Metalex Manufacturing Inc.

Metalex

Certified ISO 9001 Quality Management
Veteran Owned Business 30 Plus Years

#1-- INSIDE Pkg - Cust Copy

Packing List# 39519 **Rel#** 1 **PAGE** 1
Metalex Job# 2006-5731

Ship To: STANFORD UNIVERSITY-SLAC
BUILDING 081, ROOM 118
2575 SAND HILL ROAD
MENLO PARK CA 94025

Date: 12/19/06
Ship Via:
PTA# _____
(prepaid shipments only)
BOL/Air Bill#
Prepaid: XXXXXXX **Collect:**
Weight: **Ctns:** **Zone:**
Dimensions:

Attn: BEN POLING 408-250-6877
Customer PO: 5A10359

P.O. Item No.	Qty Ordered	Qty Shipped	Qty Back Ordered	Description
004	15	1	2	LCLS UNDULATOR MAIN ASSY ANL PART/REVISION NUMBER: L143-112000-05 SLAC PART NUMBER: SA-381-001-35 ASSEMBLY SERIAL NUMBER: 5A10359-28 STRONGBACK SERIAL NUMBER: 5A0699-28 THE FOLLOWING BOM ITEMS ARE LOOSE PARTS PACKAGED WITHIN THIS CRATE, BUT NOT ASSEMBLED TO THE MAIN STRUCTURE: ITEM# 12 L143-110109 BRACKET 1 QTY-10 ITEM# 13 L143-110110 BRACKET 2 QTY-10 ITEM# 14 L143-110111 SCREW QTY-40 ITEM# 17 91292A122 SHCS M4X0.7X25MM LG QTY-20 ITEM# 18 91292A135 SHCS M6X1.0X16MM LG QTY-20 ITEM# 24 L143-110703 PEAK FIELD SHIM QTY-20 PLEASE ENSURE THESE ITEMS ARE ACCOUNTED FOR WHEN MAIN STRUCTURE IS REMOVED FROM CRATE. -CERTIFICATE OF CONFORMANCE, INSPECTION DATA, AND CERTIFICATIONS ENCLOSED. ANL SOURCE: SIGNATURE: Glen Lawrence DATE: 12/20/06 PRINT: Glen Lawrence STAMP:

John Schrade 12/20/06
Transit who 2006 Dec 20
Nassa 12/20/06

Received By:

Printed Name _____ Signature _____ Date _____

MX3006 (10/ 02)

Metalex Manufacturing Inc.
5750 Cornell Road • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020
EMAIL: metalex@metalexmfg.com

Metalex
Customized Machinery and Parts
ISO 9001:2000 and AS9100 Certified
Veteran Owned Business 30 Plus Years

CERTIFICATE OF CONFORMANCE

Date: 12/19/2006
Customer: Argonne National Laboratory
9700 S. Cass
Argonne, IL 60439

Attention: Michael Oprondek

Metalex Job# 2006-5731
Purchase Order # 5A10359
MX Packing List # 39519

Metalex certifies that all material, processes, procedures, and dimensions are as called for on the purchase order, drawings, and/or amendments supplied by you.
All information concerning this part or parts, units and/or assemblies are on file at Metalex Manufacturing, Inc.

ITEM	QTY	PART NUMBER	REV	PART NAME	ID # *
004	1	L143-112000	05	LCLS Undulator Main Assembly	5A10359-28

*IDENTIFICATION NUMBER INCLUDES SERIAL #, HEAT #, AND/OR LOT #.

COMMENTS: "First Article" submitted on Metalex Shipper #37728 dated 3/31/06 (Job#05-4718).

SLAC Part Number: SA-381-001-35.

Assembly Serial Number: 5A10359-28.

Todd Caldill QE — Metalex Representative Signature

TODD CALDILL MTX QC 12 — Print Name

12/15/2006 — Date

MX1011 (05/05)

Metalex Manufacturing
L143-112000 BOM/ASSY Undulator
Purchase Order No. 5A10359

LCLS Undulator L143-00076 Assembly Procedure

Assembly:

ANL Part/Revision Number: L143-112000-05
SLAC Part Number: SA-381-001-35
Assembly Serial Number: 5A10359-28

Dimensional Inspection Requirements:

20. *Dimensionally inspect overall height of the magnet assemblies to verify they are within specification before installation into the strongback.*

Dimension: 78mm (3.071")

L143-110800 Upper Left Magnet Structure Assembly	Actual: 77.98-78.00
L143-111000 Upper Middle Magnet Structure Assembly	Actual: 77.99-78.00
L143-111200 Upper Right Magnet Structure Assembly	Actual: 77.97-78.00
L143-110900 Lower Left Magnet Structure Assembly	Actual: 77.97-78.00
L143-111100 Lower Middle Magnet Structure Assembly	Actual: 77.97-78.00
L143-111300 Lower Right Magnet Structure Assembly	Actual: 77.98-77.99

Temperature at start of inspection: 22 Deg.C

Temperature at end of inspection: 22 Deg. C

Verification of completion of assembly procedure:

Completed By: Thomas Becker **Date:** 12-14-06

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

Metalex Manufacturing
L143-112000 BOM/ASSY Undulator
Purchase Order No. 5A10359

LCLS Undulator Training Record

L143-00066 Statement of Work for LCLS Undulator Main Assembly

Section 4.1.3.2 Training of Assembly Personal

Requirements:

1.) Review and understand L143-00066 Statement of Work

2.) Review and understand L143-112000 Drawing Package

3.) Review and understand L143-00076 Assembly Procedure

4.) Review and understand Magnet Installation Procedure ANL video

5.) Review and understand Magnet Structure Installation ANL video

Completed By: Thomas P. Becker **Date:** 2.27.06
Thomas P. Becker

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

Metalex Manufacturing
L143-112000 BOM/ASSY Undulator
Purchase Order No. 5A10359

LCLS Undulator Training Record

L143-00066 Statement of Work for LCLS Undulator Main Assembly

Section 4.1.3.2 Training of Assembly Personal

Requirements:

