HYUNDAI WELDING

Rev. 00

SC-70Zn

METAL CORED ARC WELDING CONSUMABLE
FOR GALVANIZED STEEL

2022.03

HYUNDAI WELDING CO., LTD.

SC-70Zn

❖ Specification

AWS A5.18	**E70C-GSM**
(AWS A5.18M	**E48C-GSM)**
EN ISO 17632-A	**T3T Z M M21 1**

❖ Applications

Welding for automobile manufacturing, light structures,
and other general fabrication of galvanized steels (zinc-coated steels)

❖ Characteristics on Usage

SC-70Zn is a metal cored wire designed for single-pass welding of galvanized steels.
SC-70Zn provides excellent weldability.
(smooth arc stability, low spatters , excellent bead appearance)

❖ Note on Usage

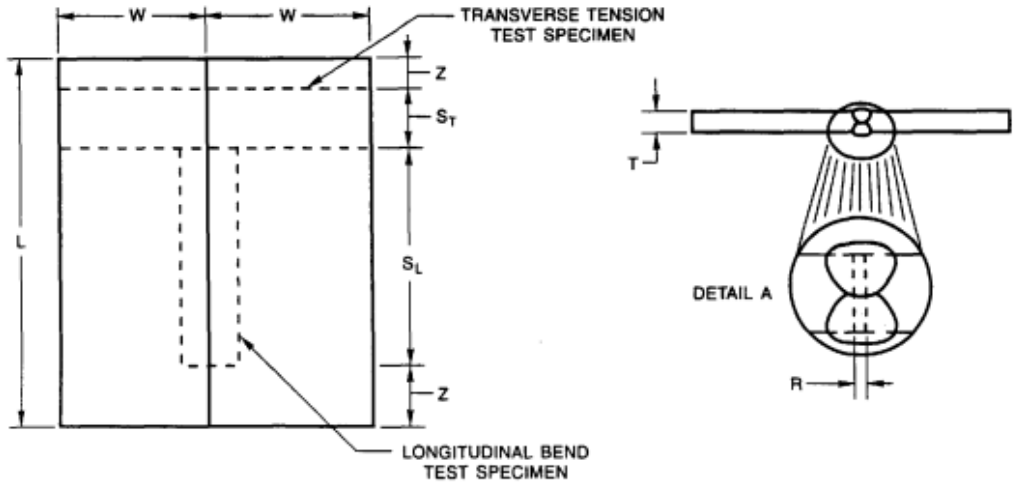
Use Ar + 15-25% CO_2 gas.

DC (-) Polarity

Mechanical Properties & Chemical Composition of All Weld Metal

❖ Test Assembly

Method by AWS Spec.



DIMENSIONS			
		in.	mm
L	Length, min.	10	250
W	Width, min.	4	100
R	Root Opening, max.	1/16	1.5
S_T	Transverse Specimen	2	50
S_L	Longitudinal Specimen	6	150
T	Thickness	1/4	6.5
Z	Discard, min.	1	25

Notes:
1. Base metal shall be as specified in Table 6.
2. The surfaces to be welded shall be clean.
3. Detail A shows the completed joint and approximate weld configuration.
4. Test conditions shall be as recommended by the manufacturer and shall be made available to the purchaser upon request.

Note) In accordance with the rule of AWS A5.18

❖ Welding Conditions

Wire Dia. (mm)	Shielding Gas	Polarity	Welding Position	Amp. (A)	Volt. (V)	Speed (cm/min)
1.2	80%Ar + 20%CO_2	DC(−)	1G	230	21	25~30

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

❖ Mechanical Properties of all weld metal

Test	As-Welded
Transverse Tensile Strength (Specimen broken in the base metal)	545 MPa
Longitudinal Guided Bend Test	Satisfaction

❖ Chemical Analysis of all weld metal(wt%)

Consumable	C	Si	Mn	P	S	Al
SC-70Zn	0.45	0.37	1.15	0.008	0.003	2.05
AWS A5.18 E70C-GSM	Not Specified					

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Proper Welding Condition

❖ Proper Current Range

Wire Diameter	Polarity	Shielding Gas	Welding Position	Current(A)	Voltage(V)
1.2 mm	DC (-)	80%Ar + 20%CO_2	Flat & Horizontal	150~300	17~24
			Vertical Up / Vertical Down	130~250	16~22

❖ F No & A No

F No	A No
6	-

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