

SR-625

AWS A5.11/ ASME SFA5.11 ENiCrMo-3
JIS Z3224 DNiCrMo-3
EN ISO 14172 Ni 6625

HYUNDAI WELDING CO., LTD.



❖ Specification

AWS A5.11/ ASME SFA5.11 ENiCrMo-3
JIS Z3224 DNiCrMo-3
EN ISO 14172 Ni 6625(NiCr22Mo9Nb)

❖ Applications

- Inconel 601 + 625 welding, welding of steel and Nickel alloys
- Hardfacing of steel.
- 9% Nickel steel welding
- LNG storage tank manufacture, desulfurization ,Heat exchanger Building of chemical carrier

❖ Characteristics

- Excellent corrosion resistance of Crevice and Pitting, SCC
- Good Tensile Strength in High Temperature
- Good Impact value at Cryogenic temperature

❖ Shielding

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❖ Current

AC/DC+

❖ Packing

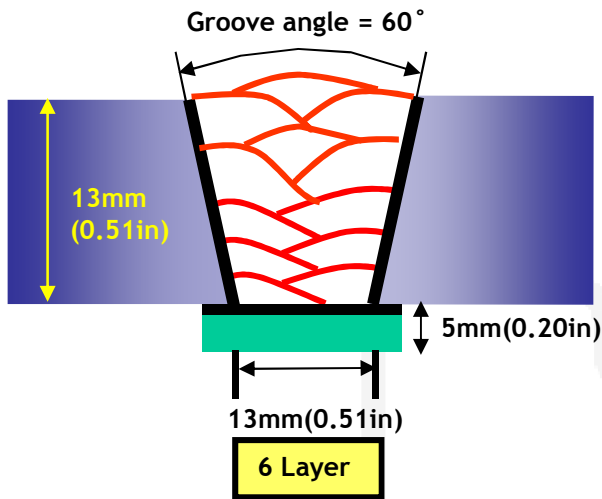
SR-625	Size mm(in)		3.2(1/8)	4.0(5/32)
	Length mm(in)		350(14)	350(14)
	Current(A)	F	70~100	100~130

❖ Approvals



Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Condition



Size(mm)	: 3.2mm (1/8)
Type of Current	: AC
Ampere/Voltage	: 100/25
Interpass temperature	: ≤150°C(302°F)
Speed(mm/min.)	: 130~180
Position	: 1G

❖ Typical Chemical Composition of All-Weld Metal (wt%)

C	Si	Mn	P	S	Ni	Cr	Mo	Fe	Nb
0.068	0.32	0.001	0.001	0.004	63.40	21.70	9.38	1.52	3.30
≤0.10	≤0.75	≤1.0	≤0.03	≤0.02	≥55.0	20.0 ~23.0	8.0 ~10.0	≤7.0	3.15 ~4.15
AWS A5.11 ENiCrMo-3									

❖ Typical Mechanical Properties of All-Weld Metal

Tensile Test Results.		
T.S MPa(ksi)	EL. (%)	
772(112)	32.0	
AWS A5.11 ENiCrMo-3	≥760(110)	≥30.0

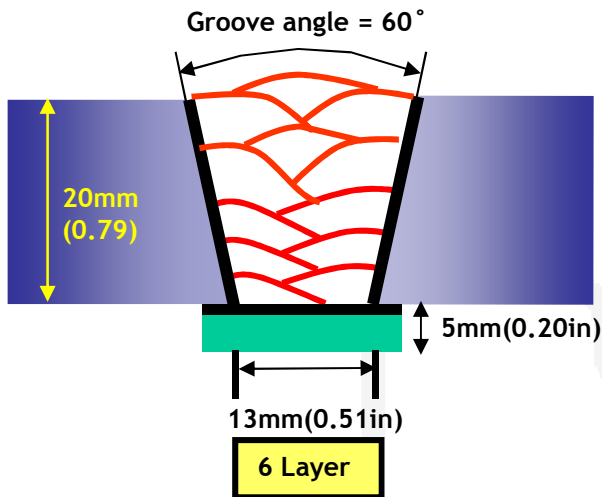
Charpy V-Notch Impact Value, Joules(ft·lbs)							
°C(°F)	X1	X2	X3	X4	X5	X6	Avg.
-196(320)	50(37)	45(33)	46(34)	52(38)	46(34)	50(37)	48(35)

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

❖ Welding Condition



Size(mm)	: 4.0mm (5/32)
Type of Current	: AC
Ampere/Voltage	: 130/25
Interpass temperature	: ≤150°C(302°F)
Speed(mm/min.)	: 130~180
Position	: 1G

❖ Typical Chemical Composition of All-Weld Metal (wt%)

C	Si	Mn	P	S	Ni	Cr	Mo	Fe	Nb
0.054	0.39	0.001	0.001	0.001	63.30	21.80	9.43	1.23	3.40
≤0.10	≤0.75	≤1.0	≤0.03	≤0.02	≥55.0	20.0 ~23.0	8.0 ~10.0	≤7.0	3.15 ~4.15
AWS A5.11 ENiCrMo-3									

❖ Typical Mechanical Properties of All-Weld Metal

Tensile Test Results.		
T.S MPa(ksi)	EL. (%)	
775(112)	34.0	
AWS A5.11 ENiCrMo-3	≥760(110)	≥30.0

Charpy V-Notch Impact Value Joules(ft·lbs)							
°C(°F)	X1	X2	X3	X4	X5	X6	Avg.
-196(320)	60(44)	58(43)	60(44)	60(44)	60(44)	57(42)	59(44)

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Bead appearance(Bead on plate)



3.2mm(1/8in)(AC,105A)



4.0mm(5/32in)(AC,145A)

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