1.) Review and understand L143-00066 Statement of Work

2.) Review and understand L143-112000 Drawing Package

3.) Review and understand L143-00076 Assembly Procedure

4.) Review and understand Magnet Installation Procedure ANL video

5.) Review and understand Magnet Structure Installation ANL video

Completed By: Rob Schuermann Date: 02/27/06
ROB SCHUERMANN

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

Metalex Manufacturing
L143-112000 BOM/ASSY Undulator
Purchase Order No. 5A10359

Assembly:

ANL Part/Revision Number: L143-112000-05
SLAC Part Number: SA-381-001-35
Assembly Serial Number: 5A10359-28

LCLS Undulator photographs per L143-00066 Sect. 4.1.3.3

L143-110800-02 Upper Left Magnet Structure Assembly

L143-110900-02 Lower Left Magnet Structure Assembly

L143-111000-102 Upper Middle Magnet Structure Assembly

L143-111000-202 Upper Middle Magnet Structure Assembly

L143-111000-302 Upper Middle Magnet Structure Assembly

L143-111100-102 Lower Middle Magnet Structure Assembly

L143-111100-202 Lower Middle Magnet Structure Assembly

L143-111100-302 Lower Middle Magnet Structure Assembly

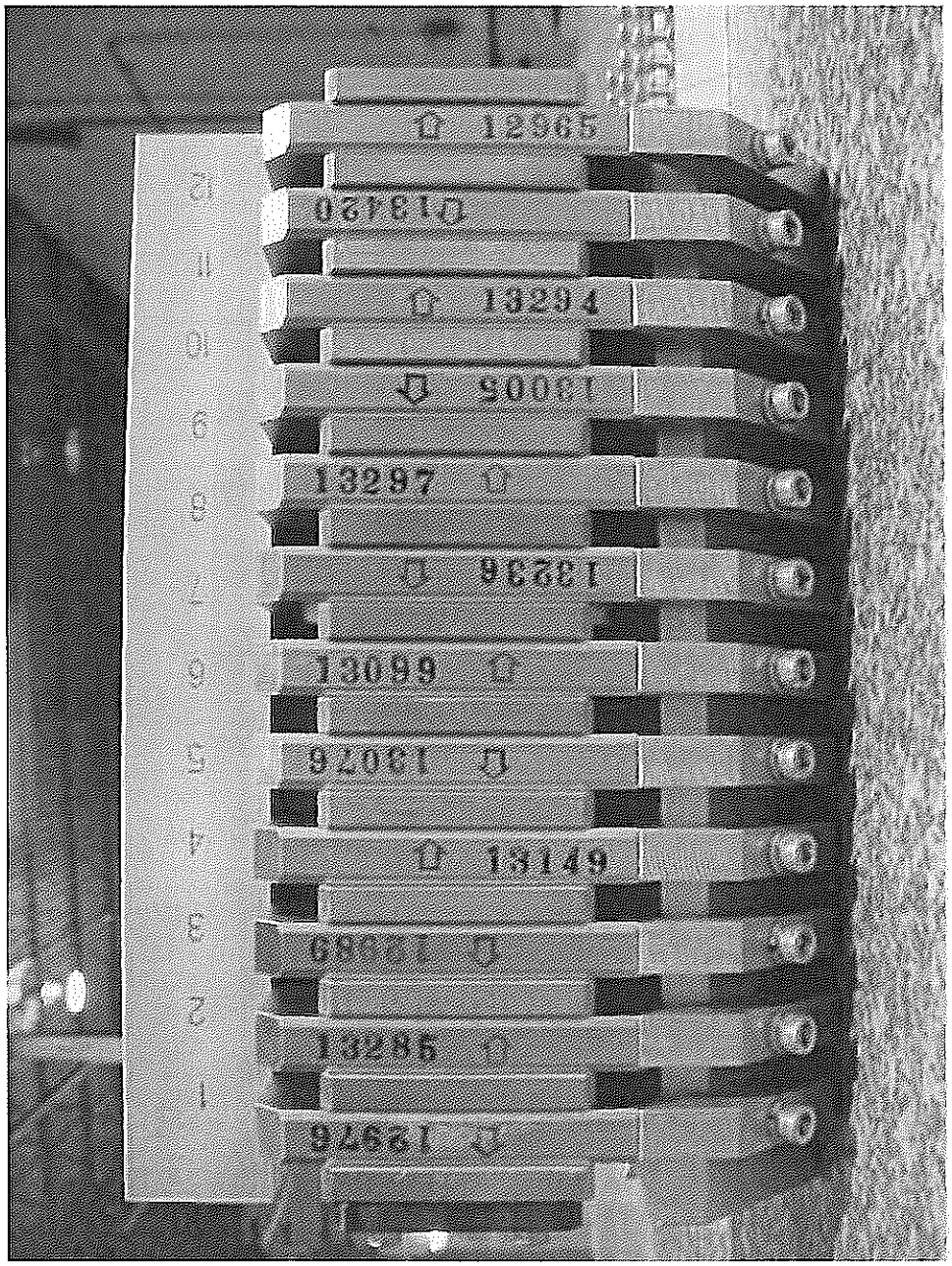
L143-111200-02 Upper Right Magnet Structure Assembly

