

# CERTIFIED MATERIAL REPORT

CMR No. : 1704183700011

Date of Issue : 2017-04-18

Customer	M.Bindt Norway		
Trade Name	SM-70EN eco	Size	0.8mm*15kg
Lot No.	5436043	Purchaser's Order No.	-

Specification	AWS A5.18 ER70S-6 * According to EN 10204-2004 : 3.1 EN ISO 14341-A G 46 4 M21 4Si1		
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Welding Current	DCEP	Shielding Gas	80%Ar+20%CO <sub>2</sub>	Post Weld Heat Treatment (°C × hr.)	AS WELDED
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Mechanical Properties	Tensile Test			Impact Test (CVN - Joule)				
	YS(MPa)	TS(MPa)	EL(%)	Temp.(°C)	X1	X2	X3	Avg.
	461	535	28.0	-40	84	83	83	83
AWS Spec.	≥ 400	≥ 480	≥ 22	-				

### Chemical Composition (%)

(WIRE) AWS Spec.	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V
	0.08	0.90	1.66	0.009	0.010	0.20	0.03	0.04	0.01	0.01
	0.06 ~0.15	0.80 ~1.15	1.40 ~1.85	≤ 0.025	≤ 0.035	≤ 0.50	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.03

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

  
 QA Manager Park K. W.



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