

05-19-2022 03:00
 L & L Ironworks, LLC
 Cust. PO - 407655

Load - 4079663

BL - 8767364

blr466

Heat - M2D018

Order - 21397618


SSAB

Test Certificate

12400 Highway 43 North, Axis, Alabama 36505, US

WARNING: This product can expose you to chemicals including nickel and nickel compounds, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Form TCI: Revision 4; Date 5 Feb 2019

ROSWELL GA 30076		Customer P.O.No.:NEW-7728652		Mill Order No. 41-670717-01		Shipping Manifest: AR354757																																				
		Product Description: ABS (2022) GR A ASTM A36(18)/A708(21)38/ASME SA36(21) MN 0.80% - 1.20% AASHYO M270(20)36				Ship Date: 13 Apr 22 Cert Date: 13 Apr 22																																				
		Size: 0.250 X 120.0 X 480.0 (IN)				Cert No: 081040606 (Page 1 of 1)																																				
Tested Pieces:		Tensiles:				Charpy Impact Tests																																				
Heat Id	Place Id	Tested Thickness	Test Loc	YS (KSI)	UTS (KSI)	%RA	Elong % 2in 8in	Test Dir	Hardness	Abs. Energy(FTLB)			% Shear			Test Temp	Test Dir	Test Siz (mm)	BWTT Temp %Shr																							
E2D018	D14	0.196 (DISCRT)	L 81	70			36	T		1	2	3	Avg	1	2	3	Avg																									
E2D018	D17	0.257 (DISCRT)	L 57	70			36	T																																		
M2D018	D12	0.257 (DISCRT)	L 56	67			36	T																																		
Heat Id		Chemical Analysis														ORGN																										
		C	Mn	P	S	Si	Total	Cu	Ni	Cr	Mo	Co	V	Ti	Cov	USA																										
E2D018		.05	1.15	.011	.001	.28	.025	.30	.11	.17	.04	.008	.005	.008	.24	USA																										
M2D018-D12		.05	1.00	.008	.001	.28	.026	.29	.10	.14	.03	.005	.004	.012	.22	USA																										
<p>KILLED STEEL MERCURY IS NOT A METALLURGICAL COMPONENT OF THE STEEL AND NO MERCURY WAS INTENTIONALLY ADDED DURING THE MANUFACTURE OF THIS PRODUCT. WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MADE BY SSAB AMERICAS BY THE ELECTRIC FURNACE / STRAND CAST PROCESS AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN BUREAU OF SHIPPING RULES WITH SATISFACTORY RESULTS. CEV = C + MN/5 MFR EN 10204:2004 INSPECTION CERTIFICATE 3.1 COMPLIANT 100% MELTED, POURED, AND ROLLED IN THE USA NO WELD REPAIR HAS BEEN PERFORMED ON THIS MATERIAL.</p> <p>PRODUCTS SHIPPED:</p> <table> <tr> <td>E2D018</td> <td>D16</td> <td>PCS:</td> <td>14,</td> <td>LBS:</td> <td>57176</td> <td>E2D018</td> <td>D15</td> <td>PCS:</td> <td>5,</td> <td>LBS:</td> <td>20420</td> </tr> <tr> <td>M2D018</td> <td>D12</td> <td>PCS:</td> <td>1,</td> <td>LBS:</td> <td>4084</td> <td colspan="6"></td> </tr> </table>																			E2D018	D16	PCS:	14,	LBS:	57176	E2D018	D15	PCS:	5,	LBS:	20420	M2D018	D12	PCS:	1,	LBS:	4084						
E2D018	D16	PCS:	14,	LBS:	57176	E2D018	D15	PCS:	5,	LBS:	20420																															
M2D018	D12	PCS:	1,	LBS:	4084																																					
										 Carlos Ferrari																																
										WOH# 5242666 Date 04/21/2022																																
										WE HEREBY CERTIFY THAT THIS MATERIAL WAS TESTED IN ACCORDANCE WITH, AND MEETS THE REQUIREMENTS OF, THE APPROPRIATE SPECIFICATION				Jason Thomas 04/14/2022 Director Technical Services																												
										Cust Part #:																																