L143-111300-02 Lower Right Magnet Structure Assembly

Rob Schuermann Date: 12/18/06

Rob Schuermann

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020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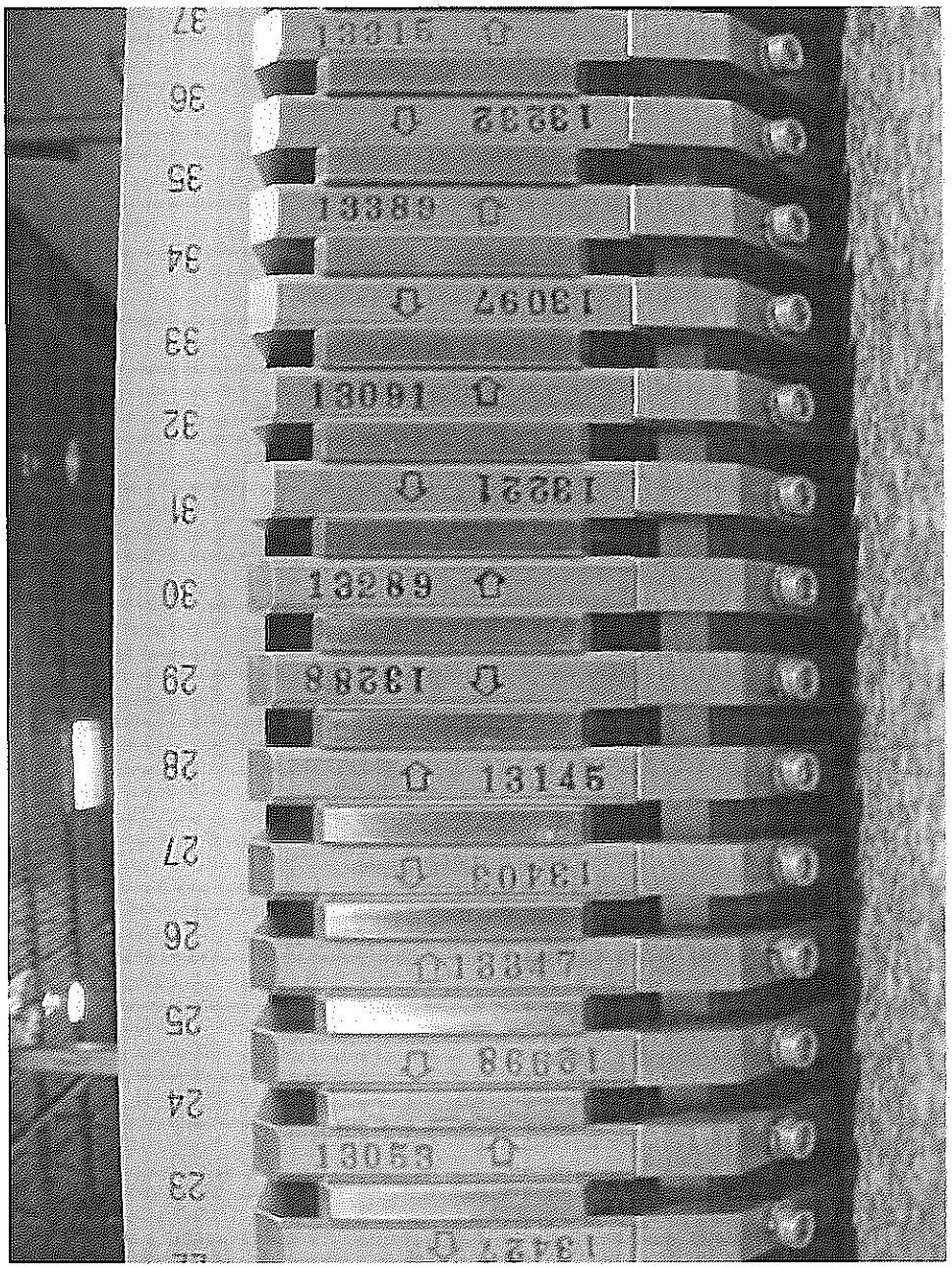
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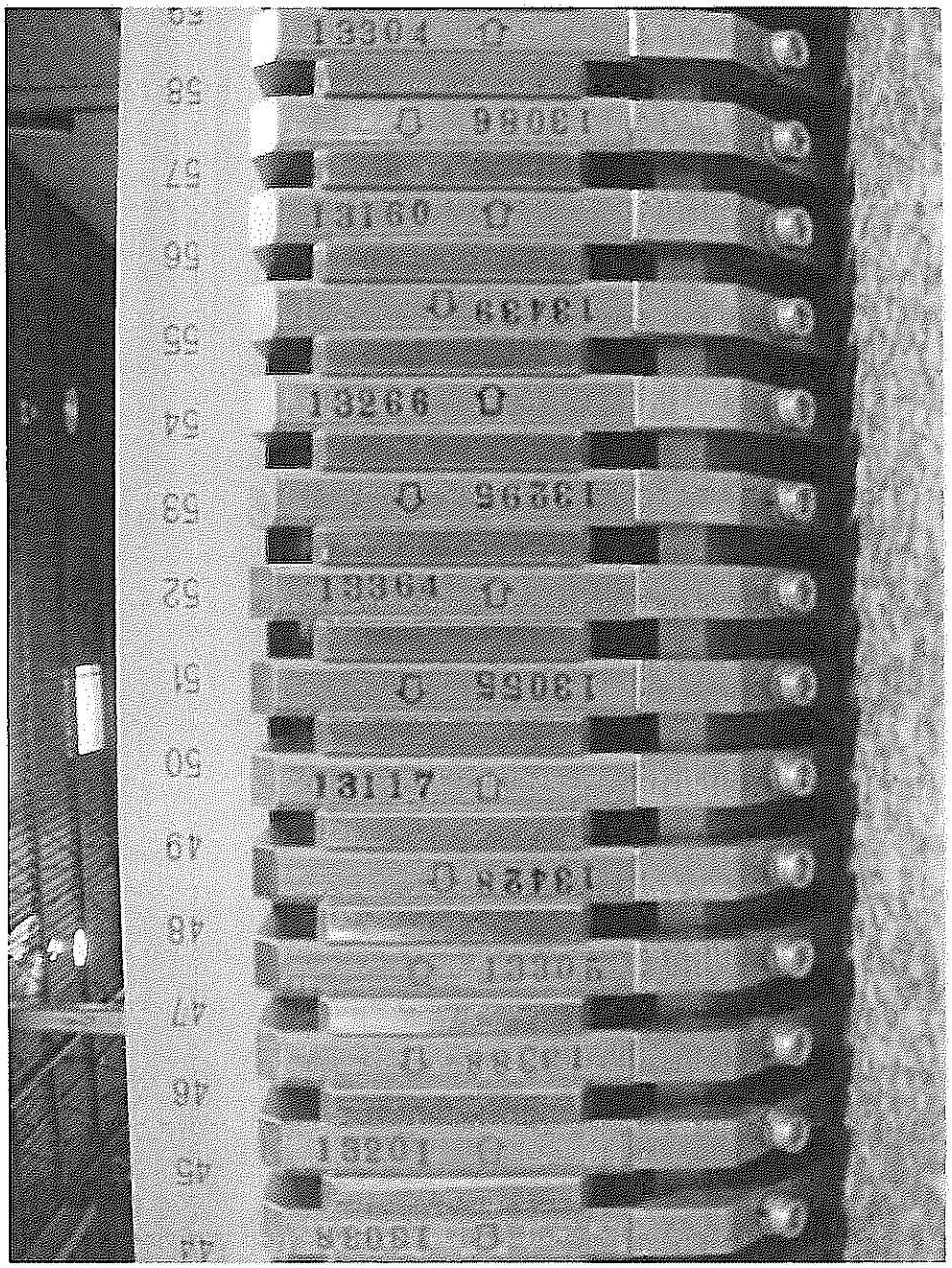

