

SMT-904L

AWS A5.9/ ASME SFA5.9 ER385
JIS Z3321 YS385
EN ISO 14343-A-G(W) 20 25 5 Cu L

HYUNDAI WELDING CO., LTD.



❖ 제품 규격

AWS A5.9/ ASME SFA5.9 ER385
JIS Z3321 YS385
EN ISO 14343-A-G(W) 20 25 5 Cu L

❖ 용도

1. 20%Cr-25%Ni-4.5%Mo-1.5%Cu 스테인레스강 용접
2. 플랜지 육성용접

❖ 특성

1. 용착금속은 완전한 오스테나이트 조직을 나타냅니다.
2. 내열, 내식성이 우수하고 특히 황산, 인산등에 부식저항성이 양호합니다.
3. 용접시 최대 1.5kj/mm이하로 입열량 제어가 필요합니다.
4. 특히 황산 분위기에서 우수한 내식성을 보유합니다.

❖ 보호 가스

Ar+2%O₂, Ar+30%He

❖ 용접 전류/극성

GMAW : DC+

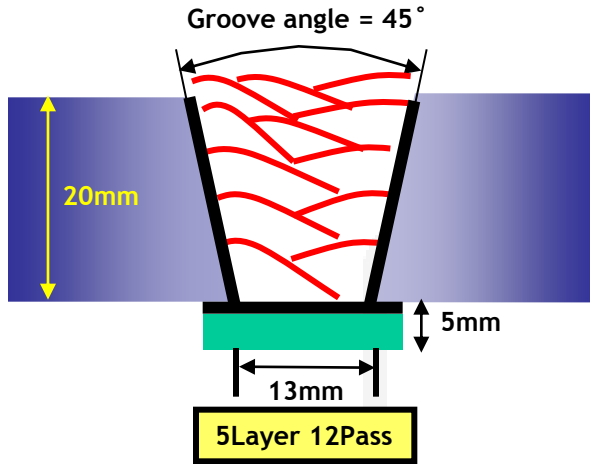
❖ 포장

SMT-904L (GMAW)	Size(mm)	1.0	1.2	1.6
	Weight	Spool : 12.5kg		



Mechanical Properties & Chemical Composition of All Weld Metal (GMAW)

❖ 용접 조건



- 선경(mm) : 1.2mm (GMAW)
- 보호 가스 : Ar+2%O₂
- 유량(ℓ /min.) : 20~25
- 전류(A)/전압(V) : 210/26
- Stick-Out(mm) : 20
- 용접 속도(cm/min.) : 30

❖ Wire 화학 성분의 일례 (wt%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
SMT-904L 1.2mm	0.013	0.31	1.89	0.013	0.001	24.9	20.5	4.32	1.42
AWS A5.9 ER385	≤0.025	≤0.50	1.0- 2.5	≤0.02	≤0.03	24.0- 26.0	19.5- 21.5	4.2- 5.2	1.2- 2.0

❖ 전 용착 금속의 화학 성분의 일례 (wt%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
SMT-904L 1.2mm	0.022	0.39	1.74	0.013	0.001	24.5	19.5	3.69	1.34

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 (GMAW)

❖ 전 용착 금속의 기계적 성질의 일례 (보호 가스 : Ar + 2%O₂)

Brand Name	Tensile Test Results.	
SMT-904L 1.2mm	T.S. (N/mm ²)	EL. (%)
	584	37.2
AWS A5.9 ER385	≥520	≥30

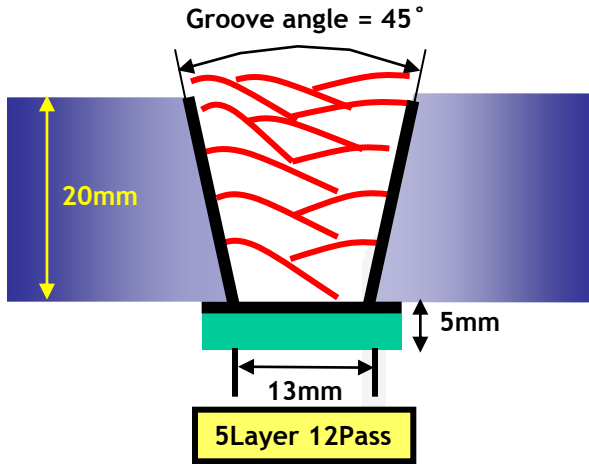
Brand Name	Charpy V-Notch Impact Value (Joules)				
SMT-904L 1.2mm	℃	X1	X2	X3	Avg.
	-60	127	123	143	131
	-196	83	94	95	91

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Mechanical Properties & Chemical Composition of All Weld Metal (GMAW)

❖ 용접 조건



- 선경(mm) : 1.2mm (GMAW)
- 보호 가스 : Ar+30%He
- 유량(ℓ /min.) : 20~25
- 전류(A)/전압(V) : 220/28
- Stick-Out(mm) : 20
- 용접 속도(cm/min.) : 30

❖ Wire 화학 성분의 일례 (wt%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
SMT-904L 1.2mm	0.013	0.31	1.89	0.013	0.001	24.9	20.5	4.32	1.42
AWS A5.9 ER385	≤0.025	≤0.50	1.0- 2.5	≤0.02	≤0.03	24.0- 26.0	19.5- 21.5	4.2- 5.2	1.2- 2.0

❖ 전 용착 금속의 화학 성분의 일례 (wt%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
SMT-904L 1.2mm	0.025	0.46	1.80	0.013	0.001	24.7	19.2	3.78	1.29

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Mechanical Properties & Chemical Composition of All Weld Metal (GMAW)

❖ 전 용착 금속의 기계적 성질의 일례 (보호 가스 : Ar + 30%He)

Brand Name	Tensile Test Results.	
SMT-904L 1.2mm	T.S. (N/mm ²)	EL. (%)
	580	43.2
AWS A5.9 ER385	≥520	≥30

Brand Name	Charpy V-Notch Impact Value (Joules)				
SMT-904L 1.2mm	℃	X1	X2	X3	Avg.
	-60	217	240	215	224
	-196	157	157	154	156

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