PART NO.

Attn:

SSAB

12400 Highway 43 North, Axis, Alabama 36505, US

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.P65Warnings.ca.gov.

Form TC1: Revision 5: Date 22 Aug 2022

Customer:	Customer P.O.No.:HOU-10864	Mill Order No. 41-704199-02	Shipping Manifest: AR377044
	Product Description: ABS (2023) GR A / GR B ASTM A36(19)/A709(21)36/ASME SA36(21) ASTM A283-C(18)/ASME SA283-C(21) 0.80-0.90% MN,.010% MAX S	Ship Date: 09 Apr 23 Cert Date: 09 Apr 23	Cert No: 081104773 (Page 1 of 1)
	Size: 0.438 X 96.00 X 480.0 (IN)		

Tested Pieces:				Tensiles:						Charpy Impact Tests							
Heat Id	Piece Id	Tested Thickness	Tst Loc	YS (KSI)	UTS (KSI)	%RA	Elong % 2in 8in	Tst Dir	Hardness	Abs. Energy(FTLB) 1 2 3 Avg	% Shear 1 2 3 Avg	Tst Tmp	Tst Dir	Tst Siz (mm)	BDWTT Tmp %Shr
E3D047	E14	0.445 (DISCRT)	L	50	70		40	T							

Chemical Analysis

Heat Id	C	Mn	P	S	Si	Tot Al	Sol Al	Cu	Ni	Cr	Mo	Cb	V	Ti	Cev	ORGN
E3D047	.15	.83	.016	.004	.03	.026	.023	.31	.17	.18	.04	.003	.003	.012	.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:
E3D047 E14 PCES: 7, LBS: 40068

(P) Cust Part #:

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

Jason Thomas
Director Technical Services