

# SSAB

## Test Certificate

Form TC1: Revision 3: Date 7 Feb 2018

12400 Highway 43 North, Axis, Alabama 36505, US

<b>Customer:</b> NORTH SHORE STEEL CO, INC 1566 MILES STREET VENDOR 52155 HOUSTON TX 77015	<b>Customer P.O. No.:</b> 305129	<b>Mill Order No.:</b> 41-545966-04	<b>Shipping Manifest :</b> AT270710	
	<b>Product Description:</b> ASTM A36(14)/A709(17)36/ASME SA36(17) AASHTO M270(15)36, 0.80-1.20 MN		<b>Ship Date:</b> 13 Aug 18 <b>Cert Date:</b> 13 Aug 18	<b>Cert No:</b> 081678029 ( Page 1 of 1 )
	<b>Size:</b> 0.313 X 120.0 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)				% Shear			Tst Tmp	Tst Dir	Tst Siz (mm)	BDWTT			
										1	2	3	Avg	1	2	3	Avg				Tmp	%Shr	
W8H547	E73	0.256 (DISCRT)	L	50	64		28	T															
W8H547	E75	0.320 (DISCRT)	L	53	65		27	T															

Heat Id	Chemical Analysis																ORGN
	C	Mn	P	S	Si	Tot Al	Cu	Ni	Cr	Mo	Cb	V	Ti	B	N	IIW	
W8H547	.04	1.13	.012	.003	.28	.028	.30	.16	.20	.03	.000	.004	.008	.0002	.0071	.31	USA

KILLED STEEL  
 MERCURY IS NOT A METALLURGICAL COMPONENT OF THE STEEL AND NO MERCURY WAS INTENTIONALLY ADDED DURING THE MANUFACTURE OF THIS PRODUCT.  
 $CEV (IIW) = C + MN/6 + (CR+MO+V)/5 + (NI+CU)/15$   
 MTR EN 10204:2004 INSPECTION CERTIFICATE 3.1 COMPLIANT  
 100% MELTED AND MANUFACTURED IN THE USA.  
 PRODUCTS SHIPPED:  
 W8H547 E76 PCES: 6, LBS: 30678 W8H547 E75 PCES: 3, LBS: 15339

(U) 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
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