

SM-100

AWS A5.28/ ASME SFA5.28 ER100S-G

2009. 8



❖ 제품 규격

AWS A5.28/ ASME SFA5.28 ER100S-G

❖ 용도

산업기계장비, 압력용기, 보일러구조물, 해양구조물, 콘크리트 펌프카

❖ 특성

1. 저온에서 인성이 우수하고 고전류에서 아크안정성이 우수합니다..
2. 스파터가 적고 비드외관이 아름답습니다.

❖ 보호 가스

Ar+CO2 (M21)

❖ 용접 전류/극성

GMAW : DC+

❖ 포장

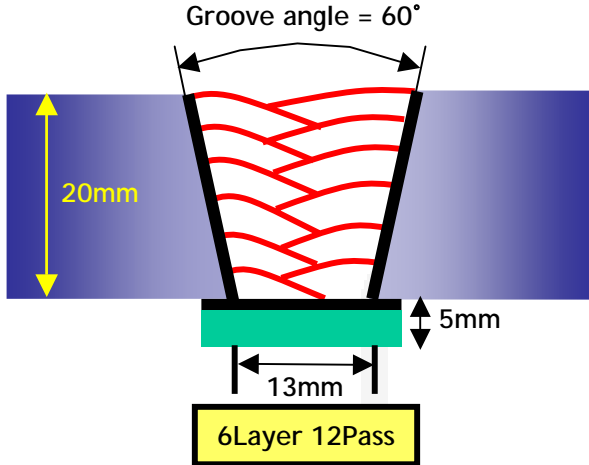
SM-100 (GMAW)	Size(mm)	1.0	1.2	1.4	1.6
	Weight	Spool : 15kg			

❖ 승인



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

❖ 용접 조건



선경(mm)	: 1.2mm (GMAW)
보호 가스	: 80%Ar+20%CO ₂
유량(ℓ /min.)	: 20~25
전류(A)/전압(V)	: 280/30
Stick-Out(mm)	: 20
용접 속도(cm/min.)	: 30

❖ Wire 화학 성분의 일례 (wt%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo
SM-100 1.2mm	0.087	0.51	1.55	0.022	0.009	1.38	0.34	0.21
AWS A5.28 Spec.	[One composition has to be in the regulated range of Ni,Cr,Mo at least]					≥0.50	≥0.3 0	≥0.20

* Other Elements Total shall include Pb, Sn, Zn

❖ 전 용착 금속의 화학 성분의 일례 (wt%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo
SM-100 1.2mm	0.087	0.37	1.23	0.012	0.008	1.41	0.31	0.20

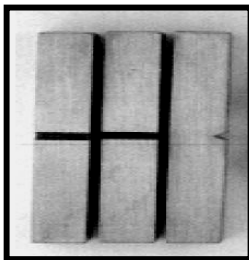


*Mechanical Properties
& Chemical Composition of All Weld Metal (GMAW)*

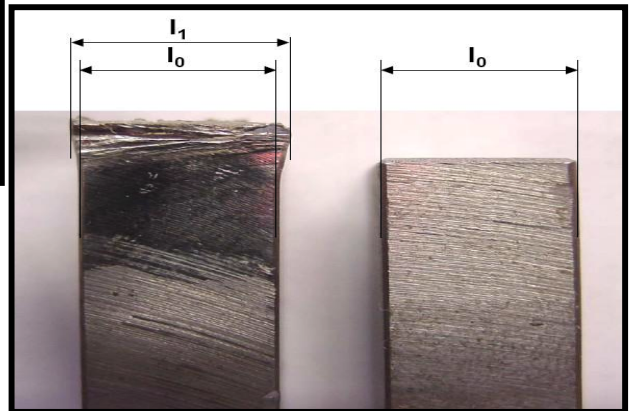
❖ 전 용착 금속의 기계적 성질의 일례 (보호 가스 : 80%Ar + 20%CO2)

Brand Name	Tensile Test Results.		
SM-100 1.2mm	Y.S. (N/mm ²)	T.S. (N/mm ²)	EL. (%)
	699	777	20.2
AWS A5.28	-	≥690	-

Brand Name	Charpy V-Notch Impact Value (Joules)					
SM-100 1.2mm	℃	X1	X2	X3	Avr	PWHT
	-20	73	105	107	95	Not required
	-40	56	63	93	70	
AWS A5.28	Not Specified					



Lateral expansion = $l_1 - l_0$

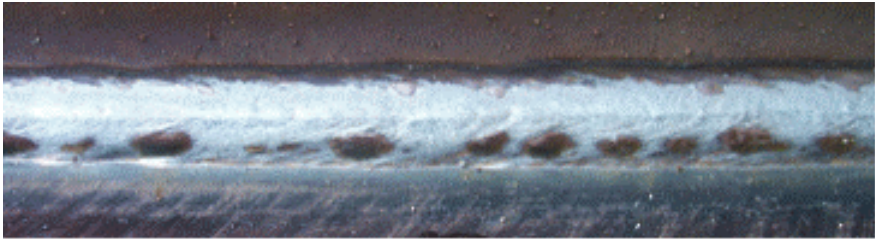


This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING 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.



Bead Appearance (GMAW)

❖ 용접 비드 외관 (H-Fillet Position)

Brand Name	용접 조건 : 280A/30V, 용접 자세 : Horizontal-fillet(2F, PB) 보호 가스 : 80%Ar+20%CO2
SM-100 1.2mm	

Notice

This test report is made for giving general information, and it's not meaning guarantee.

Test results are changeable by several welding - parameter including base materials