## CERTIFIED MATERIAL REPORT

CMR No.: JK0511331311

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Customer	NLEX U	JK LTD	).		)							
Trade Name	e S-	S-6013.V					Purchaser's Order No.					
Size	50 mm			Applicable		AWS A5.1 E6013 According to EN10204 3.1 : 2004						
Lot No.	816	81610				Date of Issue 2008/11/05						
Welding Current A(		ielding Gas	g _				ost Weld Heat Treatment (°C × hr.)			AS WELDED		
Mechanical Properties		Tensile Test					Impact Test (CVN - Joule)					
	YS (N/m²)		TS (N/mm²)		EL (	%) Tem	np.(℃)	X1	X2	Х3	Avg.	
	490		537		28.2	2						
Spec.	≥331		≥415		≥17						1	
Chemical Composition	С	Si	Mn	Р	S	Ni	Cr	Мо	٧			
(%) ( DEPO. )	0.09	0.23	0.42	0.021	0.007	0.05	0.06	0.02	0.02			
Spec.	≤0.20	≤1.00	≤1.20	-	-	- ≤0.30	≤0.20	≤0.30	≤0.08			

Others

Tested with S-6013.V 4.0mm to obtain the above results.  $\star$ P/I NO.:HWC-10158 20.175MT

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

QA Manager Kim, S. H

