

## MATERIAL CERTIFICATION REPORT

ArcelorMittal LaPlace LaPlace LOUISIANA 70068

KLOECKNER METALS CORPORATION 500 Colonial Center Parkway 30076 Roswell

KLOECKNER METALS CORPORATION HOUSTON, TX 14200 ALMEDA ROAD 77053 Houston

Tested in Accordance With: ASTM A6

Invoice NO.

Date 2012/07/31 Equal Angl

PO: 6511004

80442926

Product Heat NO.

Telephone (985) 652-4900

138 HWY 3217

Cust 40006317 Grade A3652950

Pieces 39

Ref.

Length

L85542 40' 00"

Size 4"X4"X3/4"X18 500

CHEMICAL ANALYSIS		MECHANICAL	TEST 1		TEST 2		TEST 3	
		PROPERTIES	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC
C	0.14	YIELD STRENGTH	50,600 PSI	349 MPa	50,500 PSI	348 MPa		
Mn	0.90	TENSILE STRENGTH	68,600 PSI	473 MPa	68,000 PSI	469 MPa		
P	0.012	ELONGATION	36 %	36 %	36 %	36 %		
S	0.031	GAUGE LENGTH	8 IN	203 mm	8 IN	203 mm		
Si	0.19	BEND TEST DIAMETER						
Cu	0.28	BEND TEST RESULTS		_				
Ni	0.09	SPECIMEN AREA						
Cr	0.06	REDUCTION OF AREA						
Mo	0.026	IMPACT STRENGTH	al e					
Cb	0.026							
V	0.000	_						

IMPACT STRENGTH	IMPERIAL	METRIC	INTERNAL CLEANLINESS	GRAIN SIZE
AVERAGE			SEVERITY	HARDNESS
TEST TEMP			FREQUENCY	GRAIN PRACTICE
ORIENTATION			RATING	REDUCTION RATIO

Signed

A36-08, A52950-05, CSA50W, 44W, A70936-09a, AASHTO M270 Grade 36, AASHTO M270 Grade 50, ASME SA36-2008a, A57250-07, A70950-10.

Ci 5.4 CE 0.33

0.009

В Al Sn

N Ti

This heat also makes A57250 .

I hereby certify that the material test results presented here are from the reported heat and are correct. All tests were performed in accordance to the specification reported above. All steel is electric furnace melted (billets), manufactured, processed, and tested in the U.S.A with satisfactory results, and is free of Mercury contamination in the process. No weld repair was performed on this heat.

Notarized upon request:

Sworn to and subscribed before me in and for ST. John Parish on this 31st day of July, 2012

MARK EDWARDS, QUALITY ASSURANCE SUPERVISOR

Michael E. Soileau, #81887, Notary Public

Direct any questions or necessary clarifications concerning this report to the Sales Department 1-800-535-7692 (USA)