

AI-1708LSi

Specifications

AS/NZS 2717.3 : E308LSi

AWS/ASME A5.9 ER308LSi

Description and Applications

Stainless; resistant to intercrystalline corrosion and wet corrosion up to 350°C. Corrosion-resistant similar to matching low-carbon and stabilized austenitic 18/8 CrNi(N) steels/cast steel grades. Cold toughness at subzero temperatures as low as -196°C. For joining and surfacing applications with matching and similar – stabilized and non-stabilized-austenitic CrNi(N) and CrNiMo(N) steel grades.

AI-1708LSi is Austenite with part ferrite.

Applications: For joining and surfacing work on cryogenic matching/similar austenitic CrNi(N) steel/cast steel grades.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Fe	Ni
0.02	1.7	0.9	20.0	Bal	10.0

Mechanical Properties of Weldmetal ACCORDING TO EN ISO 15792-1 (min. values at RT)

	As Welded
Yield Strength	350 at 0.2% MPa 370 at 1.0% MPa
Tensile Strength	570 MPa
Elongation(L ₀ 5d ₀)	350%
Impact values in J CVN	75
	-196°C 35
Shielding Gas	98% Ar + 2% O₂ or Ar 100%

Welding Instructions

Materials	Preheating	Postweld treatment
Matching and similar non-stabilized and stabilized austenitic CrNi(N) steels/cast steel grades	None	Mostly none. If necessary, solution annealing at 1000°C
Cryogenic austenitic steels/cast steel grades	None	None

Welding Parameters

Diameter (mm)	Current type	Amps
1.2	DC(+)	150-220
1.6	DC(+)	180-300



Welding Positions

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position

Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy.

All figures subject to change without notice. Batch analysis is available for all products sold. Should you require any further information, please contact us at sales@alloysint.com.au

