

FCW TUF-Mn-O®

Cored welding wire

The FCW TUF-Mn-O is a self-shielded flux-cored wire designed for hard-facing applications. It provides an austenitic deposit with excellent work-hardening properties, making it ideal for components subjected to repeated impacts or high pressures.

This wire is particularly suited for environments with severe mechanical stress and can be applied to both ferritic and austenitic steels, including Hadfield manganese steel. It also serves as an excellent buffer layer before applying harder overlays, such as high-chromium alloys.

APPLICATIONS

The FCW TUF-Mn-O is formulated to extend the service life of components exposed to heavy shocks and dynamic loads. Its non-magnetic deposit hardens progressively under mechanical stress, enhancing durability over time.

Exemples d'applications : Railway frogs and crossings, hydraulic press pistons, crushing equipment subjected to heavy shock, hammers, dredge pumps and all components where a work-hardening deposit is desirable.

TYPICAL CHEMICAL COMPOSITION WELD METAL

С	Mn	Si	Cr	Fe
0.4	14	0.6	14.5	Bal.

Structure: austenite

TYPICAL MECHANICAL PROPERTIES

Recommended	Shielding Gas	Hardness (after 3-layer deposit)		
Polarity		As welded	Work-hardened	
DC+	Not required (self- shielded process)	200 - 240 HB / 20 - 25 HRc	45 – 55 HRc	

OPERATING CONDITIONS

Diameter Ø	Voltage (V)	Current (A)	Stick-out (mm)
1.6 mm	150 - 350 (270 A optimal)	24 - 35 (28 V optimal)	25 - 50 (25 mm optimal)

PACKAGING

Spool 15kg

