

# TECHNICAL DATASHEET Version S19

# AI-1620

#### **Specifications**

**AS/NZS** 2576-1982, 1645-B1, B7, B5 AWRA (TN4), 1645-B1, B7, B5

# **Description and Applications**

**AI-1620** is specially produced for sub-arc applications where an alloy depositing a martensitic steel containing 13% Cr is required. It is a cored wire used for hardfacing and reclaiming components subject to moderate corrosion and metal-to-metal wear.

**Al-1620** also has excellent gouging and abrasion resistant properties. The weld deposit is a tough, hard Martensitic steel alloy. It has an attractive combination of excellent corrosion, oxidation/scaling and wear resistance. The weld deposit is machinable with Carbide tools.

Al 1620 is used as a cladding alloy on many types of steel industry rolling mill rolls such as table rolls, pinch rolls, scale breaker rolls, coiler rolls, leveller rolls and runout table rolls.

Other applications for this alloy are dragline rope sheaves, dragline rope drums, hydraulic plungers, brake drums, certain types of valve seats, pulp rotors and vanes and crane wheels.

Although this alloy has a good crack resistance, pre-heat prior to welding and slow cooling after welding is often essential.

# **Welding Flux**

Use of a basic flux is recommended: AI-16 Record 605

#### **Typical Weldmetal Analysis**

С	Mn	Si	Cr
0.25	1.35	0.35	13.0

# **Mechanical Properties of Weldmetal**

Hardness (two layers)

	As welded	500°C	525°C	550°C	575°C	600°C
AI-1620SA	53HRc	46HRc	40HRc	37HRc	31HRc	28HRc

#### **Welding Parameters**

Diameter	Current type	Amps	Stick-out
(mm)			
2.4	DC +ve	280-350	30-35
2.8	DC +ve	325-400	30-35
3.2	DC +ve	325-450	30-35
4.0	DC +ve	400-450	30-35

#### 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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