

# CERTIFIED MATERIAL REPORT

CMR No. : 1508113500003

Date of Issue : 2015-08-11

Customer	M.BINDT TRADING		
Trade Name	SM-70 eco	Size	0.8mm*5kg
Lot No.	830173	Purchaser's Order No.	-
Applicable Specification	AWS A5.18 ER70S-6 * According to EN 10204-2004 : 3.1 EN ISO 14341-A G 42 4 M21 3Si1		

Welding Current	DCEP	Shielding Gas	ISO 14175 M21	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.
	436	540	29.0	-40	90	93	91	91
Spec.	≥ 400	≥ 480	≥ 22	-				

Chemical Composition (%)

(WIRE) Spec.	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	
	0.11	0.88	1.53	0.008	0.009	0.23	0.06	0.05	0.01	0.01	
	0.06 ~0.15	0.80 ~1.15	1.40 ~1.85	≤ 0.025	≤ 0.035	≤ 0.50	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.03	

Others

\* Q'ty : 1,000kg

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

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