### MITTAL STEEL USA QUALITY DEPARTMENT

REPORT OF TESTS AND ANALYSES

**BURNS HARBOR PLATE** 

905-12460

DATE SHIPPED

CAR OR VEHICLE NO.

09-16-07

MAGE

UTLX MFB INC 300 15181 ST EAST CHICAGO RATLEGAD AVE 46312

SHIP TO UTLX MFG INC 300 ISLST ST EAST CHICAGO

RAILROAD AVE-0/W-120

						SIZE AND QUAI	VTITY				ELONG.	
)TE	SERIAL NUMBER	PAT. NO	HEAT NUMBER	NO PCS	THICKNESS	WIDTH OR DIA.	LENGTH	WEIGHT	YIELD POINT	TENSILE STRENGTH	. %	RED.
					INCHES	INCHES	INCHES	FOUNDS		\$ 1.5 5 15 15 15 15 15 15 15 15 15 15 15 15	1.5	
	FEDDU	1.1	) UMBER A L	JEK (II)	FIED WAR	COMPLYING	WITH 180 90	OZ ABS-1		T. #30-	Maria de la companya	
	QUALT'		STEEL ME	YEN	& MANUFAC	TURED IN T	HE U. S. A.					
	FLATES	\$50.0	AAR TOIRE				75.8		•			
						TIPLIIX TI CEPLUSX PE					•	
			TTW ROWN			ev pre-sp	5					

IIW FORMULA --- MILL TEST FCS SR 1150F FOR 1HR/IN-1 HR MIN NO WELD REPAIR WAS FERFORMED ON BELOW PLATE(S) HFST - FRI TUE ZA/230P LIFT MAX 10 TON-SIZES & GRADES SEP UNLDG OH-PLATE HOOF COW 300-0721498 GH 821-1934D

**6** WO49405 015743750 2 NEF#:129-4502 378 20703 67500 7/16147 91500 X. 1. (MG5)MFST

813763930 3 REF#:129-6302 **0** 0049407 Š/8 7/16147 577 3/9 **72500 8** 21 20703 68000 KM553MFST

**0** W047408 813763930 1 REF#:129-6302 2716142 1. 5.2 590i 68000 91000 (MSS)MEST

Q-QUENCH TEMPERATURE T-TEMPER TEMPERATURE N-NORMALIZE TEMPERATURE

***					•		:					IMPACT					•	
SERIAL	PAT.	HEAT	HARD	BEND	THICKNESS				TEOT	ENERGY	FT A	LEO.		SHEAR (%)		LAT. EXP		1.5
NUMBER	NO .	NUMBER				TYPE	SIZE	DIR.	TEST	1	2	3	1	2	3	1	2	3

· HEAT							CHE	IVII CAL F		3							McQUAID GRAIN
NÚMBÉR	С	Mn	P	ø	Si	Cu	Ni	Cr	Μo	V	Ti	Al	В	Ср	N	Sn	SIZE

.22 1.27 -.013 .010 .331.015 .01 .17.061.041.002.032.0002 .002.007.002

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MITTAL STEEL USA QUALITY DEPARTMENT

REPORT OF TESTS AND ANALYSES

**BURNS HARBOR PLATE** 

CAR OR VEHICLE NO. DATE SHIPPED

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08-15-02

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NOTE

UTLX MFG INC 300 1518T ST & RAILROAD AVE EAST CHICAGO IN 46312

2 SHIP

TER

UTLX MFG INC 500 151ST ST & RAILROAD AVE-0/W-128 EAST CHICAGO IN 46312 46312

					SIZE AND QUAI	NTITY				ELONG.	
SERIAL NUMBER	PAT.	HEAT NUMBER	NO. PCS	THICKNESS	WIDTH OR DIA.	LENGTH	WEIGHT	YIELD POINT	TENSILE STRENGTH	P/	RED. %
				INCHES	INCHES	INCHES	POUNDS	PSI	PSI	IN "	
PRODU	ZE.i	) LINDER A	CERT	IFIED UMS	COMPLYING	WITH 180 90	OR ARS-	QE CER	T. 450	422	
QUALI	TY	STEEL ME		A MANUFAC	TURED IN T	HE U. S. A.					

