

S-347.16

SHIELDED METAL ARC WELDING CONSUMABLE
FOR WELDING OF 321 347 STAINLESS STEEL

2020.12



❖ Specification

AWS A5.4	E347-16
JIS Z 3221	ES347-16
EN ISO 3851-A	E 19 9 Nb R

❖ Applications

Welding of 321, 347 stainless steel

❖ Characteristics on Usage

1. S-347.16 is a lime- titania type electrode.
2. As the all-weld metal contains small amount of stabilizing element, its resistance to corrosion is good.

❖ Note on Usage

1. it is mostly effective to proceed with welding. Keeping the arc as short as possible in flat position.
2. Remove dirt such as oil and dust from the groove.
3. Dry the electrode at 350°C (662°F) for 60 minutes before use.

❖ Type of Current

AC or DC+

❖ Packing

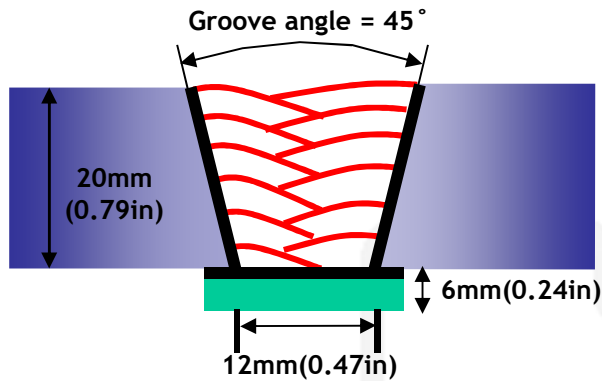
Packet	2.5kg(5.5lbs)
Carton	2.5kg(5.5lbs) X 4 : 10kg(22lbs)



Mechanical Properties & Chemical Composition of All Weld Metal

❖ **Welding Conditions**

Method by AWS Spec.



- Diameter : 4.0mm(5/32in)
- Amp./ Volt. : 140/25
- Travel speed : 13~18(Cm/min)
- Pre-Heat : R.T .
- Interpass Temp. : 150±15℃(302±59°F)
- Position : Flat
- Polarity : AC or DC+

[Joint Preparation & Layer Details]

❖ **Mechanical Properties of All weld metal**

Consumable	Tensile Test	
	TS MPa (lbs/in ²)	EI(%)
S-347.16	603(88,000)	42.4
AWS A5.4 E347-XX	≥520(75)	≥30

❖ **Chemical Analysis of All weld metal(wt%)**

Consumable	Chemical Composition (%)									
	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Nb
S-347.16	0.02	0.75	0.82	0.027	0.014	9.8	19.3	0.01	0.01	0.35
AWS A5.4 E347-XX	≤0.08	≤1.0	0.5 ~2.5	≤0.04	≤0.03	9.0 ~11.0	18.0 ~21.0	≤ 0.75	≤ 0.75	8 x C% ~1.0

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.

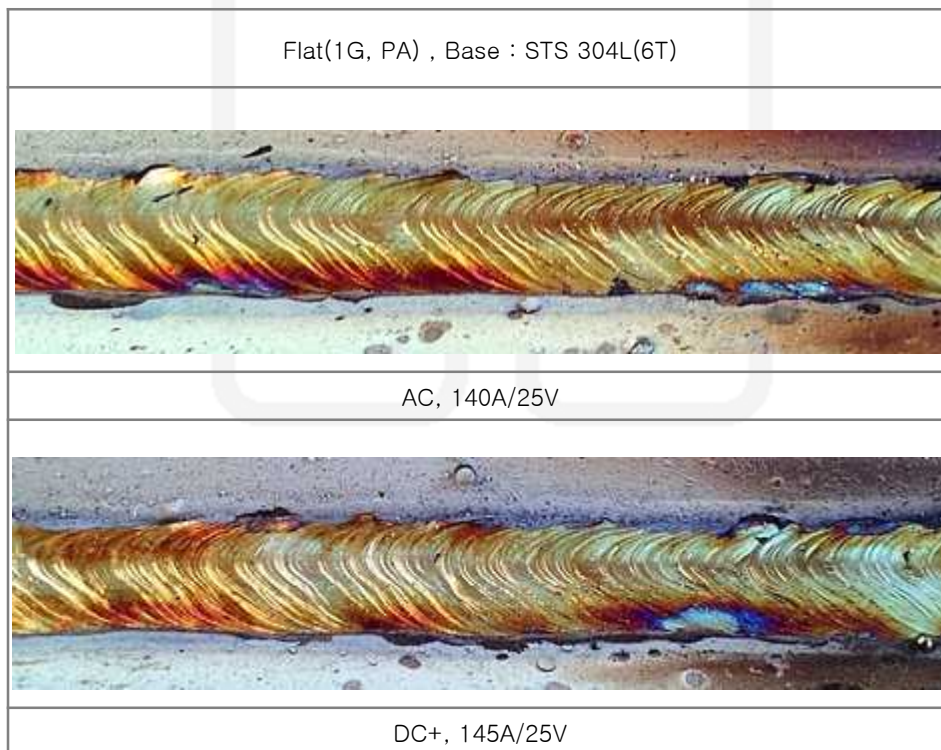


Mechanical Properties & Chemical Composition of All Weld Metal

❖ δ - Ferrite No.

Consumable	WRC(1992) Diagram	FERITSCOPE MP-30 (FISCHER)
S-347.16	6.0	3~8FN

❖ Bead Appearance



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