


# CERTIFIED MATERIAL REPORT

CMR No. : OF1011352314

Date of Issue 2013/06/10

Customer		FINLEX UK LTD.									
Trade Name		SW-309L Cored				Size		1.2 mm * 15 kg			
Lot No.		SW3927E5				Purchaser's Order No.		-			
Applicable Specification		AWS A5.22 E309LT1-1/-4 EN ISO 17633-A T 23 12 L P M/C 2				* According to EN10204 3.1 : 2004					
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.		
		-	541	40.4							
Spec.		-	≥520	≥30							
Chemical Composition (%)											
( Weld Metal )		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	
		0.03	0.94	1.24	0.017	0.006	0.04	12.55	23.19	0.02	
		Spec.	≤0.04	≤1.0	0.5 ~2.5	≤0.04	≤0.03	≤0.5	12.0 ~14.0	22.0 ~25.0	≤0.5
Others											
<p>*P/I NO.: HWC-10929 1,000KG</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="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  </div> <div style="text-align: right;"> <p>Approved by</p> <p><i>Sang Hee Lee</i></p> <p>QA Manager Lee, S. H.</p> </div> </div>											



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