

HARDFACE STEELCARB W-O

(formerly HARDFACE 60/3/D-O)



Welding Alloys Group

Products manufactured and sold
in over thirty countries worldwide

Welding Wire

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CLASSIFICATIONS

AS2576 WTIA(TN4)
3460-B7 3460-B7

PRODUCT NAME

STEELCARB W-O

WELDING PROCESS

Open Arc(Self Shielded-Gasless)

DESCRIPTION

HARDFACE STEELCARB W-O is a cored wire used for hardfacing components subject to extreme abrasion and moderate impact. The weld deposit contains hard Primary Tungsten Carbide granules in a Carbon Steel Secondary Carbide Eutectic matrix. This alloy is virtually the most abrasion resistant of all available alloys in specific applications. Primary Tungsten Carbide particles have a hardness of 2000HV. The weld deposit is non-machinable.

Relief checking is normal. Best limited to a maximum of two (2) layers.

TYPICAL APPLICATIONS

Used to protect carbide tool holders on mining machinery, drill bits, pug mill paddles and augers, mixer blades, paddles, drill collars and tool joints, dredge cutters, fan blades, muller ploughs, sand mixer blades, churn drills, post hole digger teeth, sand and gravel chutes, coal chutes, feed screws, oil industry drill stabilisers.

TYPICAL COMPOSITION

60% primary Tungsten Carbide in a plain Carbon Steel sheath.

TYPICAL HARDNESS

60 - 65 HRC
575 - 640 HB

AVAILABLE SIZES

1.6mm, 2.0mm, 2.4mm, 2.8mm

Open Arc (Self Shielded-Gasless)

Wire Diameter	Current (Amps)		Voltage (Volts)		Stick-out (mm)		Polarity
	Range	Optimum	Range	Optimum	Range	Optimum	
1.6mm	150-350	270	24-28	24	25-50	25	DC+
2.0mm	200-400	300	26-30	26	25-50	35	DC+
2.4mm	250-450	350	26-30	28	25-50	40	DC+
2.8mm	250-450	400	28-32	30	25-50	40	DC+

No gas required.

It is advisable to use welding currents which are as low as practical. This ensures that most of the Carbide particles do not melt and go into solution due to the heat generated by the arc.

Our products, and any recommended practices, should be tested by the user under actual service conditions to determine their suitability for any particular purpose. The results obtained using this product/information are affected by variables such as welding procedure, base material composition, operating temperature, weldment design, method of fabrication and service requirements which are beyond our control. It is the sole responsibility of the user to determine the serviceability of a structure using this product and the information contained in this data sheet.