HYUNDAI WELDING

Rev. 04

S–347.16

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

2020.12

HYUNDAI WELDING CO., LTD.

S -347.16

❖ 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 dirts such as oil and dust from the groove.
3. Dry the electrode at 350℃(662°F) for 60 minutes before use.

❖ Type of Current

AC or DC+

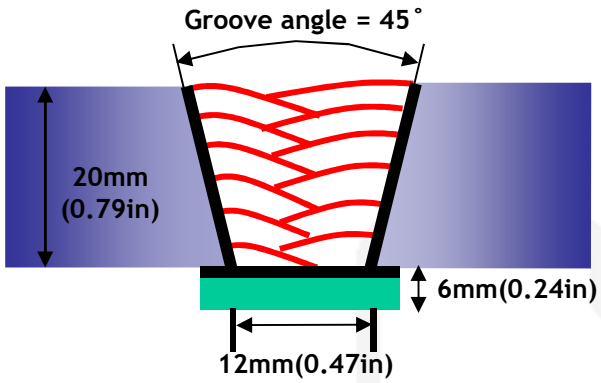
❖ Packing

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.



[Joint Preparation & Layer Details]

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+

❖ Mechanical Properties of All weld metal

Consumable	Tensile Test	
S-347.16	TS MPa (lbs/in²)	El(%)
	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

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

Flat(1G, PA) , Base : STS 304L(6T)

AC, 140A/25V

DC+, 145A/25V