

Supershield CrCW

CHROMIUM CARBIDE TYPE OPEN ARC WIRE

HYUNDAI WELDING CO., LTD.



Supershield CrCW

❖ Specification

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❖ Description & Applications

Supershield CrCW is an open arc wire that resists severe abrasion. The wire deposit weld metal of austenite structure containing Cr-Carbide.

(Crush rolls, Wear plate, Earth engaging tools etc.)

❖ Welding Process

Open Arc Type

❖ Current Type

DC+

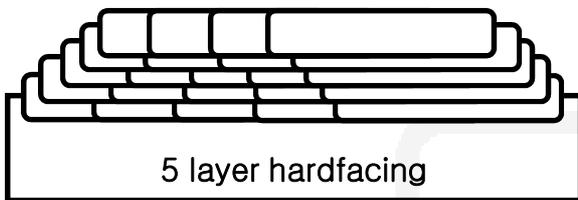
❖ Packing

Supershield CrCW	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
Supershield CrCW	4.80	0.52	0.70	24.5

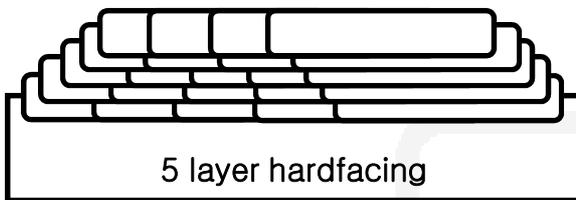
❖ Hardness test of All weld metal(HRc)

Consumable	Hardness(HRc)					Avg.
Supershield CrCW	56	57	57	58	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
Supershield CrCW	4.95	1.02	1.80	25.5

❖ Hardness test of All weld metal(HRc)

Consumable	Hardness(HRc)					Avg.
Supershield CrCW	59	61	63	63	64	62



Test Results

❖ BEAD APPEARANCE

Consumable	Supershield CrCW (1.6mm, 1/16in)
Amp.(A)	280~300
Volt.(V)	30~32
Carrige Speed	40~60cm/min(15.7~23.6in/min)
Welding Position	Flat(1G)



Consumable	Supershield CrCW (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.