



Test Certificate

12400 Highway 43 North, Axis, Alabama 36505, US

Form TC1: Revision 5, Date 22 Aug 2022

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.

Customer:

Customer P.O.No.:HOU-10942
 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, 0.10% MAX S

Ship Date: 22 Jun 23
 Cert Date: 22 Jun 23
 Shipping Manifest: AR362368
 Cert No: 081120389
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Size: 0.250 X 96.00 X 480.0 (IN)

Heat Id	Piece Id	Tested Thickness	Tst Loc	YS		UTS		%RA		Elong %		Tct Dir	Hardness	Abs. Energy(FTLB)			% Shear			Tst Tmp	Tst Dir	Tst Siz (mm)	BDWTT Tmp %Str
				(KSI)	(KSI)	2in	8in	1	2	3	Avg			1	2	3	Avg						
E3F161	C27	0.257 (DISCR)	L 51	62	62	43	T																

Heat Id	C	Mn	P	S	SI	Total	Sol Al	Cu	Ni	Cr	Mo	Cb	V	Ti	Cov	ORGN
E3F161	.05	.86	.011	.002	.29	.026	.025	.25	.10	.13	.03	.003	.002	.022	.20	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 FN 10204-2004 INSPECTION CERTIFICATE 3.1 COMPLIANT
 100% MILLED, POURED, AND ROLLED IN THE USA
 NO WELD REPAIR HAS BEEN PERFORMED ON THIS MATERIAL.
 PRODUCTS SHIPPED:
 E3F161 C27 PCS: 5, LBS: 16335

(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