</sub> [%]	CVN [J]
600	430	32	+ 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 + 0.5-5% CO <sub>2</sub> ) M13 mixed gas (Ar + 0.5-3% O <sub>2</sub> )	

### 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.