Technical data sheet EN130624GB	Thermal spraying cored wire **HARDSPRAY NI WC-TS**	Welding Alloys

CLASSIFICATION

EN ISO 14919: 6 - 1.6 - 4

DESCRIPTION

- Metal cored wire specifically designed for thermal spraying by using arc wire spray process
- Ni-B-Si matrix containing tungsten carbide particles
- Outstanding extreme abrasion resistance coating, even in corrosive environments
- Excellent bonding properties
- Highly compact deposit
- High deposition rate

APPLICATIONS

HARDSPRAY NI WC-TS is mainly used for high abrasion resistance on highly wear loaded surfaces

Examples:
Cutting edges, feeding screws, hammers, dredging parts, ect.

TYPICAL DEPOSIT ANALYSIS

C	Si	B	WC	Ni
0.4	5.0	2.0	62	Bal.

TYPICAL DEPOSIT PHYSICAL AND MECHANICAL PROPERTIES

As-sprayed hardness:	Matrix: 450 - 590 HV / (45 - 55 HRC) Carbides: 2200 - 2800 $HV_{0.1}$
Melting point:	1100 °C
Bond strength:	40 MPa @ 20 mils
Coating density:	11.0 g/cm^3

TYPICAL ARC WIRE SPRAY PARAMETERS (1.6 mm wire)

Arc load voltage:	31 V
Current intensity:	150 A
Standoff distance:	100 mm
Air pressure:	3.5 bar
Spraying rate:	4.0 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