

Westmoreland Mechanical Testing & Research, Inc.

P.O. Box 388
Westmoreland Drive
Youngstown, Pa. 15696-0388 U.S.A.
Telephone: 724-537-3131 Fax: 724-537-3151
Website: www.wmtr.com
WMTR is a technical leader in the material testing industry.



621-01 & 621-02

May 9, 2006

CERTIFICATION

MetaTek International
The Carondelet Division
8600 Commercial Blvd.
I-55 Industrial Park
Pevely, MO 63070-1528

Section 1 of 1
WMT&R Report No. 6-27868
P.O. No. 19386
Requisition No. 6842

Attention: Jim Galaske
Subject: All processes, performed upon the material as received, were conducted at WMT&R, Inc. in accordance with the WMT&R Quality Assurance Manual, Rev. 9, dated 4/1/2000.
The following tests were performed on this order: TENSILE

TENSILE RESULTS: ASTM E21-05

Requirements: UTS ksi (Min 951Max ---) 0.2% YS ksi (Min 721Max ---) 4D Elong. % (Min 321Max ---) Modulus Msi (Min 211Max ---)

SOAK TIME: 5 Minutes

SPEED OF TESTING: 0.003 in./in./min., 0.05 in./in./min.

MATERIAL: Metatek CF8MNMNMOD

Coil No.	Specimen	Testlog Number	Temp. °F	UTS ksi	0.2% YS ksi	Elong %	RA %	Modulus Msi	Ult. Load lbf	0.2% YLD. lbf	Orig. Dia. (in.)	Final Dia. (in.)	4D Orig GL (in.)	4D Final GL (in.)	Orig. Area (sq. in.)	Machine Number	AIUR
B4	Z1	D47460	-320	164.5	98.0	56	53	25.8	16010	9535	0.3520	0.2420	1.40	2.18	0.09731397	M9	A
B4	Z2	D47461	-320	166.0	97.9	56	42	24.1	16190	9545	0.3524	0.2695	1.40	2.18	0.09753527	M9	A
B4	Z3	D47462	-320	167.9	104.8	48	46	25.9	16270	10160	0.3513	0.2588	1.40	2.07	0.09692731	M9	A

DISPOSITION: Acceptable

AIUR: A=ACCEPTABLE, U=UNACCEPTABLE, R=REPORT

Requirements supplied by MetaTek International.

Matthew Wojton
Roy E. StarrMatt Wojton
Technical Services Manager
Tensile Supervisor

May 9, 2006

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Locations in Youngstown, PA U.S.A. ~ Tel. (724) 537-3131 and
Barbury U.K. ~ Tel. +44 (0) 1295 261211

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 Chemical, Metallurgical, Mechanical, Nondestructive, Environmental Testing, Analyses and Field Service.

METALTEK INTERNATIONAL
 8600 Commercial Blvd.
 Pevely, MO 63070

April 12, 2006
 Lab No. 06P-1284
 P.O. No. 21324
 Page 1 of 3

Attention: Chuck Ruud

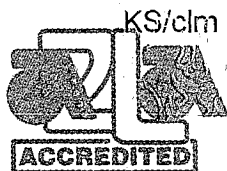
REPORT OF CHARPY IMPACT TEST

MATERIAL (SAMPLE ID): B-4, Z1, Z2, Z3
SPECIFICATION: ASTM A 370-03a
SPECIMEN TYPE: "A" Vee Notch
SPECIMEN SIZE: 10 mm x 10 mm
TEMPERATURE OF TEST: 77°K
REQUIREMENTS: 35 Ft. Lbs. Minimum

BASE METAL	FOOT LBS.	LATERAL EXPANSION	% SHEAR
Z1-7	55	0.034	30
Z1-8	59	0.038	30
Z1-9	71	0.032	40
Average	62	0.035	33
SAMPLE ID	FOOT LBS.	LATERAL EXPANSION	% SHEAR
Z2-7	83	0.051	40
Z2-8	77	0.054	50
Z2-9	66	0.041	30
Average	75	0.049	40
SAMPLE ID	FOOT LBS.	LATERAL EXPANSION	% SHEAR
Z3-7	66	0.036	30
Z3-8	62	0.037	30
Z3-9	52	0.037	20
Average	60	0.037	27

Identification of tested specimen provided by client.


