HYUNDAI WELDING

Rev. 03

Supershield EG-72T

SELF-SHIELD FLUX CORED CONSUMABLE
FOR ELECTRO GAS ARC WELDING PROCESS

2019.09

HYUNDAI WELDING CO., LTD.

Supershield EG-72T

❖ Specification

AWS A5.26 EG72T-1

❖ Applications

Vertical-up, Self-shielded, V-groove & Square Butt joint single pass electro gas arc welding process for Storage tank fabrication and pressure vessels.

❖ Characteristics on Usage

Supershield EG-72T are self shielded consumable used for electro gas arc welding process (EGW).

This wire provide good bead appearance, thin slag which removes easily and cleanly.

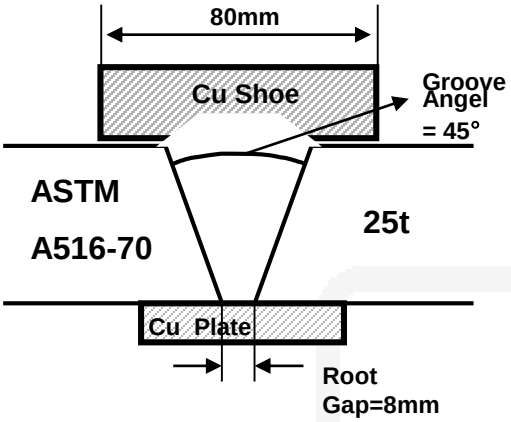
It provides highly efficient welding by electro gas process.

❖ Note on Usage

Do not use shielding gas

Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Conditions



[Joint Preparation & Layer Details]

Welding Position	:	3G(PF)
Diameter	:	2.4mm(3/32in)
Shielding Gas	:	N/A
Amp./ Volt.	:	450 / 38
Heat Input(KJ/cm)	:	180
Polarity	:	DC(+)
Copper Shoe	:	Movable Cu Dam (Water Cooling)
Back Plate	:	Cu Plate

❖ Mechanical Properties of all weld metal

Consumable	Tensile Test			CVN Impact Test J(ft · lbs)
Supershield EG-72T	YS MPa(lbs/in²)	TS MPa(lbs/in²)	EL(%)	-29℃(-20°F)
	450(65,000)	605(88,000)	26	45(33)
AWS A5.26 EG72T-1	**≥ 350 (51,000)**	**480~650 (70,000~94,000)**	**≥ 22**	**≥27J at -29℃ (≥20ft · lbs at -20°F)**

❖ Chemical Analysis of all weld metal(wt%)

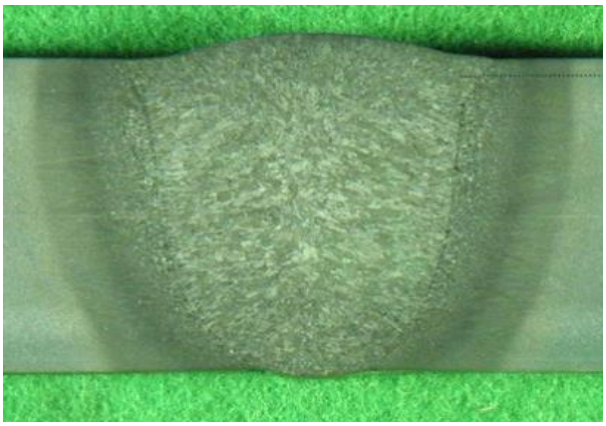
Consumable	C	Si	Mn	P	S	Mo	Ni
Supershield EG-72T	0.055	0.33	1.30	0.004	0.003	0.18	0.02
AWS A5.26 EG72T-1	N/S	**≤ 0.50**	**≤ 1.70**	**≤ 0.03**	**≤ 0.03**	**≤ 0.35**	**≤ 0.30**

Bead Appearance & Micro Structure

❖ Bead Appearance

Slag | Surface Bead | Surface Bead | Back Bead

❖ Macro Structure



Proper Welding Condition

❖ Welding Conditions

Consumable	Shielding Gas	CTWD	Welding Position	Wire Feed Speed m/min (in/min)	Amp.(A) / Volt.(V)
					2.4mm(3/32in)
Supershield EG-72T	N/A	38mm (1.5in)	V-Up	6.4(250)	380~450 / 34
				7.6(300)	450~480 / 36
				8.9(350)	480~550 / 38
				10.2(400)	550~600 / 45

❖ F No & A No

F No	A No
6	1