

## FR92®

### FTC Hardfacing Cord

The BMI FR92® flexible hardfacing wire is a continuous electrode composed of a nickel core wire, coated with a thick layer. This coating consists of a nickel-based alloy matrix (NiCrBSi), in which spherical tungsten carbide grains (SFTC – WC or WC2) of various sizes are integrated.

These grains provide improved abrasion resistance compared to crushed tungsten carbide.

### PROPERTIES & APPLICATIONS

During deposition, the nickel-based powder matrix and the nickel core wire fuse like a brazing material, encapsulating the tungsten carbide grains to form a compact coating that is strongly bonded to the base material.

The BMI FR92® flexible hardfacing wire can be used on all types of base materials, including non-martensitic steels. It can be applied in successive layers when thicker deposits are needed.

This wire has been specifically developed for the manufacturing of new parts as well as the repair of worn parts in various industries facing abrasion issues.

**Main Applications :** *Mixing screws and blades, grinding and crushing tools, scraper blades, teeth, buckets, grapples, drilling screws, grinding discs, and augers.*

### CHEMICAL COMPOSITION

#### Nickel Core Ø1 mm

Ni	Fe	Mn
99.5	0.25	0.25

#### Matrix – Nickel-Based Alloy (42 at 47%)

B	Fe	Cr	Si	Ni
1 à 2	2 à 3	6 à 10	2 à 5	Balance

#### Tungsten Carbide (53 at 58 %)

W	C	Fe
95 à 96	3.7 à 4	0.5

#### Groupe BMI

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## GRANULOMETRY

Item Code	BMI-W-FR-9205			BMI-W-FR-9208			
Secondary Granulometry	45-150 $\mu$			45-420 $\mu$			
Primary Granulometry	250-420 $\mu$			420-840 $\mu$			
Diameter (mm)	5	6.5	5	6.5	5	6.5	5
Weight (Kg/m)	0.14	0.22	0.14	0.22	0.14	0.22	0.14

## PACKAGING

Plastic Spools of 10, 15, and 20 kg