 Karl Schmitz, Director
 Materials Testing



Certificate No. 0397-01
 Certificate No. 0397-02

AN OFFICIAL COPY OF TEST REPORT WILL BE PROVIDED BY THIS LABORATORY ON REQUEST.
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April 12, 2006
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 Page 2 of 3

Attention: Chuck Ruud

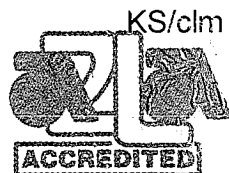
REPORT OF CHARPY IMPACT TEST

MATERIAL (SAMPLE ID): B-4, Z1, Z2, Z3
SPECIFICATION: ASTM A 370-03a
SPECIMEN TYPE: "A" Vee Notch
SPECIMEN SIZE: 10 mm x 10 mm
TEMPERATURE OF TEST: 293°K
REQUIREMENTS: 50 Ft. Lbs. Minimum

BASE METAL	FOOT LBS.	LATERAL EXPANSION	% SHEAR
Z1-7	106	0.077	50
Z1-8	103	0.103	60
Z1-9	122	0.112	80
Average	110	0.097	63
SAMPLE ID	FOOT LBS.	LATERAL EXPANSION	% SHEAR
Z2-7	126	0.082	60
Z2-8	105	0.084	50
Z2-9	124	0.102	80
Average	118	0.089	63
SAMPLE ID	FOOT LBS.	LATERAL EXPANSION	% SHEAR
Z3-7	154	0.085	80
Z3-8	127	0.094	70
Z3-9	111	0.071	60
Average	131	0.083	70

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April 12, 2006
Lab No. 06P-1284
P.O. No. 21324
Page 3 of 3

Attention: Chuck Ruud

REPORT OF MECHANICAL TEST

SAMPLE ID: B-4, Z1, Z2, Z3

Sample ID	Original Area Sq. Inches	Reduced Area Sq. Inches	Reduction in Area %	Modulus	Yield Strength PSI	Tensile Strength PSI	Elongation (2.0" Gage Length)	
							in.	%
B4-Z1	.1924	.1320	31.4	21.7	41,600	85,700	0.90	45.0
B4-Z2	.2003	.1244	37.9	23.5	43,100	84,800	0.86	43.0
B4-Z3	.1971	.1269	35.6	23.1	43,200	86,300	0.85	42.5

Round, reduced section tensiles

Yield taken at .2% offset

Tested in accordance with ASTM A 370-03a

Identification of tested specimens provided by the client.



Certificate No. 0397-01
Certificate No. 0397-02


Karl Schmitz, Director
Materials Testing

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PRODUCT CONFORMANCE REPORT



Product	LNM 4455	Size(s) mm	1,2
Class.	EN 12072-99: G 20 16 3 Min L	Lot/Batch	3018513/78308
		Item No.	692129
Customer	EUROWELD MOORESVILLE N.C. 28117 UNITED STATES	Quantity	105,0 KG
		Customer ref.	P.O. 05-46
		LSW Order No.	SD427896

Chemical analysis (%)

EN10204 2.2

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N
0,01	0,5	7,3	0,015	0,001	20,3	15,4	2,9	0,1	0,19

Mechanical tests, all weld metal

EN10204 2.2

Tensile testing

Impact testing

Cond.	Temp. °C	Rp0.2 N/mm2	Rm N/mm2	AS %	Cond.	Temp.1 °C	Av1 J
AW	RT	407	623	41	AW	-196	67

Additional information

EN10204 2.2

Other tests

Remarks

Impact testing (individual values): 70J - 65J - 67J.

The product identified above has been manufactured, tested and supplied in compliance with a Quality Assurance Programme that fulfils the requirements of EN 29000/ISO 9000/BS 5750 or similar standard.

We herewith certify that the product complies with the above-mentioned standards.

Certified ISO 9001:2000.

Company

Lincoln Smitweld B.V.

Registered Office

Nieuwe Dukenburgseweg 20
6534 AD NIJMEGEN

Post address

P.O. Box 253
6500 AG Nijmegen

Issued by

P. Nagels

Telephone

31 24 3522911

Function

QA Administrator 22/03/2005

Fax:

31 24 3522200

Date

Cert.No.

3018513/7830

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METALTEK INTERNATIONAL
8600 Commercial Blvd.
Pevely, MO 63070

August 16, 2005
Lab No. 05P-2532
P.O. No. 21324
Page 1 of 2

Attention: Chuck Ruud

REPORT OF CHARPY IMPACT TEST

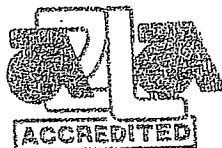
MATERIAL (SAMPLE ID): LNM 4455, LINCOLN LOT 3018513/78308
SPECIFICATION: ASTM A 370-03a
SPECIMEN TYPE: "A" Vee Notch
SPECIMEN SIZE: 10 mm x 10 mm
TEMPERATURE OF TEST: 293°K

BASE METAL	FOOT LBS.	LATERAL EXPANSION	% SHEAR
LNM4455-7	104	0.085	100
LNM4455-8	106	0.093	100
LNM4455-9	99	0.084	100
Average	103	0.087	100

Identification of tested specimen provided by client.

