

## Technical data sheet

EN131025GB

# Thermal spraying cored wire HARDSPRAY NI AI5-TS



### CLASSIFICATION

EN ISO 14919: 6.5 - 1.6 - 4

### DESCRIPTION

- Metal cored wire specifically designed for thermal spraying by using wire arc spray process
- Ni-Al alloy wire dedicated to bonding layer
- Excellent bonding properties that self-bond to most metallic substrates even with minimal surface preparation
- Good wear and corrosion resistant protective coatings
- Highly compact deposit
- High deposition rate

### APPLICATIONS

HARDSPRAY NI AI5-TS is mainly used for thermal spraying bonding of parts subject to wear and corrosion at high temperature

#### Examples:

Waste to energy boiler tubes, gas turbines, ceramics bonding, etc

### TYPICAL DEPOSIT ANALYSIS

Al	Ni
5	Bal.

### TYPICAL DEPOSIT PHYSICAL AND MECHANICAL PROPERTIES

As-sprayed hardness: 180 - 200 HV  
Melting point: 1450 °C  
Bond strength: 60 MPa @ 20 mils  
Coating density: 7.8 g/cm<sup>3</sup>

### TYPICAL WIRE ARC SPRAY PARAMETERS (1.6 mm wire)

Arc load voltage: 30 V  
Intensity: 200 A  
Standoff distance: 100 mm  
Air pressure: 3.5 bar  
Spraying rate: 4.5 kg/hour  
Other parameters according to equipment

### STANDARD DIAMETERS (mm)

Diameters: 1.6 - 2.0 - 2.4 - 2.8 - 3.2 mm  
Other diameters: please consult us

### PACKAGING

Diameter	1.6 - 2.4 mm	2.4 - 3.2 mm
Spool type	BS 300	B 450
Weight	15 kg	25 kg

Other packaging: please consult us