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# Welding Consumable: Approval Certificate

Office:

Mumbai-Port

Date:

18 May 2016

This Certificate is issued to Senor Metals Pvt. Ltd. to certify that the undernoted welding consumable is recommended for entry in the supplementary list of certified welding consumable in accordance with ASME Section II, Part C, SFA 5.1, specification of the year 2015. This certificate is issued on the basis of satisfactory test results on the test coupons prepared on 01 March 2016 and subsequently tested on 22 March 2016. Welding consumable is manufactured by Senor Metals Pvt. Ltd. Jamnagar, India

## **Description:**

Consumable name

: SME 7018

Size

: 2.5, 3,15, 4.0 mm

SFA Classification

: SFA 5.1 AWS CL. E7018

Results of test

Meadita of teat				
	2.50mm	3.15mm	4.00 mm	5.00 mm
0.2% Proof stress	Not Required	488 N/mm <sup>2</sup>	479 N/mm <sup>2</sup>	
UTS	Not Required	574 N/mm²	565 N/mm <sup>2</sup>	
% Elongation	Not Required	31.00	28.70	
Impact at -30deg C	Not Required	136 J,96 J,150 J	122 J,42 J,84 J,	
		Avg 127.33 J	Avg 82.67 J	
Chemical	Acceptable	Acceptable	Acceptable	Acceptable
Radiography	Not Required	Acceptable	Acceptable	Acceptable
Fillet( H,V, OH )	Not Required	Acceptable	Acceptable	Acceptable

#### Chemical Analysis-Size: 2.5mm

	С	Mn	Si	S	P	Ni	Мо	Cr	Cu	V
	%	%	%	%	%	%	%	%	%	%
Range	0.15 max	1.60	0.75	0.035 max	0.035 max	0.30 max	0.30 max	0.20 max		0.08 max
Result	0.038	1.13	0.47	0.017	0.031	0.018	< 0.01	0.045	0.016	0.018

## Chemical Analysis - Size: 3.15mm

	С	Mn	Si	S	P	Ni	Мо	Cr	Cu	V
	%	%	%	%	%	%	%	%	%	%
Range	0.15 max	1.60	0.75	0.035 max	0.035 max	0.30 max	0.30 max	0.20 max	-	0.08 max
Result	0.038	1.11	0.45	0.017	0.031	0.016	< 0.01	0.040	0.016	0.017

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## Chemical Analysis-Size: 4mm

	С	Mn	Si	S	P	Ni	Мо	Cr	Cu	V
	%	%	%	%	%	%	%	%	%	%
Range	0.15 max	1.60	0.75	0.035 max	0.035 max	0.30 max	0.30 max	0.20 max		0.08 max
Result	0.037	1.07	0.47	0.010	0.025	0.015	< 0.01	0.033	0.021	0.017

Moisture Test - Absorbed Moisture test was conducted & results were found Satisfactory.

Chemical Analysis- Size 5mm

	С	Mn	Si	S	P	Ni	Мо	Cr	Cu	V
	%	%	%	%	%	%	%	%	%	%
Range	0.15 max	1.60	0.75	0.035 max	0.035 max	0.30 max	0.30 max	0.20 max	-	0.08 max
Result	0.038	1.03	0.41	0.017	0.031	0.019	< 0.01	0.046	0.016	0.017

Certificate is valid until 21 March 2017.

Multipoar Port Office

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