DATASHEET

16/12/2024 V1

FCW60WC ®

Cored welding wire

The **BMI FCW60WC® hardfacing cored wire** is a flux-core wire composed of powders, encased in a metallic sheath, designed for **welding hardfacing under Ar+CO_2 gas shielding**.

This **cored wire**, with a **high tungsten carbide content (50 to 60% depending on the diameter)**, has a specially engineered chemical composition to provide **excellent abrasion resistance** in the deposited material.

APPLICATIONS

The **Ni-Cr-B-Si matrix**, with **high toughness**, combined with a **high tungsten carbide content** (hardness of **2300 HV**), provides the deposit with **exceptional abrasion resistance**.

Additionally, the deposit offers **excellent corrosion resistance**.

Main applications : *Drilling augers, crushers, parts for the clay industry, earthmoving equipment, rubber mixers, and, more generally, all components subjected to severe abrasion in the mining, steel, and public works sectors.*

TYPICAL MECHANICAL PROPERTIES

Ni-Cr-B-Si Matrix	Tungsten Carbide
~ 500-600 HV	~ 2300HV

OPERATING CONDITIONS

Cored Wire Ø	1.6	2.4	2.8
Current (A) DC (+)	120-180	220-280	240-300

CONDITIONS OF USE

Select **high-strength base materials**. The welding surfaces must be **perfectly clean**, free from rust, oil, or any other contamination.

Use **low heat input** to prevent the fusion and degradation of tungsten carbides.

Welding should be performed **exclusively in the flat position**, with the possibility of applying **two layers while maintaining a low level of cracking**.

PACKAGING

15 Kg & 25 Kg Spools

Groupe BMI
28 Rue de la Mairie Le Puiset-Doré
49600 Montrevault-sur-Evre (FR)

Contact Details
+33 (0)2 41 75 69 00
contact@marybmi.com