

SSW 140543



1770 Bill Sharp Boulevard, Muscatine, IA 52761-9412, 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 P.O.No.: 11231 Mill Order No. 41-115417-11 Shipping Manifest: MR500281
 Product Description: ASTM A1011(23)SS GRADE 36 Ship Date: 23 Aug 23 Cert No: 061246034
 TYPE 2, 0.20% MIN. CU, 0.80-1.20% MN Cert Date: 23 Aug 23 (Page 1 of 1)

Size: 0.130(MIN) X 96.00 X COIL (IN)

Heat Id	Tested Pieces:			Tensiles:			Charpy Impact Tests			BDWTT Temp %Shr		
	Piece Id	Thickness	Tst Loc	YS (KSI)	UTS (KSI)	%RA	Elong %	2in	8in		Tst Dir	Tst Temp
A3H166	0456	0.139		51	70		36					
A3H166	0457	0.140		50	69		33					
B3G883	0716	0.140		54	71		30					
B3G683	0717	0.139		52	69		32					

Heat Id	Chemical Analysis														ORGN	
	C	Mn	P	S	Si	Tot Al	Cu	Ni	Cr	Mo	Cb	V	Ti	B		N
A3H166	.16	.84	.009	<.001	.07	.029	.30	.10	.12	.03	.001	.003	.007	.0000	.0063	USA
B3G683	.15	.82	.011	.001	.05	.034	.33	.11	.13	.03	.001	.003	.007	.0001	.0083	USA

KILLED STEEL
 MERCURY IS NOT A METALLURGICAL COMPONENT OF THE STEEL AND NO MERCURY WAS INTENTIONALLY ADDED DURING THE MANUFACTURE OF THIS PRODUCT.
 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:
 B3G683 0717 PCS: 1, LBS: 52340 B3G683 0716 PCS: 1, LBS: 52000
 A3H166 0457 PCS: 1, LBS: 40940 A3H166 0456 PCS: 1, LBS: 40780

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

Customer Part # _____ Brian Wales
 PRINCIPAL METALLURGIST

ALGOMA STEEL INC. ALGOMA STEEL INC., 105 West Street, Sault Ste. Marie, Ontario, Canada P6A 7B4ALGOMA

SO No., Item & Date: 8117602 000010 2023/11/27	Shipment No. & Date: 1000527850 2023/11/28	TC No., Date & Time: ASI-923298 2023/11/28 - 11:53:18													
Sold to Customer Name and Address:	Ship to Customer Name and Address:	Customer PO No./Item: 10699 / 1													
		BOL NO.: 1000527850													
		Cust. Part No.: CN (USD FUNDS) - MBKX 169017													
		Carrier:													
Customer Specification: HR STEEL SHEET Carbon CQ / CS ASTM A1011 CS TY B (2018A) Top Semi Critical Surface Improved Shape Gauge type MIN - 0/+ 0.0120 * Coil break considered															
Supplementary Instructions: Test Cert 1:ryan.letz@willbanksmetals.com Test Cert 2: docs@willbanksmetals.com															
Insp T/R: Chemical Analysis															
Cust Use: GENERAL MANUFACTURING															
ALGOMA STEEL INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES. THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ALGOMA STEEL INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705)945-4095 FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT. THIS TEST REPORT HAS BEEN GENERATED BY A COMPUTERIZED SYSTEM AND IS VALID WITHOUT A PHYSICAL SIGNATURE.															
MEETS EN 10204 3.1 ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ALGOMA.COM															
ALL HEATS FULLY KILLED. HEATS INDICATED WITH (*) FINE GRAINED. HEATS INDICATED WITH (+) Melted and poured in CANADA; Made in Canada for USIMCA duty preference purposes.															
Dimensions (T x W x L)	Batch No.	Heat No.-MS	Quantity	No. of Pcs	Dimensions (T x W x L)	Batch No.	Heat No.-MS	Quantity	No. of Pcs						
0.1265" x 96.000"	LOR5504	6018K5-51	21,460 LB	1	0.1265" x 96.000"	LOR5508	6018K5-52	21,980 LB	1						
0.1265" x 96.000"	LOR5507	6018K5-53	21,860 LB	1	0.1265" x 96.000"	LOR5511	6851N5-02	21,840 LB	1						
0.1265" x 96.000"	LOR5509	6851N5-01	21,800 LB	1											
*****CHEMICAL PROPERTIES*****															
Heat No. (wt%)	C	Mn	P	S	Si	Cr	Ni	Cu	Mo	Al	Nb	V	B	Ti	N
6018K5*	0.05	0.39	0.013	0.008	0.016	0.04	0.02	0.04	0.01	0.035	0.001	0.000	0.0002	0.001	0.0060
6851N5*	0.06	0.38	0.017	0.002	0.031	0.04	0.02	0.02	0.00	0.030	0.000	0.000	0.0000	0.001	0.0077

KARSTEN ROGERS
 KARSTEN ROGERS
 MANAGER METALLURGICAL SERVICES

WARNING THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE INCLUDING DESIGN OR CALCULATIONS AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

Packing List 118536-1 (1/5/2024) Image 257202 (1/5/2024)

Our Order 208505-1-1 Your Order SSW140543

ALGOMA STEEL INC. ALGOMA STEEL INC., 105 West Street, Sault Ste. Marie, Ontario, Canada P6A 7B4ALGOMA

SO No., Item & Date: 8117802 000010 2023/11/27 Shipment No. & Date: 1000527850 2023/11/28 TC No., Date & Time: ASI-923298 2023/11/28 - 11:53:18
 Customer PO No./Item: 10699 / 1
 BOL NO.: 1000527850
 Cust.Part No.:
 Carrier: CN (USD FLUNDS) - MBKX 169017

Customer Specification: HR STEEL SHEET Carbon CQ / CS ASTM A1011 CS TY B (2018A) Top Semi Critical Surface Improved Shape Gauge type MIN - 0/+ 0.0120 ° Coil break considered

Supplementary Instructions: Test Cert 1:ryan.letz@willbanksmetals.com Test Cert 2: docs@willbanksmetals.com

Insp T/R: Chemical Analysis
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MEETS EN 10204 3.1
 ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ALGOMA.COM

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 HEATS INDICATED WITH (*) FINE GRAINED.
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0.1265" x 96.000"	LQR5507	6018K5-53	21,860 LB	1	0.1265" x 96.000"	LQR5511	6851N5-02	21,840 LB	1
0.1265" x 96.000"	LQR5509	6851N5-01	21,800 LB	1					

Heat No. (wt%)	C	Mn	P	S	SI	Cr	Ni	Cu	Mg	Al	Mo	V	B	Ti	N
6018K5*	0.05	0.39	0.013	0.008	0.016	0.04	0.02	0.04	0.01	0.035	0.001	0.000	0.0002	0.001	0.0060
6851N5*	0.06	0.38	0.017	0.002	0.031	0.04	0.02	0.02	0.00	0.030	0.000	0.000	0.0000	0.001	0.0077

CHEMICAL PROPERTIES

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