

SMT-7030

2022.02



❖ Specification

AWS A5.7/ ASME SFA-5.7 ERCuNi

❖ Applications

Used for welding desalination plant, evaporators, etc in salt and sea water processing system.

❖ Characteristics on Usage

- ① SMT-7030 is a TIG Wire used to weld different copper-nickel types Cu/Ni 70.30, 80.20 and 90.10.
- ② Normally, preheating is not required & maximum interpass temperature 150°C.
contamination of the weld zone with foreign material, particularly any source of lead, tin or zinc must be removed to prevent weld metal cracking.

❖ Note on Usage

Ar, Ar + He

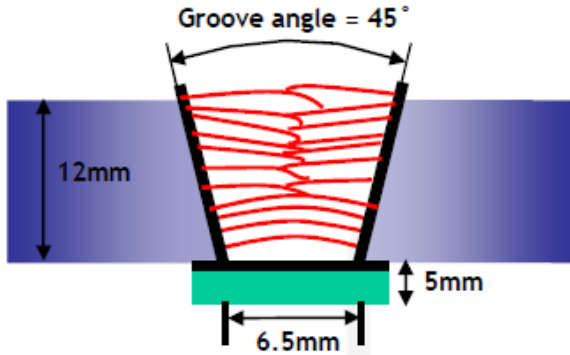
❖ Packing

Dia.	2.0mm (5/64in)	2.4mm (3/32in)	3.2mm (1/8in)
TIG	5kg (11lbs)		



Mechanical Properties of All Weld Metal & Chemical Composition of the Wire

❖ Welding Conditions



Diameter(mm)	: 2.4mm
Shielding Gas	: 100%Ar
Flow Rate(ℓ /min.)	: 20~25
Amp./ Volt.	: 160~240
Pre-Heat(℃)	: R.T.
Interpass Temp.(℃)	: ≤150
Polarity	: DC(-)

[Joint Preparation & Layer Details]

❖ Mechanical Properties of All weld metal

Brand Name	Tensile Test		
	YS MPa(ksi)	TS MPa(ksi)	EL (%)
SMT-7030	309 (45)	478 (69)	38.8

❖ Chemical Analysis of the wire(wt%)

Brand Name	Cu+Ag	Si	Mn	P	S	Ni+Co	Ti	Fe	Pb
SMT-7030	67.5	0.14	0.70	0.003	0.001	30.5	0.24	0.56	0.001
AWS A5.7 ERCuNi	Rem.	≤0.25	≤1.0	≤0.02	≤0.01	29.0 ~32.0	0.20 ~0.50	0.40 ~0.75	≤0.02

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 of All Weld Metal
& Chemical Composition of the Wire**

❖ **Hardness test(Hv1)**

Brand Name	Hardness (Hv1)		
	x1	x2	x3
SMT-7030	124	117	118

