

# CERTIFIED MATERIAL REPORT

CMR No. : 1712113700007

Date of Issue : 2017-12-11

Customer	A-LEAF		
Trade Name	Superflux 800T X M-12K	Size	10 X 48 Mesh
Lot No.	3021128	Purchaser's Order No.	-
Specification	AWS A5.17 F7A8 X EM12K EN ISO 14174 S A FB 1 (Superflux 800T) * According to EN 10204-2004 : 3.1		

Welding Current	AC	Shielding Gas	-		Post Weld Heat Treatment ( x hr.)			AS WELDED	
Mechanical Properties		Tensile Test			Impact Test (CVN - Joule)				
		YS(MPa)	TS(MPa)	EL(%)	Temp. ( )	X1	X2	X3	Avg.
		529	590	29.2	-60	103	104	97	101
AWS Spec.		400	480 660	22	27				

## Chemical Composition (%)

	C	Si	Mn	P	S	Cu					
(WIRE)	0.09	0.16	1.16	0.018	0.018	0.09					
AWS Spec.	0.05 0.15	0.10 0.35	0.80 1.25	0.030	0.030	0.35					

Others

We hereby certify 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*

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