

AI-1708

Specifications

AS/NZS 2717.3 : E308LSi

AWS/ASME A5.9 ER308Si

Description and Applications

AI-1708 is a premium alloy cored tool steel wire designed for **hardfacing of tools operating in working temperature range of up to 500-550°C**.

It is ideal for hardfacing components subjected to thermal shocks, mechanical stresses and adhesive (metal-to-metal) wear.

Applications include: Shear blades, hot punches, hot extrusion dies, mill guides, moulds, camshafts, cable sheaves, sliding metal parts and similar applications.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Fe	W	V
0.08	0.9	0.3	2.25	Bal	3.7	0.6

Mechanical Properties of Weldmetal

	As Welded
Microstructure	Martensite
Machineability	Good with tungsten carbide tools
Hardness Undiluted	40 HRc
Shielding Gas	Ar 98% + 2% O₂ or Ar 100%

Welding Instructions

NOTE: This alloy cannot be cut with oxyacetylene.

As welded in 3 layers with an interpass temperature of 250°C hardness is 37 – 40 HRc

After tempering for 2 hours at 500°C hardness is 40- 43 HRc.

After softening at 750 – 800°C for 2 – 4 hours hardness is 25 HRc

After austenitisation at 1000–1050°C followed by oil quench is 38 HRc.

Welding Parameters

Diameter (mm)	Current type	Amps
1.2	DC/AC	150-220
1.6*	DC/AC	180-300

*By request only

Also available as Coated Electrodes **AI-0508**

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



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