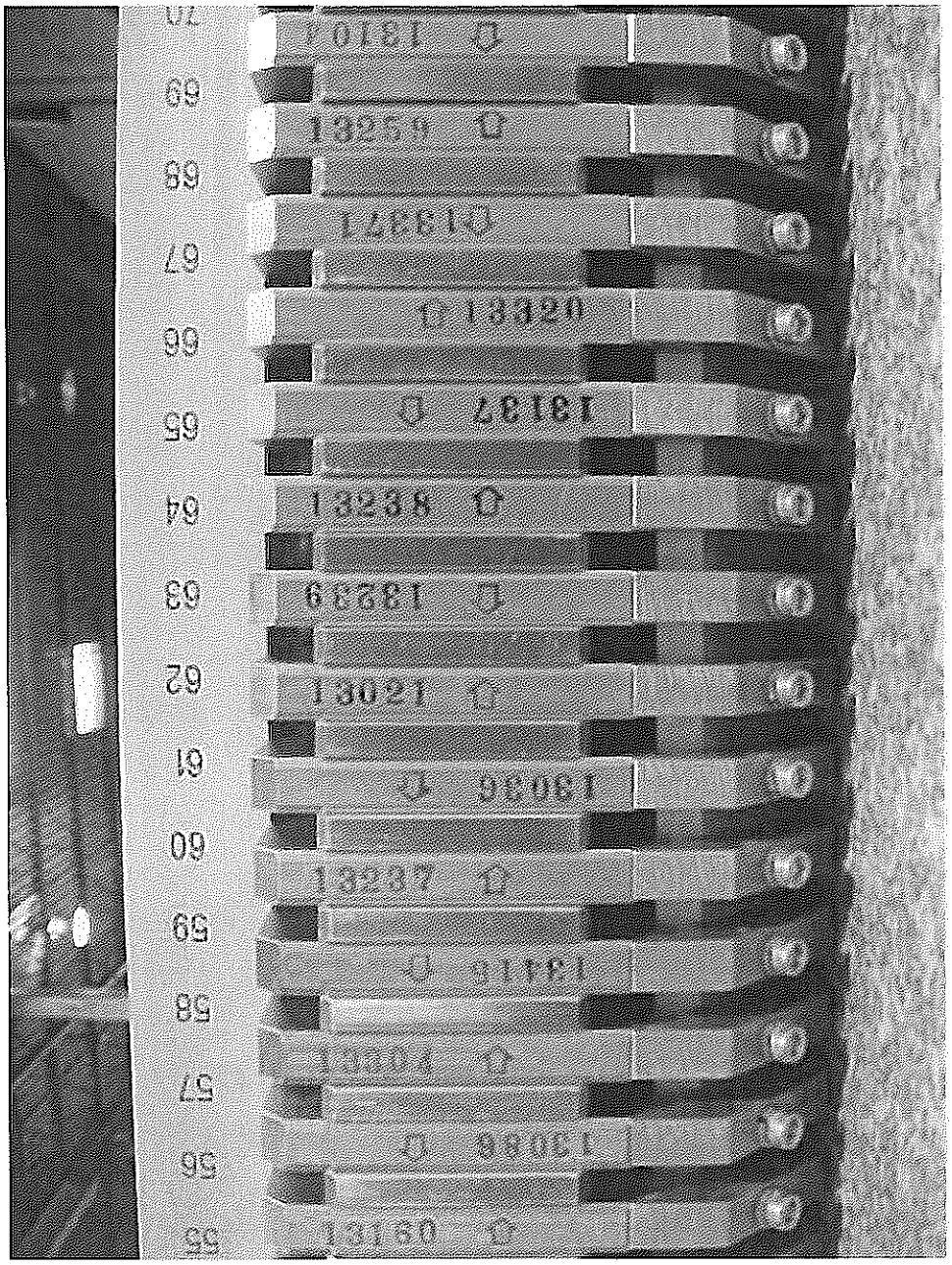

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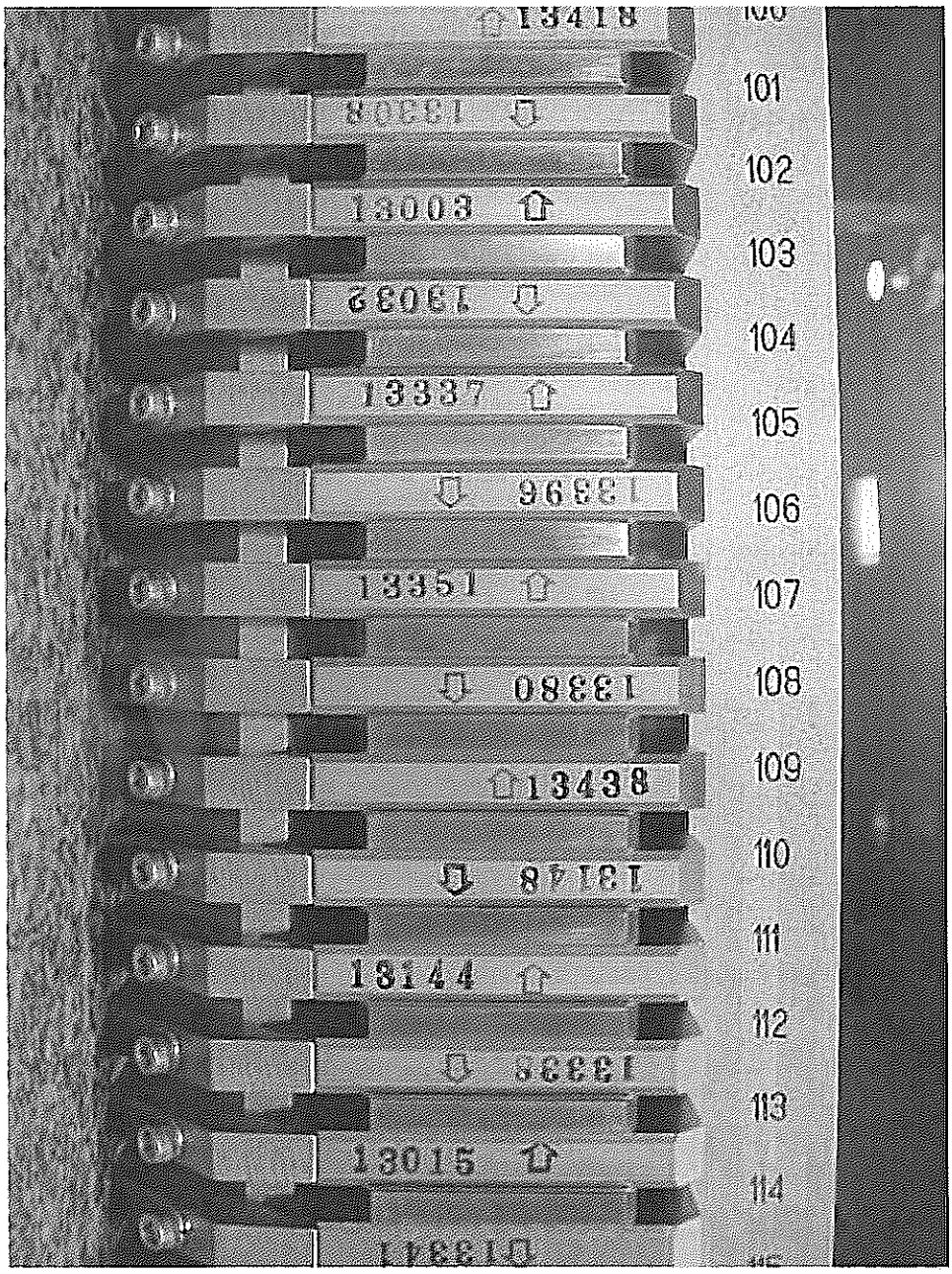
