

# CERTIFIED MATERIAL REPORT

CMR No. : 2401244300013

Date of Issue : 2024-01-24

Customer	SPECIALISED WELDING PRODUCTS LIMITE		
Trade Name	SW-309L Cored	Size	1.2mm*15kg
Lot No.	20005928DB23JE7	Purchaser's Order No.	-
Specification	AWS A5.22 E309LT1-1/-4 EN ISO 17633-A - T 23 12 L P M21/C1 2		

Welding Current	DCEP	Shielding Gas	CO <sub>2</sub>	Post Weld Heat Treatment (°C × hr.)	AS WELDED
-----------------	------	---------------	-----------------	-------------------------------------	-----------

**Mechanical Properties**

Weld Metal	Tensile Test			Impact Test (CVN - Joule)				
	YS(MPa)	TS(MPa)	EL(%)	Temp.(°C)	X1	X2	X3	Avg.
	463	536	42.6		-	-	-	-
AWS Spec.	-	≥ 520	≥ 30		-			

**Chemical Composition (%)**

\* According to EN 10204-2004 : 3.1

Weld Metal	C	Si	Mn	P	S	Cu	Ni	Cr	Mo		
	0.03	0.79	1.22	0.019	0.006	0.06	12.53	22.40	0.05		
AWS Spec.	≤ 0.04	≤ 1.0	0.5 ~2.5	≤ 0.04	≤ 0.03	≤ 0.75	12.0 ~14.0	22.0 ~25.0	≤ 0.75		

Others

We hereby certify that the material covered by this report has been inspected in accordance with and been found to meet the applicable requirements of specification and customer's requirements.



0035-CPR-C760  
EN13479  
0035 06 / HWC-402

Approved by

*K.W. Park*

QA Manager Park K. W.



HYUNDAI WELDING CO., LTD.

Head Office  
Pohang Plant

507, Teheran-ro, Gangnam-gu, Seoul, Republic of Korea  
100, Daesong-ro, Nam-gu, Pohang, Republic of Korea