

SW-309LNS Cored

FLUX CORED ARC WELDING CONSUMABLE
FOR WELDING OF DISSIMILAR METALS
STAINLESS STEELS AND CARBON STEELS
OR STAINLESS STEELS AND LOW ALLOY METALS



SW-309LNS Cored

❖ Specification

AWS A5.9	EC309L
JIS Z3323	TS309L-MA0
EN ISO 17633-A	T23 12 L M M

❖ Applications

SW-309LNS Cored is designed for welding of dissimilar metals such as Stainless steels and carbon steels or stainless steels and low alloy steels.

❖ Characteristics on Usage

1. SW-309LNS Cored is a metal type stainless steel flux cored wire for welding of 22% Cr-12% Ni steel, heat resistant cast steel and for the joining of chrome nickel clad steels to Cr-Mo steel or mild steel.
2. SW-309LNS Cored is designed for flat and horizontal fillet welding. Its weld metal contains ferrite in austenite structure, it gives excellent weldability, good corrosion and heat resistance.

❖ Note on Usage

Use 100% Ar gas or Ar+2~5% O₂ gas

❖ Packing

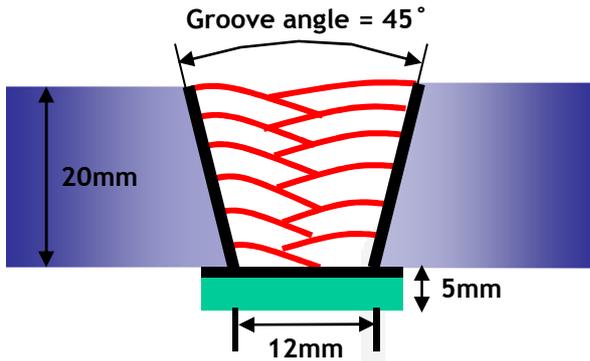
Dia.(mm)	1.2	1.4	1.6
Spool (kg) *including ball pac	5	12.5	15



Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Conditions

Method by AWS Spec.



[Joint Preparation & Layer Details]

Diameter(mm)	: 1.2mm
Shielding Gas	: 100% Ar
Flow Rate(ℓ /min.)	: 20~22
Amp./ Volt.	: 220 / 26
Stick-Out(mm)	: 20
Pre-Heat(℃)	: R.T .
Interpass Temp.(℃)	: 150±15
Polarity	: DC(+)

❖ Mechanical Properties of All weld metal

Consumable	Tensile Test		CVN Impact Test (Joule)
	TS(MPa)	EI(%)	-20℃
SW-309LNS Cored	590	45.0	66
AWS A5.4 E309LTX-X	≥ 520	≥ 30	Not Specified

❖ Chemical Analysis of All weld metal(wt%)

Consumable	Shielding Gas	Chemical Composition (%)								
		C	Si	Mn	P	S	Ni	Cr	Mo	Cu
SW-309LNS Cored	100% Ar	0.030	0.55	1.80	0.020	0.010	13.0	24.0	0.130	0.125
AWS A5.9 EC309L		≤0.03	0.3~0.65	1.0~2.5	≤0.03	≤0.03	12.0~14.0	23.0~25.0	≤0.75	≤0.75

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.



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Mechanical Properties & Chemical Composition of All Weld Metal

❖ Bead Appearance

Flat Position , Base : STS 304L(6T)



Ar+2% O₂(220A/26V)

❖ δ – Ferrite No.

Consumable	Shielding Gas	Diagram			FERITSCOPE MP-30 * (FISCHER)
		Schaeffler	Delong	WRC(1992)	
SW-309LNS Cored	100% Ar ₂	10.4	18.6	17.0	14.0~15.0

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