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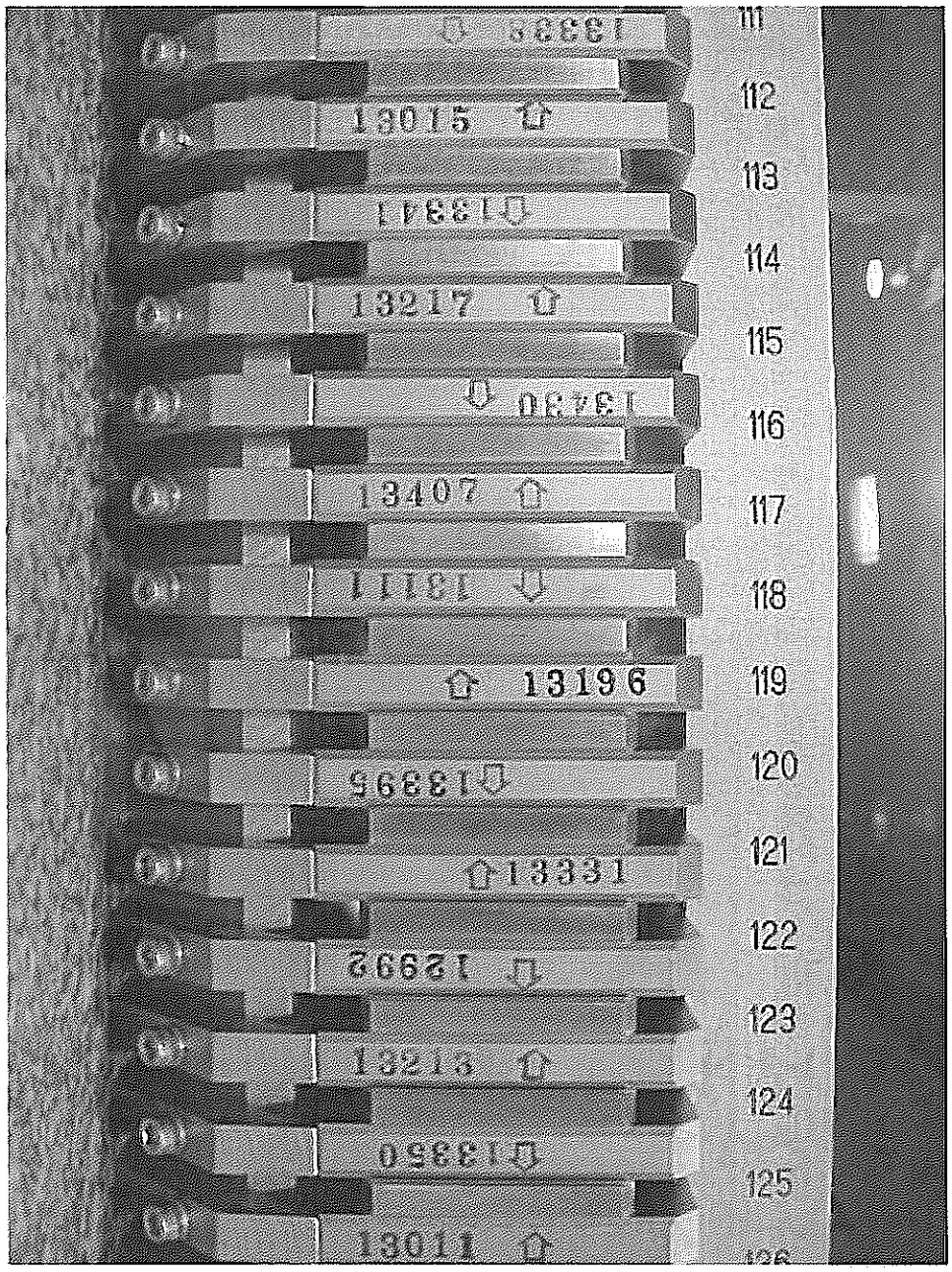
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