

# **Supershield 71GS**

SELF-SHIELD FLUX CORED ARC WELDING CONSUMABLE  
FOR MILD & 490MPa CLASS HIGH TENSILE STEEL

2020.12



## ❖ Specification

**AWS A5.20**

**E71T-GS**

**(AWS A5.20M**

**E491T-GS)**

**JIS Z3313**

**T49 T14-1 N S**

**EN ISO 17632-A**

**T 42 Z Z V NO 1**

## ❖ Applications

Supershield 71GS is used where light structures, short assembly welds, and other general fabrication and galvanized steel fixtures, gate etc.

## ❖ Characteristics on Usage

Supershield 71GS is an all position self-shielded flux cored wire designed for single-pass welding of thin mild and medium tensile steels not exceeding 510MPa.

Supershield 71GS used DC(-) polarity produces smooth arc stability, low spatters ,full covering slag for all position welding

## ❖ Note on Usage

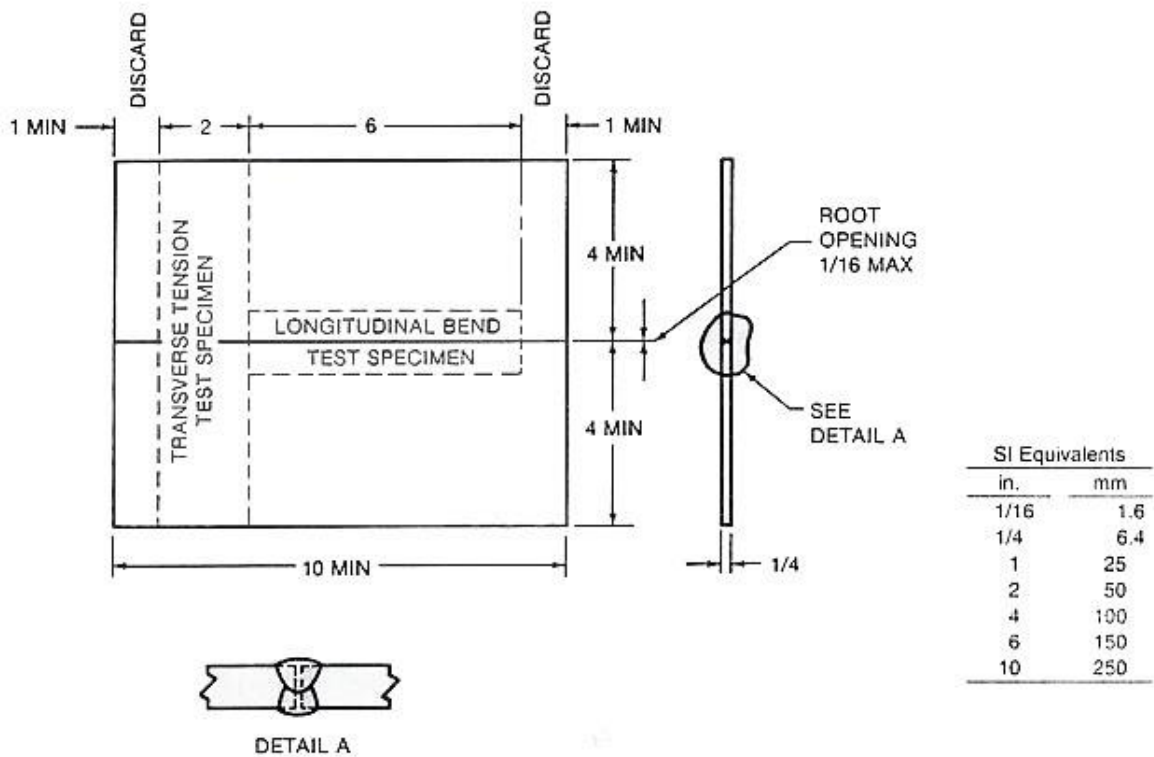
Do not use shielding gas.



## Mechanical Properties & Chemical Composition of All Weld Metal

### ❖ Test Assembly

Method by AWS Spec.



Note) In accordance with the rule of AWS A5.20

### ❖ Welding Conditions

Wire Dia.	Polarity	Welding Position	Amp. (A)	Volt. (V)	Carrige Speed	Heat Input (kj/cm)	Interpass Temp.
1.2mm (0.045in)	DC(-)	1G	220	20	0.2~0.3m/min (7.8~11.8in/min)	11~16	150±15°C (302±59°F)

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, MPa(lbs/in <sup>2</sup> ) (Specimen broken in the base metal)	586(85,000)
Longitudinal Guided Bend Test	Satisfactory

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

Consumable	C	Si	Mn	P	S	Al
Supershield 71GS	0.26	0.50	0.91	0.016	0.014	2.05
AWS A5.20 E71T-GS	Not Specified					



## Proper Welding Condition

### ❖ Proper Current Range

Consumable	Shielding Gas	Welding Position	Wire Dia.	
			1.2mm (0.045in)	1.6mm (1/16in)
Supershield 71GS	NONE	F	160~220Amp (190A 18V)	200~280Amp (250A 20V)
		HF	140~200Amp (180A 17V)	180~260Amp (240A 19V)
		V-Up	130~180Amp (150A 16V)	170~230Amp (190A 20V)
		OH	130~180Amp (150A 16V)	170~230Amp (190A 20V)

### ❖ F No & A No

F No	A No
6	-