AI-1505

Specifications

AS/NZS 2576-1215-B7
AWS/ASME IIC SFA 5.21 : FeMn-Cr
DIN 8555: MF 7-GF-200-KP

Description and Applications

AI-1505 is an open arc surfacing and joining wire used extensively as a buffer layer or build-up on 14% manganese (Hadfield) steel, carbon and other steels prior to hardfacing. It is also extensively used for joining manganese steel to itself or to dissimilar steels. By way of its high chromium content, **AI-1505** is suitable for one-wire hardfacing where work hardening can be expected.

Applications include: Rebuilding of railway frogs and crossovers, railway lines, shovel track pads, and all types of crushers, hammers, manganese steel components, bucket repair and hardfacing, ball mill liners, many earthmoving, quarrying and mining areas.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Fe
0.50	16.00	0.30	13.00	Bal

Mechanical Properties of Weldmetal

	As Welded
Tensile Strength	860 MPa
Yield Strength (0.2%)	580 MPa
Elongation	37%
Microstructure	Austenite
Hardness	210 HRb (15 HRc)
	450 HRb (48 HRc) Work Hardened

Welding Parameters

Wire Dia	Polarity	Current (Amps)	Stickout (mm)
1.2 mm	DC(+)	120-180	30-35
1.6 mm	DC(+)	180-300	30-35
2.4 mm	DC(+)	250-300	30-35

Welding Positions

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

ISO 9001 BUREAU VERITAS Certification

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