



KCH-60CR-O

Product Data Sheet

Self-Shielded Flux Cored Wire for Hardfacing

Specification

DIN 8555 : MF 10-GF-60-G

Applications

It is suitable for wear plates manufacturing and the repair of quarry machines, cement rolls and gyratory crusher liners

Characteristics

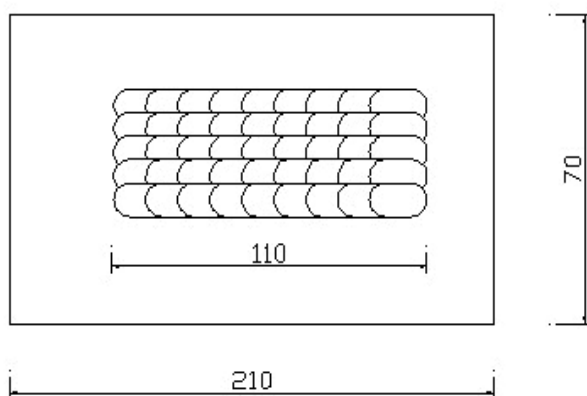
- Weld metal contains primary carbide and eutectic structure.
- The abrasion resistance is improved due to special carbides with ultrahigh hardness.
- Good weldability and almost no slag.

Note on Usage

- Weld metal is unable to be machined, but it can be ground if necessary.
- Preheat temperature is 150~250°C for carbon steel, low alloy steel or cast steel base metal.
- Use KCH-13MC-O for buffer layer.

Chemical Composition & Hardness of All Weld Metal

Specimen specification and welding parameter



Diameter (mm)	2.8
Current (A)	300
Voltage (V)	32
Interpass	
Temperature (° C)	150±15
Shielding Gas	None
Polarization	DC(+)

- **Hardness of Weld Metal**

Layer	1	2	3
Hardness (HRC)	55~58	57~60	58~62

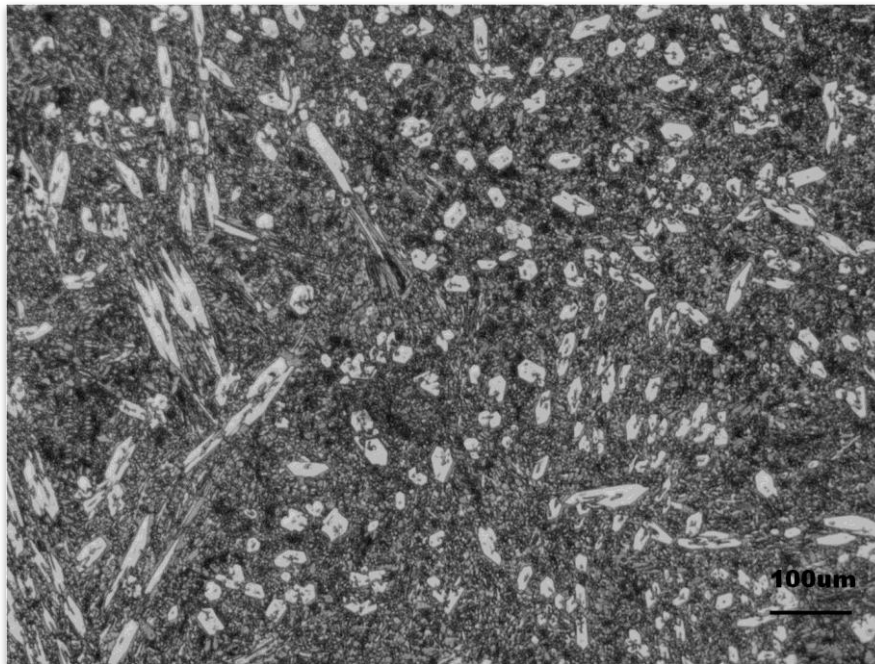
- **Chemical Composition of Weld Metal**

C	Si	Mn	P	S	Cr
4.0	1.5	1.4	0.021	0.016	25.50

Available Sizes and Suggested Operating Range

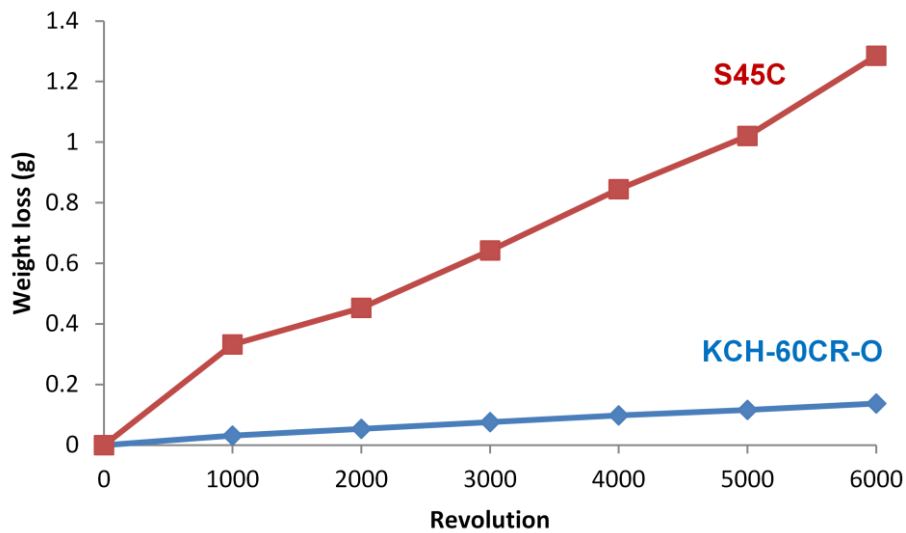
Size (mm)	Voltage (V)	Current (A)	ESO (mm)
2.8	28~33	350~400	40~60

Microstructure of all weld metal



KCH-60CR-O produces a high concentration of small primary and eutectic carbides. It results in a significant improvement in wear performance.

Wear test of hardfacing layer



According to ASTM G65A, wear resistance of KCH-60CR-O is 10 times than one of S45C.

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