

AI-0207T

Specifications

AWS/ASME A5.4: ER 307-16 (mod)

EN ISO 3851-A: ER Z18 9 MnMo R 3 2

Description and Applications

AI-0207T is an austenitic high recovery, rutile coated electrode for welding 14% Mn steels, armour steels, hardfaced wear plate, hardening steels, and generally all difficult to weld steels. Use **AI-0207T** for welding and surfacing of rails, depositing 1st layer before hardfacing on 14% Mn steels or on steels with unknown composition. Good for applications with high impact or shock loading. Suitable for strain-hardening, very good cavitation resistance, crack resistant, resistant to thermal shock, resistant to scaling up to +850°C. Heat treatment is possible.

Exceptional toughness of the weld metal even at high dilution levels with hard-to-weld steels or when subject to thermal shock. Cryogenic down to -100°C.

Typical Weldmetal Analysis

C	Si	Mn	Cr	Fe	Ni	Mo
0.08	0.8	6.5	19.5	Bal	9.0	0.7

Mechanical Properties of Weldmetal

	As Welded
Tensile Strength	720MPa
Yield Strength (0.2%)	520Mpa
Elongation	>38% (4d)
Recovery	160%
Hardness	200HB as welded 500HB after work hardening
Charpy Impact	90J @ 20°C

Welding Instructions

Clean weld area thoroughly. Thick walled, ferritic elements have to be preheated to approximately 150 – 250 °C

Welding Parameters

Rod Diameter (mm)	Current Type	Shielding Gas
1.6	DC (-)	I 1
2.4	DC (-)	I 1

Also available as Electrodes in 2.5, 3.2, 4.0, 5.0mm and MIG wire: **AI-1707** gas-shielded or flux cored

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

