

Supershield CrC

CHROMIUM CARBIDE TYPE OPEN ARC WIRE



Supershield CrC

❖ Specification

DIN8555 MF 10-60GR

❖ Description & Applications

Supershield CrC is an open arc wire used for hardfacing components subject to extreme abrasion/erosion and moderate/heavy impact.

(Gyratory Crusher, Crusher & Coke Hammers Chemical Pipe etc.)

❖ Welding Process

Open Arc Type

❖ Current Type

DC+

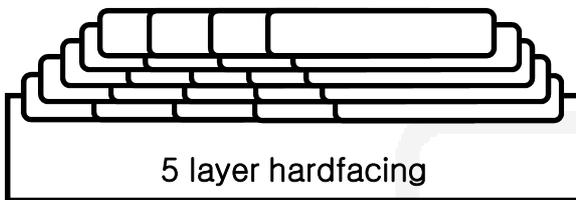
❖ Packing

Supershield CrC	Dia.	1.2mm(0.045in), 1.6mm(1/16in)	2.4mm(3/32in), 2.8mm(7/64in)
	Spool	15kg(33lbs)	-
	Coil	-	25kg(55lbs)
	Pailpack	-	150, 250



Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Conditions



Diameter	: 1.2mm(0.045in)
Welding Type	: Open Arc
Amp./ Volt.	: 300/32
Stick-Out	: 25~30mm(0.98~1.18in)
Pre-Heat	: 150~250℃ (302~482°F)
Interpass Temp.	: 200~300℃ (392~572°F)
Total layers	: ≥4 layer

❖ Chemical Analysis of All weld metal(wt%)

Consumable	C	Si	Mn	Cr	Other
Supershield CrC	4.3	0.4	1.3	24.0	0.1

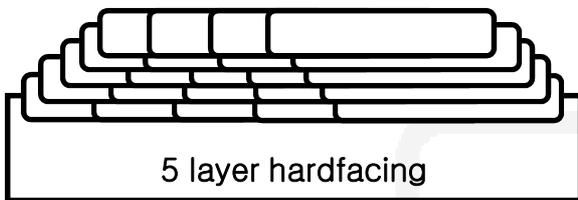
❖ Hardness test of All weld metal(HRc)

Consumable	Hardness(HRc)					Avg.
Supershield CrC	54	56	57	57	58	57



Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Conditions



Diameter	: 2.8mm(7/64in)
Welding Type	: Open Arc
Amp./ Volt.	: 380/30
Stick-Out	: 25~30mm(0.98~1.18in)
Pre-Heat	: 150~250℃ (302~482°F)
Interpass Temp.	: 200~300℃ (392~572°F)
Total layers	: ≥4 layer

❖ Chemical Analysis of All weld metal(wt%)

Consumable	C	Si	Mn	Cr	Other
Supershield CrC	5.0	0.5	1.5	28.0	0.1

❖ Hardness test of All weld metal(HRc)

Consumable	Hardness(HRc)					Avg.
Supershield CrC	58	59	60	60	62	60

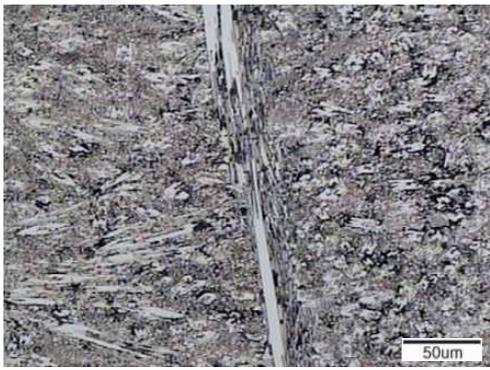
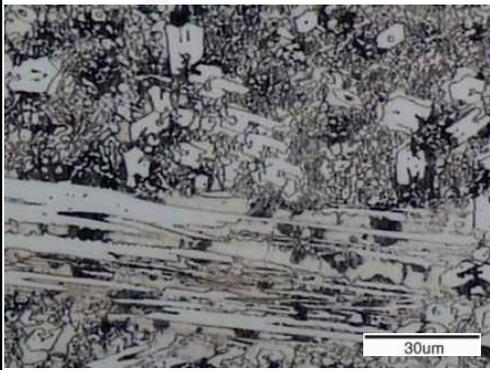


Mechanical Properties & Chemical Composition of All Weld Metal

❖ Abrasive Wear Test(ASTM G 65-94 Procedure A)

Consumable	Dia.	Welding Layer	Weight loss(g)
Supershield CrC	1.6mm(1/16in)	2Layers	76.90
	2.8mm(7/64in)		41.50

❖ Micro Structures of Weld Metal

Supershield CrC		
	<p>1. Hyper-eutectic 2. Volume fraction of Carbides : $\geq 37\%$</p>	



Test Results

❖ BEAD APPEARANCE

Consumable	Supershield CrC (2.8mm, 7/64in)
Amp.(A)	370~390
Volt.(V)	29~30
Carrige Speed	40~60cm/min(15.7~23.6in/min)
Welding Position	Flat(1G)



This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.