

TECHNICAL DATASHEET Version S19

# AI-1545

**Specifications DIN** 8555 EN 14700 MF 10-70-GZ T Fe 16-70-GZ

# **Description and Applications**

**AI-1545** is a complex chromium carbide open arc wire. It has an austenitic matrix with complex carbides of different types: chromium rich hexagonal primary carbides, complex eutectic and globular niobium rich carbides.

**Deposit thickness:** Max. 8.0 mm in 2 or 3 layers. The deposit will self check readily. The alloy is designed to resist severe high stress abrasion with very low impact at high temperature (up to 650°C).

**Applications include**: sinter plant parts, greenawalt crushers, smelter ladle overlays, exhaust fan blades in pellet plants and sugar cane industry, pearlite crushers, bucket teeth and lips on bucket wheel excavators in the phosphate mines, chutes in blast furnace bell, blast furnace bell burden area.

## **Typical Weldmetal Analysis**

С	Mn	Si	Cr	V	Nb	W	Мо
5.50	1.00-2.00	<1.50	22.00	1.00	6.00-7.00	2.00-3.00	5.00-6.00

# **Mechanical Properties of Weldmetal**

	As Welded
Abrasion Resistance	Exceptional
Impact Resistance	Poor
Deposit Efficiency	87%
Hardness	20°C 62 HRc
	550°C 54 HRc
	600°C 50 HRc
Wear Index	0.2%
Machineability	Grinding

### **Welding Parameters**

Diameter (mm)	Current type	Amps	Stick-out
1.6	DC/AC	180-200	30-35
2.4	DC/AC	250-300	30-35
2.4	DC/AC	250-300	30-35

Also available as Coated Electrode AI-0545

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#### **Welding Positions**

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position, (4F) Horizontal overhead position, (4G) Overhead position, (3G, 3F, 5G up) Vertical Position Up & (3G, 3F, 5G down) Vertical position down

#### 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 <u>sales@alloysint.com.au</u>



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