

# **S-310.15**

SHIELDED METAL ARC WELDING CONSUMABLE  
FOR WELDING OF 25% Cr-20% Ni STAINLESS STEEL

2021.05

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**HYUNDAI WELDING CO., LTD.**



## ❖ Specification

**AWS A5.4** E310-15

**JIS Z3221** ES310-15

**EN ISO 3581-A** E 25 20 B

## ❖ Applications

S-310.15 is designed for welding of 25%Cr-20%Ni stainless Steels.

## ❖ Characteristics on Usage

S-310.15 is a Basic type electrode for DC(+) full austenitic electrode for 25%Cr-20%Ni stainless steel. Weld metal has full austenitic structure and good mechanical property especially excellent toughness.

## ❖ Note on Usage

1. Dry the electrodes at 350°C(662°F) for 60 minutes before use.
2. Remove dirt such as oil and dust from the groove.
3. Weaving width should be within two and a half times of electrode's diameter.

## ❖ Type of Current

DC+

## ❖ Packing

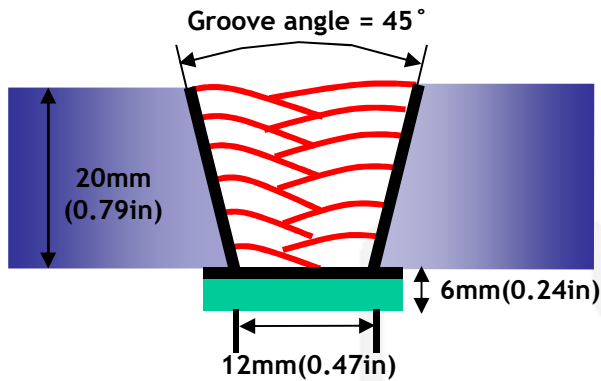
<b>Packet</b>	2.5kg(5.5lbs) / 5Kg(11lbs)
<b>Carton</b>	2.5kg(5.5lbs) X 4 : 10kg(22lbs) 5Kg(11lbs) x 4 : 20Kg(44lbs)



**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	: DC+

[ Joint Preparation & Layer Details ]

❖ **Mechanical Properties of All weld metal**

Consumable	Tensile Test	
	TS MPa (lbs/in <sup>2</sup> )	EI(%)
S-310.15	610(88,000)	35
AWS A5.4 E310-XX	≥550(80,000)	≥ 30

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

Consumable	Chemical Composition (%)								
	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
S-310.15	0.09	0.50	2.30	0.020	0.010	21.0	25.5	0.09	0.05
AWS A5.4 E310-XX	0.08~ 0.20	≤0.75	1.0~ 2.5	≤0.03	≤0.03	20.0~ 22.5	25.0~ 28.0	≤0.75	≤0.75

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