

# CERTIFIED MATERIAL REPORT

CMR No. : LE1011331348

Date of Issue 2010/05/10

Customer		FINLEX UK LTD.										
Trade Name		ST-72				Size		3.2 mm * 1000 mm * 5 kg				
Lot No.		92223951				Purchaser's Order No.		-				
Applicable Specification		AWS A5.18 ER70S-2      * According to EN10204 3.1 : 2004										
Welding Current	DCEN	Shielding Gas	Ar			Post Weld Heat Treatment (°C × hr.)			AS WELDED			
Mechanical Properties		Tensile Test			Impact Test (CVN - Joule)							
		YS (N/mm <sup>2</sup> )	TS (N/mm <sup>2</sup> )	EL (%)	Temp.(°C)	X1	X2	X3	Avg.			
		535	587	30.3	-30	172	200	200	191			
Spec.		≥400	≥482	≥22	≥27							
Chemical Composition (%)												
( WIRE )		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Ti
		0.04	0.50	1.16	0.017	0.004	0.20	0.01	0.01	0.01	0.01	0.07
		Spec. ≤0.07	0.40 ~0.70	0.90 ~1.40	≤0.025	≤0.035	≤0.50	≤0.15	≤0.15	≤0.15	≤0.03	0.05 ~0.15
( WIRE )		Zr	Al									
		0.05	0.08									
		Spec. 0.02 ~0.12	0.05 ~0.15									
<p>Others</p> <p>Tested with ST-72 2.4mm to obtain the above results.</p> <p>*P/I NO.:HWC-10440</p> <p>17.1MT</p>												
<p>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.</p> <div style="text-align: right;"> <p>Approved by</p> <p><i>Sang Hee Lee</i></p> <p>QA Manager Lee, S. H.</p> </div>												



**HYUNDAI WELDING CO., LTD.**

Head Office  
Pohang Plant

157-37, Samsung-dong, Gangnam-gu, Seoul, Republic of Korea  
90-5, Jangheung-dong, Nam-gu, Pohang-si, Republic of Korea