PLATES - AAR TC128 GR B PVG (CPC-1169)
CU+NI+CR+MO=.63X CB+V+TI=.11X TI/N
RATIO 4.0 X REV 7/1/03 CE=.53X PER
ITW FORMULA -- MILL TEST PCS 8R
1150F FOR 1HR/IN 1 HR MIN
NO WELD REPAIR WAS PERFORMED ON BELOW PLATE(S)
MFST - FRI TUE 7A/230F LIFT MAX 10 TON-SIZES & GRADES
SEP UNLDS OH-FLATE HOOK
CON 300-0/21498 GH 821-1934C

haoart as 048149 - 813Y63910 3 (M05)MF67 REFW:129-6302

W048150 813Y43910 3 /(M55)MFST REF#:129-6302

W048151 813Y63910 L (MS5)MFST REFW:129-6302

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20705

6901

378

67200

66200

68200

89500 8 1.7

89100 8

1. 7

( )

NOTE Q-QUENCH TEMPERATURE

T-TEMPER TEMPERATURE

N-NORMALIZE TEMPERATURE

										(	<u>CHARPY</u>							
SERIAL NUMBER	PAT.	HEAT	HARD	BEND	THICKNESS					ENERGY	ET	1 880.		SHEAR (%)		LAT. EXP	84°	H. S
NOWBER	NO	NUMBER			INCHES	TYPE	SIZE	DIR.	TEST TEMP	1	2	3	1	2	3	1	2	3
										•								

HEAT NUMBER		, , , , , , , , , , , , , , , , , , ,					CHE	EMICAL A	NALYSIS								McQUAID
NUMBER	С	Mn	P	s	Si	Си	Ni	Cr	Мо	٧	Ti	Al	В	Cb	N	Sn	McQUAID GRAIN SIZE

.20 1.28 .010 .009 .341.012 .01 .16.058.042.002.040.0002 .002.008.002

F4859700

BURNS HARBOR PLATE

905-11474

OTE Q-QUENCH TEMPERATURE

# QUALITY DEPARTMENT

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08-01-07

TRLR 246

PAGE

SOLD

UTLX MFG INC 300 ISIST ST & I EAST CHICAGO IN & RAILROAD AVE SHIP TO

WILK MES INC 500 15151 ST & RAILROAD AVE-0/W-12 CHICAGO X.N 46512

N-NORMALIZE TEMPERATURE

ļ						SIZE AND QUAI	VTITY	•			ELONG.	
TE:	SERIAL NUMBER	PAT. NO	HEAT NUMBER	NO. PCS	THICKNESS	WIDTH OR DIA.	LENGTH	WEIGHT	YIELD POINT	TENSILE STRENGTH	04	RED. %
		l			INCHES	INCHES	INCHER	POUNDS	23) 32)	957	IN .	
		MI.		The first of the	PARD SME	CLMPL Tipo	Will ISU YV	VX ANGE	Mt. Uhw	1. 750	## 3" 3"	

QUALITY STEEL WELTED & MANUFACTURED IN THE U.S.A.

PLATES - AAR TC128 GR B PVG (CPC-1169)

CU+NI+CR+MO=.65% CB+V+TI=.11% TI/N

RATIO 4.0 % REV 7/1/01 CE=.53% PER

IIW FORMULA -- MILL TEST PCS.SR

1150F FOR 1HR/IN 1 HR MIN

NO WELD REPAIR WAS PERFORMED ON MELOW PLATE(S)

MFST - FRI TUE 7A/230F LIFT MAX 10 TON-SIZES & GRADES

SEP UNLDG OH-FLATE HOOM

CON 300-0721478 GH 821-1934A

<b>\</b> WO44070 (MS5)MFST	171F04770 1 REF#:129-6302	2/26247	379	377	378	6901	57906	81.500 8	575 F 415 S
<b>(</b> 6044071	371704770 2	7/16147	8/18	377	3/8	15802	58500	82600 8	22

(M55)MFST REF#:129-6502

• W044072 81200 172P22780 7/16147 6901 57300 (MDS)MFST REFN:127-6502

**6**₩044075 172F22780 7/16147 3/8 20703 58200 82400 8 (M55) MFST REFW:129-6302

T-TEMPER TEMPERATURE

CHARPY IMPACT THICKNESS LAT. EXP HARD BEND ENERGY SHEAR (%) SERIAL NUMBER TEST: TYPE SIZE DIR. INCHES

HEAT							CHE	MICAL A	NALYSIS	}				• •			McQUAID GRAIN SIZE
NUMBER .	С	Mn	P <sub>.</sub>	s	Si	Си	NE	Cr	Mo	.V	Ti	Al	В	Сь	N	Sn	SIZE
1.71204770	72 k	1.26	.011	006	.354	.020	. 62	4 1 23	.039	.028	.005	.026	.0001	.002	.005	.008	

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F4859700

BURNS HARBOR PLATE

905-11474

OTE Q-QUENCH TEMPERATURE

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		l			INCHES	INCHES	INCHER	POUNDS	23) 32)	957	IN .	
		MI.		The first of the	PARD SME	CLMPL Tipo	Will ISU YV	VX ANGE	Mt. Uhw	1. 750	## 3" 3"	

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HEAT							CHE	MICAL A	NALYSIS	}				• •			McQUAID GRAIN SIZE
NUMBER .	С	Mn	P <sub>.</sub>	s	Si	Си	NE	Cr	Mo	.V	Ti	Al	В	Сь	N	Sn	SIZE
1.71204770	72 k	1.26	.011	006	.354	.020	. 62	4 1 23	.039	.028	.005	.026	.0001	.002	.005	.008	

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