

FCW65-450®

Cored welding wire

The BMI FCW65-450® hardfacing cored wire consists of a flux-core powder encased in a metallic sheath, designed for open-arc welding (without gas shielding or slag).

Its composition has been specially developed to provide exceptional abrasion resistance, combined with good impact resistance, even under high service temperatures (up to 450°C).

APPLICATIONS

Thanks to its **high carbon (C), chromium (Cr), and niobium (Nb) content**, the deposited material provides **superior abrasion resistance** compared to conventional chromium-based cast iron electrodes.

The **BMI FCW65-450® cored wire** is designed to be applied in a **maximum of three layers**. It ensures **homogeneous fusion, good metal spread, no slag formation, and a very smooth bead**. The formation of cracks in the deposited metal is **normal for this type of product and does not affect its service performance**. The deposit can be **machined by grinding or finishing**.

These electrodes have been **specifically developed for parts exposed to temperatures up to 450°C**, subjected to **low to moderate impacts**, where **exceptional abrasion resistance** is required.

Main applications : Design of high-performance composite parts, such as overlay plates, grinding and mineral conveying components, dredging pumps, mixers, screen plates, chutes, troughs, conveyor screws, knives, blades, hoppers, and tanks.

TYPICAL CHEMICAL COMPOSITION WELD METAL

C	Mn	Si	Cr	Nb
4.6	0.2	1.7	22.8	5.9

TYPICAL MECHANICAL PROPERTIES

Hardness 1st Layer	Hardness 2nd Layer
~ 58 HRC	~ 60-64 HRC

OPERATING CONDITIONS

Cored Wire Ø	1.6	2.4	2.8
Voltage (V)	25-32	28-32	28-32
Current (A)	150-250	200-300	280-380

PACKAGING

15 Kg & 25 Kg Spools

Groupe BMI

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