



Test Certificate

Form TC1: Revision 3: Date 7 Feb 2018

12400 Highway 43 North, Axis, Alabama 36505, US

Customer P.O.No.:		Mill Order No. 41-544691-01	Shipping Manifest: AR270818
Product Description: ABS (2018) GR A / GR B ASTM A36(14)/A709(17)36/ASME SA36(17) .010% MAX S		Ship Date: 13 Aug 18 Cert Date: 13 Aug 18	Cert No: 081678207 (Page 1 of 1)
Size: 0.188 X 120.0 X 480.0 (IN)			

Tested Pieces:				Tensiles:					Charpy Impact Tests					BDWTT Tmp %Shr						
Heat Id	Piece Id	Piece Dimensions	Tst Loc	YS (KSI)	UTS (KSI)	%RA	Elong % 2in 8in	Tst Dir	Hardness	Abs. Energy(FTLB)					% Shear				Tst Tmp	Tst Dir
										1	2	3	Avg	1	2	3	Avg			
E8H050	E57	0.749 (DISCRT)	L	50	62		32	T												
E8H050	E58	0.195 (DISCRT)	L	62	73		18	T												

Heat Id	Chemical Analysis															ORGN USA
	C	Mn	P	S	Si	Tot Al	Sol Al	Cu	Ni	Cr	Mo	Cb	V	Ti	Cev	
E8H050	.04	1.14	.017	.005	.29	.033	.033	.38	.11	.19	.03	.000	.003	.008	.23	

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 AND MANUFACTURED IN THE USA.
 NO WELD REPAIR HAS BEEN PERFORMED ON THIS MATERIAL.
 PRODUCTS SHIPPED:
 E8H050 E58 PCS: 14, LBS: 42994 E8H050 E56 PCS: 2, LBS: 6142

(P) Cust Part #:	WE HEREBY CERTIFY THAT THIS MATERIAL WAS TESTED IN ACCORDANCE WITH, AND MEETS THE REQUIREMENTS OF, THE APPROPRIATE SPECIFICATION	Justin Ward SENIOR METALLURGIST - PRODUCT
------------------	--	--