KS/tlv

Karl Schmitz
Karl Schmitz, Director
Materials Testing



Certificate No. 0397-01
Certificate No. 0397-02

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August 16, 2005
Lab No. 05P-2532
P.O. No. 21324
Page 2 of 2

Attention: **CHUCK RUUD**

REPORT OF MECHANICAL TESTS

SAMPLE ID: LNM 4455, LINCOLN LOT 3018513/78308

Sample ID	Original Area	Reduced Area	Reduction in Area %	Yield Strength PSI	Tensile Strength PSI	Elongation (2.0" Gage Length)		Modules of Elasticity
	Sq. Inches	Sq. Inches				in.	%	
LNM4455	0.1932	0.0866	55.2	65200	95200	0.76	38.0	23.4

Round, reduced section tensiles

Yield taken at .2% offset

Tested in accordance with ASTM A 370-03a

Identification of tested specimens provided by the client.


Karl Schmitz, Director
Materials Testing

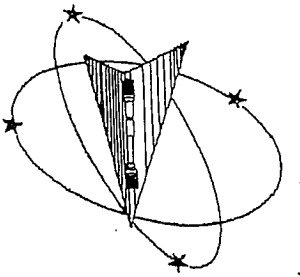
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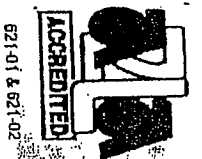




October 18, 2005

Westmoreland Mechanical Testing & Research, Inc.
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Website: www.wmtr.com
WMTR is a technical leader in the material testing industry.

Section 1 of 1
WMTR Report No. 5-35979
Requisition No. 4972



Accredited
Materials Testing Laboratory

MetalTek International
The Camdelet Division
8600 Commercial Blvd.
I-55 Industrial Park
Pewee, MO 63070-1528

Attention: Jim Galaske

Subject:

All processes, performed upon the material as received, were conducted at WMTR, Inc. in accordance with the WMTR Quality Assurance Manual, Rev. 9, dated 4/1/2000.
The following tests were performed on this order: TENSILE

TENSILE RESULTS: ASTM E21-03a

SOAK TIME: 5 Minutes

SPEED OF TESTING: 0.0030 in./in./min., 0.0500 in./in./min.

MATERIAL: METALTEK CF8MNMNM0D

Specimen ID	Test Log Number	Temp. °F	UTS ksi	0.2% YS ksi	Elong %	RA %	Modulus Msi	Ult. Load lbf	0.2% YLD. lbf	Orig. Dia. (in.)	Final Dia. (in.)	4D Orig GL (in.)	4D Final GL (in.)	Orig. Area (sq. in.)	Machine Number	Machine R
3018513/78308	CS4936	-320	184.9	123.7	33	33	32.8	18470	12350	0.3566	0.2926	1.40	1.86	0.09987403	M9	R

DISPOSITION: Report
AUR: A=ACCEPTABLE, U=UNACCEPTABLE, R=REPORT

KNOWLEDGE OF VOLUNTARY FALSIFYING OR CONCEALING A MATERIAL FACT ON THIS FORM OR MAKING FALSE STATEMENTS OR MISLEADING REPRESENTATIONS OF RESULTS OR CONCLUSIONS IS A FEDERAL VIOLATION OF FEDERAL STATUTES. THIS CERTIFICATE OR REPORT SHALL NOT BE REPRODUCED OR USED IN FULL, WITHOUT THE WRITTEN APPROVAL OF WMTR, INC.

Roy E. Stammatt Wojton
Technical Services Manager
Tensile Supervisor

October 18, 2005

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14:29 OCT 18, 2005



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October 5, 2005
Lab No. 05P-3096
P.O. No. 21324
Page 1 of 1

Attention: Chuck Ruud

REPORT OF CHARPY IMPACT TEST

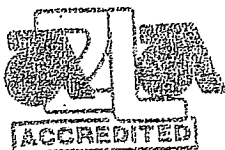
MATERIAL (SAMPLE ID): WELD PLATE- 3018513 / 78308
SPECIFICATION: ASTM A 370-03a
SPECIMEN TYPE: "A" Vee Notch
SPECIMEN SIZE: 10 mm x 10 mm
TEMPERATURE OF TEST: -320°F
REQUIREMENTS: minimum 35 ft / lbs.

BASE METAL	FOOT LBS.	LATERAL EXPANSION	% SHEAR
3018513/78308-1	48	0.033	50
3018513/78308-2	65	0.045	50
3018513/78308-3	48	0.033	50
Average	54	0.037	50

Identification of tested specimen provided by client.

KS/tlv


Karl Schmitz, Director
Materials Testing



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