

# SSAB

## Test Certificate

12400 Highway 43 North, Avia, 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](http://www.P65Warnings.ca.gov).

Customer:

Customer P.O.No.:HOU-10813

Mill Order No. 41-684141-01

Shipping Manifest AR364993

Product Description: ABS (2022) GR A / GR B

ASTM A384(18)/AZ09(21)(81)/ASME SA384(21)

ASTM A283-C(18)/ASME SA283-C(21)

0.80-0.50% MN, 0.10% MAX S

Ship Date: 23 Sep 22  
Cert No: 081070679  
Cert Date: 23 Sep 22 (Page 1 of 1)

Size: 0.313 X 96.00 X 480.0 (IN)

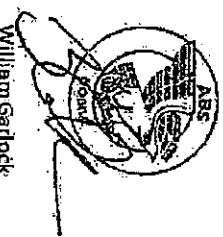
**Tested Pieces:**

Heat Id	Piece Id	Tested Thickness	Loc (KSI)	YS (KSI)	UTS (KSI)	%RA	Elong %	Tst Dir	Hardness	Abs. Energy (FTLB)	1	2	3	Avg	Tst Temp	Tst Dir	Tst Slz (mm)	BDWTT
E21173	D08	0.320 (DISCRY)	L 61	70	40		T			1	2	3	Avg	Temp	Dir	Slz (mm)	Temp %Str	

**Chemical Analysis**

Heat Id	C	Mn	P	S	SI	Total Sol Al	Cu	NI	Cr	Mo	Cb	V	Ti	Cev	ORGN	
E21173	1.15	84	0.009	0.003	0.03	0.031	0.030	0.30	1.16	0.13	0.03	0.001	0.003	0.014	29	USA

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  
KILLED STEEL, PRODUCED TO A FINE GRAIN PRACTICE  
MTR 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: D08  
PCS: 12, LBS: 49080



William Gerlock  
W.O.# \_\_\_\_\_ Date \_\_\_\_\_  
5486455 04 OCT 2022

09/26/2022

WE HEREBY CERTIFY THAT THIS MATERIAL WAS TESTED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE APPROPRIATE SPECIFICATION

Jason Thomas  
Director Technical Services