

SC-430S

FERRITIC STS TYPE SUBMERGED ARC WIRE

HYUNDAI WELDING CO., LTD.



❖ Specification

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❖ Description & Applications

SC-430S is a submerged arc wire and suitable for the build up on continuous casting rolls. Good at defect-resistance and weldability etc. By shielding weld metal with flux from defects.

(Guide Roller, Steel Mill Rolls, Casting Rolls, etc.)

❖ Welding Process

SAW (with S-717 flux)

❖ Current Type

DC+

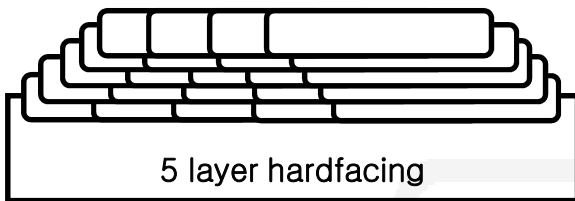
❖ Packing

SC-430S	Dia.	2.4mm(3/32in) 3.2mm(1/8in)
	Coil	25kg(55lbs)
	Pailpack	150kg(330lbs), 250kg(551lbs)



Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Conditions



- Diameter** : 2.4mm(3/32in)
- Welding Type** : SAW(S-717)
- Amp./ Volt.** : 360 / 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	Ni	Mo
SC-430S	0.06	1.0	1.40	18.0	0.05	0.02

❖ Hardness test of All weld metal(HRC)

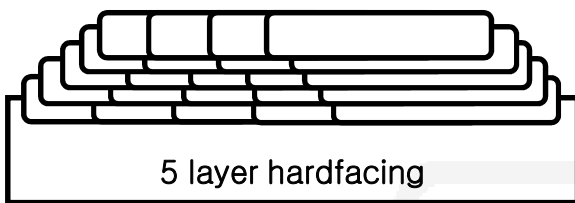
Consumable	Hardness(HRC)						Avg.
	First layer						
SC-430S	First layer	42	43	45	45	46	44.2
	Multi layer	5	6	6	7	8	6.4

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.



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** : 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	Ni	Mo
SC-430S	0.06	0.94	1.43	18.10	0.06	0.02

❖ Hardness test of All weld metal(HRC)

Consumable	Hardness(HRC)						Avg.
	First layer						
SC-430S	First layer	46	46	46	47	47	46.5
	Multi layer	5	7	8	8	9	7.5

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Test Results

❖ BEAD APPEARANCE

Consumable	SC-430S (2.4mm, 3/32in)
Amp.(A)	350~270
Volt.(V)	28~30
Carrige Speed	40~60cm/min(15.7~23.6in/min)
Welding Position	Flat(1G)



Consumable	SC-430S (3.2mm, 1/8in)
Amp.(A)	380~400
Volt.(V)	28~30
Carrige Speed	40~60cm/min(15.7~23.6in/min)
Welding Position	Flat(1G)



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