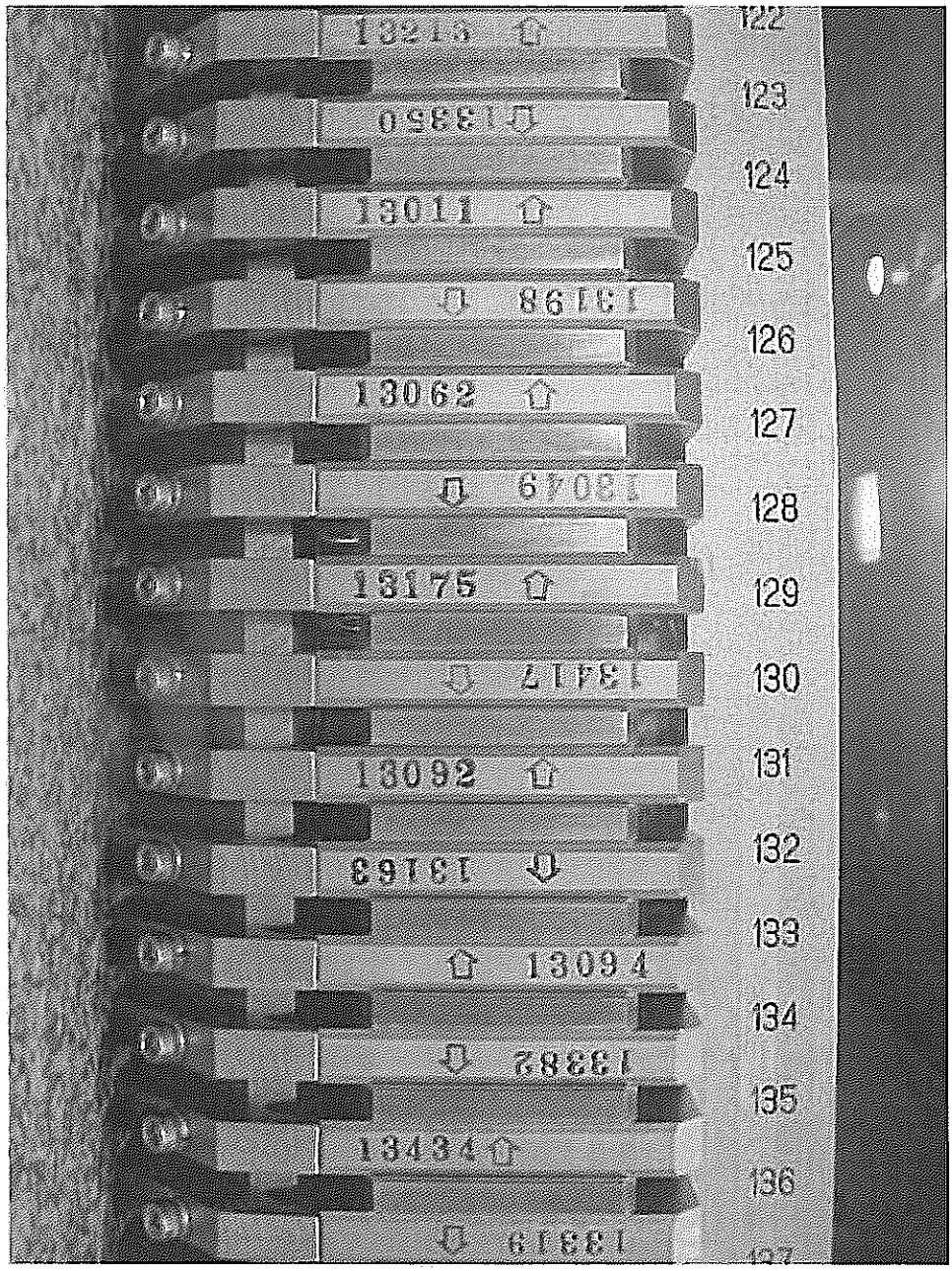
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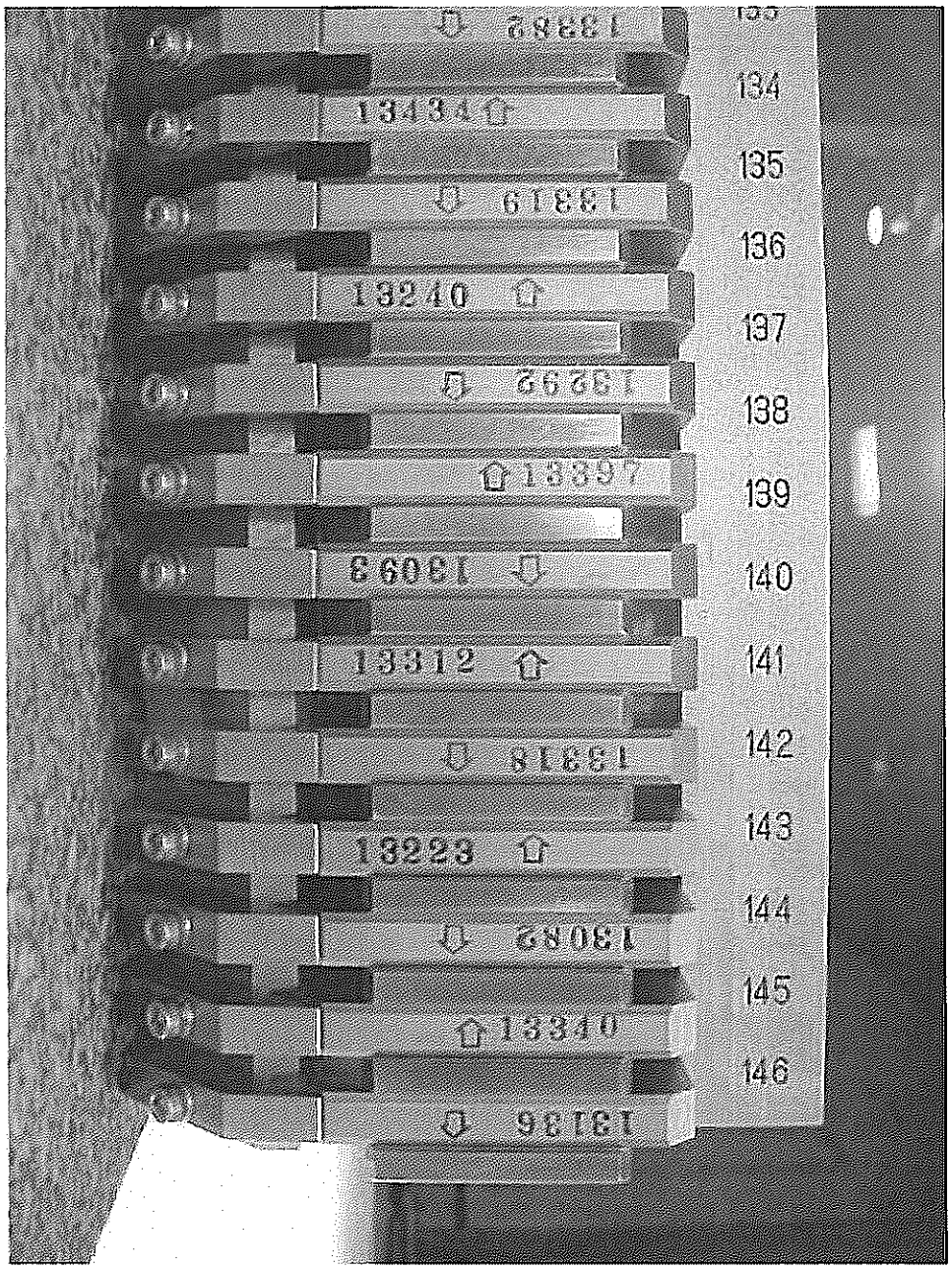
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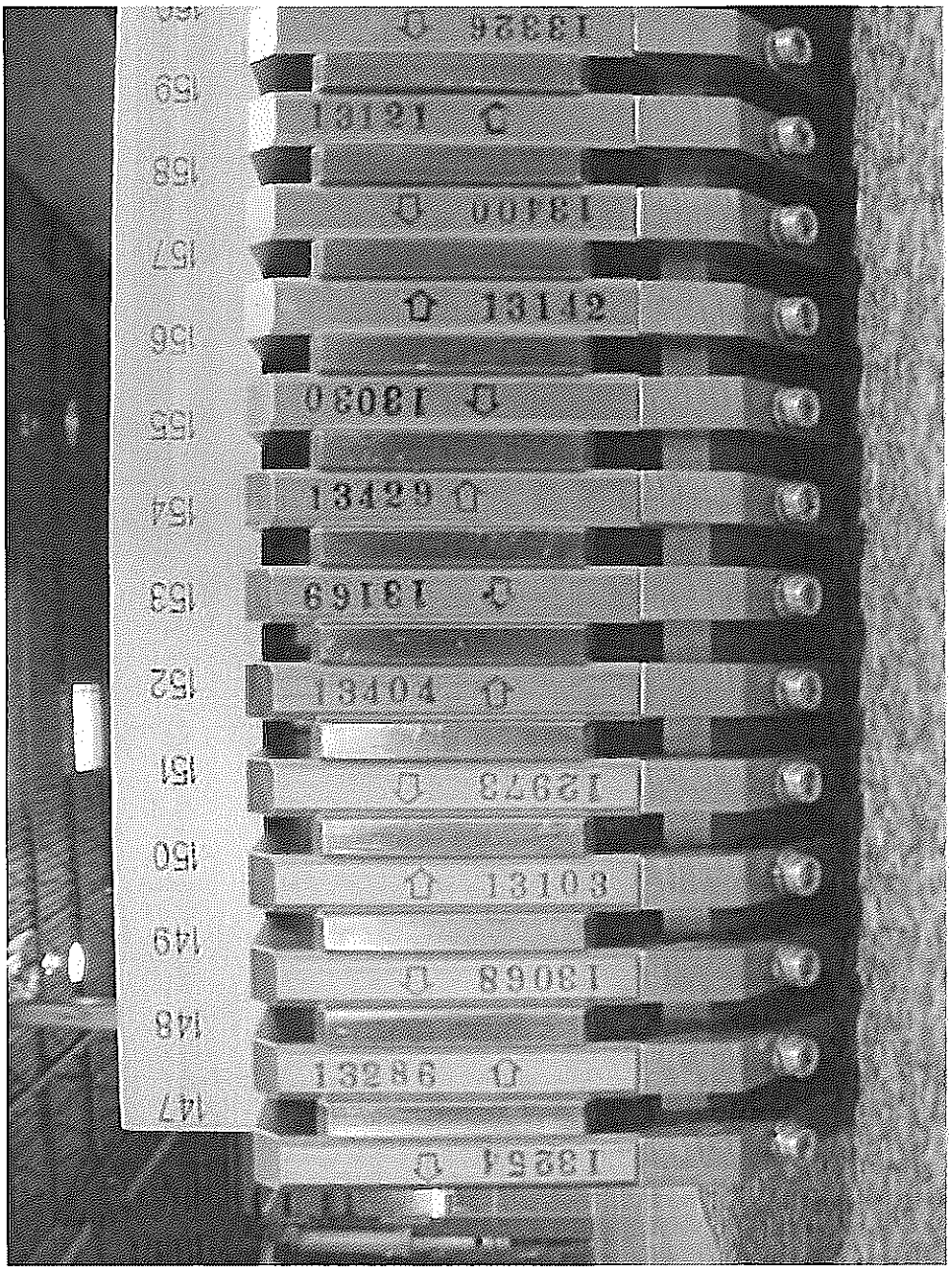
