

# CERTIFIED MATERIAL REPORT

CMR No. : 1411263500026

Date of Issue : 2014-11-26

Customer	M.BINDT TRADING		
Trade Name	SC-71LHM Cored	Size	1.2mm*5kg
Lot No.	MF4220K0	Purchaser's Order No.	-
Applicable Specification	AWS A5.20 E71T-9M * According to EN 10204-2004 : 3.1 Equivalent to EN ISO 17632-A T 46 3 P M 1		

Welding Current	DCEP	Shielding Gas	80%Ar+20%CO <sub>2</sub>	Post Weld Heat Treatment (°C × hr.)	AS WELDED			
Mechanical Properties	Tensile Test			Impact Test (CVN - Joule)				
	YS(MPa)	TS(MPa)	EL(%)	Temp.(°C)	X1	X2	X3	Avg.
	543	599	30.0	-30	52	56	56	55
Spec.	≥ 390	490~670	≥ 22	≥ 27				

Chemical Composition (%)

	C	Si	Mn	P	S	Ni	Cr	Mo	V	Cu	
(Weld Metal)	0.04	0.52	1.08	0.011	0.009	0.03	0.03	0.01	0.01	0.01	
Spec.	≤ 0.12	≤ 0.90	≤ 1.75	≤ 0.03	≤ 0.03	≤ 0.50	≤ 0.20	≤ 0.30	≤ 0.08	≤ 0.35	

Others

ORIGINAL

We hereby certifies 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

*Sang Hyeon Lee*

QA Manager Lee, S. H.



**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