

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

Load - 4079663

BL - 8767364

Heat - M2D018

Order - 21397618

SSAB

Test Certificate

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.p65.ca.gov.

12400 Highway 43 North, Axis, Alabama 38505, US

Form TCT: Revision 4: Date 6 Feb 2018

Customer:
 KLOECKNER METALS CORPORATION
 500 COLONIAL CENTER PKWY
 ROSWELL
 GA 30076

Customer P.O.No.: NEW-772652
 Product Description: ABS (2022) GR A
 ASTM A36(15)/A709(21)36/ASME SA36(21)
 MN 0.80% - 1.20%
 AASHTO M270(20)36

MMI Order No. 41-670717-01
 Shipping Manifest: AR354757
 Ship Date: 13 Apr 22
 Cert No: 081040806
 Cert Date: 13 Apr 22 (Page 1 of 1)

Size: 0.250 X 120.0 X 480.0 (IN)

Heat Id	Piece Id	Tested Thickness	Tst Loc	Tensiles				Tst Dir	Hardness	Abs. Energy (FTLB)			Charpy Impact Tests			Tst Dir	Tst Siz (in)	BDWTT Temp %Shr
				YS (KSI)	UTS (KSI)	%RA	Elong % 2in			Elong % 8in	1	2	3	Avg	1			
E2D018	D14	0.196 (DISCRT)	L 61	70														
E2D018	D17	0.257 (DISCRT)	L 57	70														
M2D018	D12	0.257 (DISCRT)	L 28	67														

Heat Id	Chemical Analysis												
	C	Mn	P	S	Si	Tot Al	Cu	Ni	Cr	Mo	V	Ti	Cev
E2D018	.05	1.15	.011	.001	.28	.025	.30	.11	.17	.04	.003	.005	.008
M2D018-D12	.05	1.00	.008	.001	.28	.026	.29	.10	.14	.03	.005	.004	.012


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.

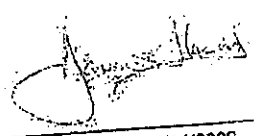
CEV = C + Mn/6
 MET EN 10204:2004 INSPECTION CERTIFICATE 3.1 COMPLIANT
 100% MELTED, POURED, AND ROLLED IN THE USA
 NO WELD REPAIR HAS BEEN PERFORMED ON THIS MATERIAL.

PRODUCTS SHIPPED:
 E2D018 D16 PCS: 14, LBS: 57176
 M2D018 D12 PCS: 1, LBS: 4084

E2D018 D15 PCS: 5, LBS: 20420



WOP 5242666 Date 04/21/2022
 Carlos Ferran



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 #: