





Introduction

HFK 630B-O is a chromium-molybdenum-boron high-chromium cast iron surfacing welding wire.

It is suitable for the welding of workpiece surfaces that require strong wear resistance. The wire's single-layer hardness after welding is ≥ 60 HRC. The weld metal is forged and not machinable. When coating old layers, a buffer layer with HFK Mn14 is recommended. Though shielding gas is not mandatory, CO₂ should be used for best results.

Abrasion	
Impact	
Corrosion	
Heat	

Typical Applications

Used for surfacing in situations which normal and high temperature abrasion and corrosion resistance are needed. Example applications include turbine blades, screws, dredging bucket front edges, dragline buckets, pump impellers, fan blades, and mixer blades.

Chemical composition of deposited metal (%)

C	Cr	%Mo	%B	Fe
4.50-5.0	20-28.0	0.80-1.20	0.80-1.50	Balance

Mechanical Properties

Layers	Hardness (HRC)
Second Layer	60-62

Recommended welding parameters

Diameter: in (mm)	Current (A)	Voltage (V)	DC reverse connection
0.045 (1.2)	160-220	22-25	
1/16 (1.6)	200-280	22-28	

Shielding Gas	Gas Flow: cfh (l/min)	Torch angle	Stick Out: in (mm)
100% CO ₂	40 (20)	80°	1/2-3/4 (15-20)

Diameters (mm) and Packaging

Diameter: in (mm)	Packaging: lb (kg)
0.045 (1.2)	33 (15)
1/16 (1.6)	33 (15)