

FR82®

FTC Hardfacing Cord

The **BMI FR82® 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 **melted and crushed tungsten carbide grains** (FTC – WC or WC2) of various sizes are incorporated.

PROPERTIES & APPLICATIONS

During deposition, the nickel-based powder matrix and 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 FR82® 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 required.

This hardfacing wire has been specifically developed for manufacturing new parts and repairing worn parts in various industries facing abrasion issues.

Main Applications : *This hardfacing wire is particularly suitable for 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 (39 at 44%)

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

Tungsten Carbide (56 at 61%)

| W | C | Fe |
|---------|---------|-----|
| 95 à 96 | 3.7 à 4 | 0.5 |

Groupe BMI

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GRANULOMETRY

| Item Code | BMI-W-FR-8205 | | | BMI-W-FR-8208 | | | BMI-W-FR-8212 | | | BMI-W-FR-8220 | | |
|------------------------|---------------|------|------|---------------|------|------|----------------|------|------|-----------------|------|------|
| Secondary Granulometry | | | | 105-450 μ | | | 105-800 μ | | | 105-1200 μ | | |
| Primary Granulometry | 150-450 μ | | | 450-800 μ | | | 800-1200 μ | | | 1200-2200 μ | | |
| Diameter (mm) | 5 | 6.5 | 8 | 5 | 6.5 | 8 | 5 | 6.5 | 8 | 5 | 6.5 | 8 |
| Weight (Kg/m) | 0.14 | 0.22 | 0.32 | 0.14 | 0.22 | 0.32 | 0.14 | 0.22 | 0.32 | 0.14 | 0.22 | 0.32 |

PACKAGING

Plastic Spools of 10, 15, and 20 kg