

# CERTIFIED MATERIAL REPORT

CMR No. : 1712183700003

Date of Issue : 2017-12-18

Customer	A-LEAF		
Trade Name	Superflux 800T X M-12K	Size	10 X 48 Mesh
Lot No.	0021104	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.
		513	584	29.4	-60	86	86	97	90
AWS Spec.		400	480 660	22	27				

## Chemical Composition (%)

	C	Si	Mn	P	S	Cu					
(WIRE)	0.09	0.25	1.01	0.016	0.009	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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