

HARDFACE HC-O/S/G

Welding Wire



Welding Alloys Group
Products manufactured and sold
in over thirty countries worldwide

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CLASSIFICATIONS

AS2576-1982, 2560-B7, B1, B5
WTIA (TN4), 2560-B7, B1, B5

DESCRIPTION

Hardface HC is a cored wire used for hardfacing components subject to extreme abrasion/erosion and moderate/heavy impact. The weld deposit contains a high proportion of hard primary Chromium Carbides in a tough Martensitic-Secondary Carbide Eutectic matrix. The weld deposit is non machineable.

HC-O - Open Arc (Self Shielded - Gasless) Wire

HC-S - Submerged Arc Wire

HC-G - Gas Shielded Wire

TYPICAL APPLICATIONS

Gyratory crusher cones and mantles, catalyst pipes and valves, slurry pipes and valve bodies, dredge pump bodies, sand dredge parts, extruder screws, "barmac" crushers, mining and earthmoving equipment, blast furnace bells, brick muller tyres, sugar mill crusher hammers, drag line components, coal pulveriser rolls, Raymond rolls, coke hammers, cone knives and shredders.

Relief checking is normal and best limited to two (2) layers unless impact loading is small. Can be multi-layered in specific applications.

TYPICAL CHEMICAL COMPOSITION

C - 5.0%, Mn - 0.9%, Si - 1.1%, Cr - 25.0%

TYPICAL HARDNESS

60 - 62 HRC

575 - 600 HB

AVAILABLE SIZES

1.2mm, 1.6mm, 2.0mm, 2.4mm, 2.8mm, 3.2mm

WELDING PARAMETERS**Open Arc (Self Shielded - Gasless)**

Wire	Current (Amps)		Voltage (Volts)		Stick-out (mm)		Polarity
Diameter	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	300-550	400	28-32	30	25-50	40	DC+

No gas required

Submerged Arc

Wire	Current (Amps)		Voltage (Volts)		Stick-out (mm)		Polarity
Diameter	Range	Optimum	Range	Optimum	Range	Optimum	
2.4mm	200-450	350	26-30	30	25-60	30	DC+
2.8mm	250-550	400	28-32	30	25-60	30	DC+
3.2mm	300-650	500	28-32	32	25-60	30	DC+

Use with neutral agglomerated flux, eg, WAF 325, WAF 350

Gas Shielded

Wire	Current (Amps)		Voltage (Volts)		Stick-out (mm)		Polarity
Diameter	Range	Optimum	Range	Optimum	Range	Optimum	
1.2mm	100-280	220	18-30	22	15-25	20	DC+
1.6mm	150-350	300	22-30	26	15-25	20	DC+

Use with Argon + 15-20% CO₂ gas - Flow rate 15-20 litres/minute

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.