

CERTIFIED MATERIAL REPORT

CMR No. : 2603244200031

Date of Issue : 2026-03-24

Customer	Hyundai Welding GMBH		
Trade Name	SM-70EN	Size	1.0mm*15kg
Lot No.	267003031	Purchaser's Order No.	
Specification	EN ISO 14341-A - G 46 5 M21 4Si1 * According to EN 10204-2004 : 3.1		
Welding Current	DCEP	Shielding Gas	M21
		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.
	562	628	25.6	-50	76	69	84	76
Spec.	≥ 460	530~680	≥ 20	≥ 47				

Chemical Composition (%)

	C	Si	Mn	P	S	Ni	Cr	Mo	V	Cu	Al
WIRE	0.08	0.89	1.67	0.009	0.006	0.01	0.04	0.01	0.01	0.18	0.01
Spec.	0.06~0.14	0.80~1.20	1.60~1.90	≤ 0.025	≤ 0.025	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.03	≤ 0.35	≤ 0.02
WIRE	Ti+Zr										
	0.01										
Spec.	≤ 0.15										

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.

Approved by

K.W. Park

QA Manager Park K. W.



HYUNDAI WELDING CO., LTD.

Head Office

507, Teheran-ro, Gangnam-gu, Seoul, Republic of Korea

Pohang Plant

100, Daesong-ro, Nam-gu, Pohang, Republic of Korea