



ArcelorMittal LaPlace
 138 HWY 3217
 LaPlace LOUISIANA 70068
 Telephone (985) 652-4900
 Export Country = USA

MATERIAL CERTIFICATION REPORT

Tested in Accordance
 With: ASTM A6

Sales Order 145770-17 Date 07/09/2015 PO:
 Product Unequal Angles Cust 40006020 Ref. 80811934
 Heat NO. L98234 Grade A3652950 Pieces 20
 Cust.Mat. Length 40' 00" Weight 10880
 Size 7"x4"x3/8"x13.600

CHEMICAL ANALYSIS		MECHANICAL PROPERTIES		TEST 1		TEST 2		TEST 3	
				IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC
C	0.12	YIELD STRENGTH		51200 PSI	353 MPa	54400 PSI	375 MPa		
Mn	0.88	TENSILE STRENGTH		71400 PSI	492 MPa	74500 PSI	514 MPa		
P	0.008	ELONGATION		34 %	34 %	33 %	33 %		
S	0.023	GAUGE LENGTH		8 IN	203 mm	8 IN	203 mm		
Si	0.16	BEND TEST DIAMETER							
Cu	0.31	BEND TEST RESULTS							
Ni	0.15	SPECIMEN AREA							
Cr	0.18	REDUCTION OF AREA							
Mo	0.067	IMPACT STRENGTH							
Cb	0.010								
V	0								
B									
Al									
Sn	0.010								
N									
Ti									
Ci	5.7								
CE	0.35								

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

This heat makes the following grades: A36-08, A52950-05, G40.21-CSA50W, CSA44W, A70936-09a, ASME SA36-2010, A57250-07, A70950-10, and the following AASHTO M270 Grades: 36, 50, and 345. Heat is free of Mercury contamination in the process.

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 arc furnace melted (billets), manufactured, processed, tested in the U.S.A with satisfactory results. No weld repair was performed on this heat.

Notarized upon request:
 Sworn to and subscribed before me on this 9th day of July, 2015

Signed Mark Edwards
 MARK EDWARDS, QUALITY ASSURANCE SUPERVISOR

Notary Public _____ Parish/County _____

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

CHAPEL STEEL CO., INC.
 Heat No. L98234
 Doc No. 120220 Indexed 10-Jul-15 by jmasar