DATASHEET

16/12/2024 V1

FCW70NANO®

Cored welding wire

The **FCW70NANO cored wire** is designed for **hardfacing welding** under **gas-shielded or self-shielded arc welding**.

The deposited alloy is a **complex composition** containing **Chromium (Cr), Tungsten (W), Boron (B), Niobium (Nb), and Molybdenum (Mo)**.

This deposit provides **extreme abrasion resistance** against **grinding wear under high stress and erosion**, without impact. A **high hardness of 66 to 70 HRc** is achieved from the **first layer**.

APPLICATIONS

High resistance to abrasion and erosion.

Hardness: 66 - 70 HRc.
Suitable for **single-layer deposition**, but can be applied in **two layers**.
Can be **reapplied** over existing hardfacing made with **FCW70NANO**.

Structure: Complex carbides and borides dispersed in an austenitic matrix.

The **FCW70NANO wire** is particularly suited for applications requiring **extreme abrasion resistance**, with **moderate impact** or **high temperatures up to 750°C**.

Main applications : *Excavator buckets, crushers, extrusion screws, shredders, hammers, fan blades, and sintering furnaces.*

TYPICAL CHEMICAL COMPOSITION WELD METAL

C	Mn	Si	Cr	Mo	W	Nb	B	Fe
1.1	0.6	0.7	21.5	4.1	6.7	3.6	+	Balance

TYPICAL MECHANICAL PROPERTIES

Hardness
~ 66-70 HRC

OPERATING CONDITIONS

Cored Wire Ø	1.2	1.6	2.4	2.8
Voltage (V)	21-35	24-35	26-35	28-35
Current (A)	100-300	150-350	250-450	250-450

PACKAGING

15 Kg Coils & 25 Kg Spools

Groupe BMI
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