



Mill Test Certificate

Certificate No. : 141023-FP01PS-00038-0001

Date of Issue : Nov., 10, 2014

Order No. : 01S1303977

PO No. : 244429

Supplier : DAE WOO INTERNATIONAL CORP.

Commodity : PLATE

Customer : NAMASCO LA CORP.

Spec & Type : A36/SA36/A709-36

Size	Product No.	Quantity	Weight (kg)	Heat No.	Position	Tensile Test			Division	Chemical Composition (%)										
						YP (MPa)	TS (MPa)	EL (%)		C	Si	Mn	P	S	Cr	Ni	Cu	Mo	Nb	V
1"x96"x240"	PB60775904	1	2,963	SB15141	T	280	452	30	L	0.1595	0.238	0.879	0.0110	0.0037	0.017	0.012	0.011	0.002	0.001	0.002
1"x96"x240"	PB60949001-9003	3	8,889	SB15404	T	281	461	34	P	0.1450	0.246	0.860	0.0135	0.0040	0.020	0.016	0.013	0.000	0.000	0.002
	*** Sub Total (090) ***	4	11,852 (kg)						L	0.1621	0.258	0.891	0.0150	0.0044	0.016	0.003	0.006	0.002	0.001	0.002
									P	0.1584	0.252	0.879	0.0141	0.0035	0.015	0.006	0.007	0.000	0.001	0.001
1.75"x96"x240"	PB60899501-9503	3	15,555	SB15407	T	283	460	33	L	0.1628	0.241	0.931	0.0107	0.0022	0.013	0.008	0.008	0.002	0.001	0.001
	*** Sub Total (100) ***	3	15,555 (kg)						P	0.1655	0.242	0.926	0.0103	0.0020	0.012	0.011	0.009	0.004	0.001	0.000
	*** Grand Total ***	7	27,407 (kg)																	
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=== Last Item ===

- * Position - T : Top, M : Middle, B : Bottom
- * Tensile Test. Direction : Transversal, Gauge Length : 200mm(Rectangular), YP Method : 0.2% off-set
- * Division - L : Ladle Analysis, P : Products Analysis
- * Supply Condition : As-Rolled unless otherwise Heat Treated.

We hereby certify that the material herein has been made in accordance with the order and above specification. This material has been made by vacuum degassing process. This material is fine grained steel. This material has been fully killed and made by basic oxygen process. Test Certificate is issued according to EN10204 3.1.

This Mill Test Certificate cannot be copied for any purpose.

Surveyor To :

M.S. JANG



Metallurgical Chemistry and Testing Laboratory

3204 BROADWAY (77017)
POST OFFICE BOX 262265
HOUSTON, TEXAS 77267-2265
PHONE: (713) 644-7501
FAX: (713) 644-1400

March 24, 2015

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North Shore Supply Company
Attn: Junior Johnston
P.O. Box 9940
Houston, TX 77213-0940

P.O. No. 256155
Report No. 15-0581-8
Revision: 3/25/2015

IDENTIFICATION: 1-3/4", Tag# 013115-20, HT# SB15407, SL# PB608995-01
MATERIAL: A36

IMPACT TEST
10mm x 10mm CVN @ +10°F
(Longitudinal)

<u>Foot Pounds</u>	<u>Lateral Expansion (mils)</u>	<u>% Shear</u>
118.0	90	60
113.0	89	50
121.0	83	60

Donald Derrick
Mechanical Testing Supervisor

SC

Tests were performed in accordance with the An-Tech Laboratories, Inc. Quality Assurance Manual, 2nd Edition, Revision 2 dated May 28, 2013. The contents for this report are correct and accurate and that all test results and operations performed by An-Tech are in accordance with the material specification and customer requirements. Our letters and reports are for the exclusive use of the client to whom they are addressed. Our reports apply only to the actual sample tested and are not necessarily indicative of the properties of other identical or similar materials.