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| Technical data sheet EN130624GB | <p style="text-align: center;">Thermal spraying cored wire</p> <h2 style="text-align: center;">HARDSPRAY HB4-TS</h2> |  Welding Alloys |
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CLASSIFICATION

EN ISO 14919: 5 - 1.6 - 4

DESCRIPTION

- Metal cored wire specifically designed for thermal spraying by using arc wire spray process
- Fe-Cr-B-Si alloy with high percentage of complex amorphous phases
- Produces a hard coating exhibiting resistance to abrasion and corrosion, thermal resistant
- Low coefficient of friction, easy to polish to obtain a high chrome like finishing after grinding
- Excellent bonding properties
- Highly compact deposit
- High deposition rate

APPLICATIONS

HARDSPRAY HB4-TS is mainly used for thermal spraying of parts subject to erosion, in gaseous environment, at high temperature up to 850 °C

Examples:

Fans, tubes and water walls of boilers, cyclones, steam turbines casings, feeding systems in the chemical industry, casing, plungers, shafts, etc.

TYPICAL DEPOSIT ANALYSIS

| C | Cr | B | Fe |
|-----|------|-----|------|
| 0.1 | 29.0 | 3.8 | Bal. |

TYPICAL DEPOSIT PHYSICAL AND MECHANICAL PROPERTIES

As-sprayed hardness: Matrix: 450 - 590 HV / (45 - 55 HRC)

Carbides: 1200 - 1600 HV_{0.1}

Melting point: 1200 °C

Bond strength: 40 MPa @ 20 mils

Coating density: 6.7 g/cm³

TYPICAL ARC WIRE SPRAY PARAMETERS (1.6 mm wire)

Arc load voltage: 33 V

Current intensity: 150 A

Standoff distance: 100 mm

Air pressure: 3.5 bar

Spraying rate: 3.5 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

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.