

# **SC-55S**

SUBMERGED ARC WIRE FOR THE HARDFACING OF STEEL MILL  
TABLE ROLL AS MARTENSITE ALLOY



❖ **Specification**

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❖ **Description & Applications**

SC-55S is a submerged arc wire used for hardfacing and rebuilding components subject to metal-metal wear and moderate abrasion. (Crane Wheel, Rod Wheel, Tractor Roller, Steel mill rolls-required to get high hardness and abrasion resistance, etc.)

❖ **Welding Process**

SAW (with S-717 flux)

❖ **Current Type**

DC+

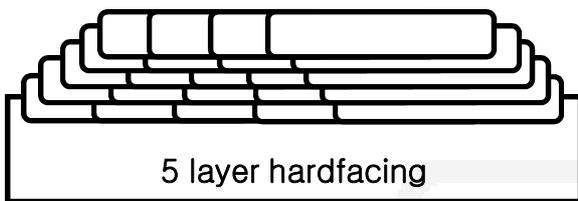
❖ **Packing**

SC-55S	<b>Dia.</b>	3.2mm(1/8in)
	<b>Coil</b>	25kg(55lbs)
	<b>Pailpack</b>	150kg(330lbs), 250kg(551lbs)



## Mechanical Properties & Chemical Composition of All Weld Metal

### ❖ Welding Conditions



- Diameter** : 3.2mm(1/8in)
- Welding Type** : SAW(S-717)
- Amp./ Volt.** : 400 / 30
- Stick-Out** : 25~30mm(0.98~1.18in)
- Pre-Heat °C** : 150~250°C (302~482°F)
- Interpass Temp.** : 200~300°C (392~572°F)
- Total layers** : ≥4 layer

### ❖ Chemical Analysis of All weld metal(wt%)

Consumable	C	Si	Mn	Cr	Mo	V	W
SC-55S	0.28	0.65	2.0	6.5	1.8	0.45	1.6

### ❖ Hardness test of All weld metal(HRc)

Consumable	Hardness(HRc)					Avg.
SC-55S	52	52	53	53	55	53

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.



## Test Results

### ❖ BEAD APPEARANCE

<b>Consumable</b>	SC-55S
<b>Amp.(A)</b>	380~400
<b>Volt.(V)</b>	28~30
<b>Carrige Speed</b>	40~60cm/min(15.7~23.6in/min)
<b>Welding Position</b>	Flat(1G)



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