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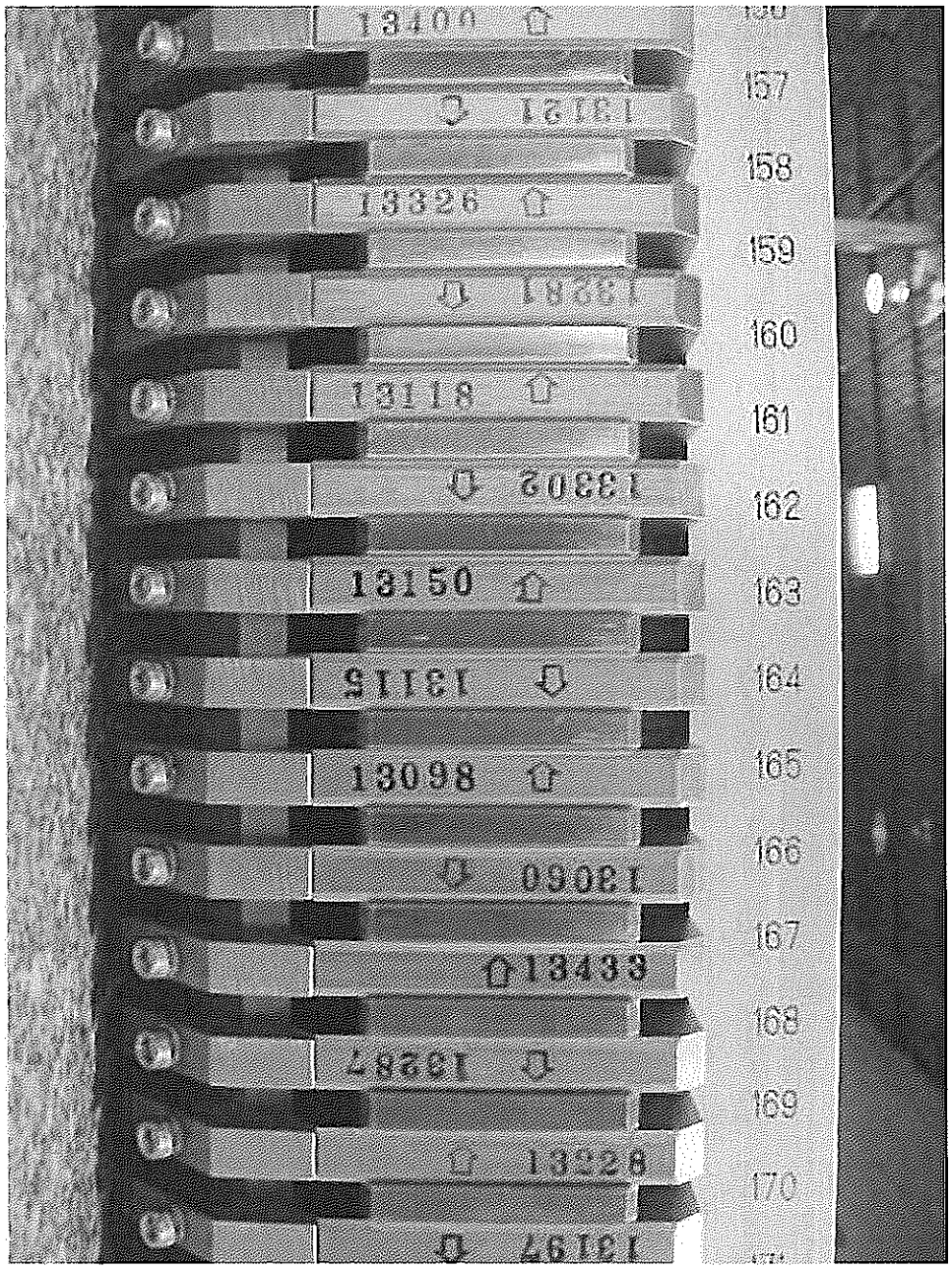
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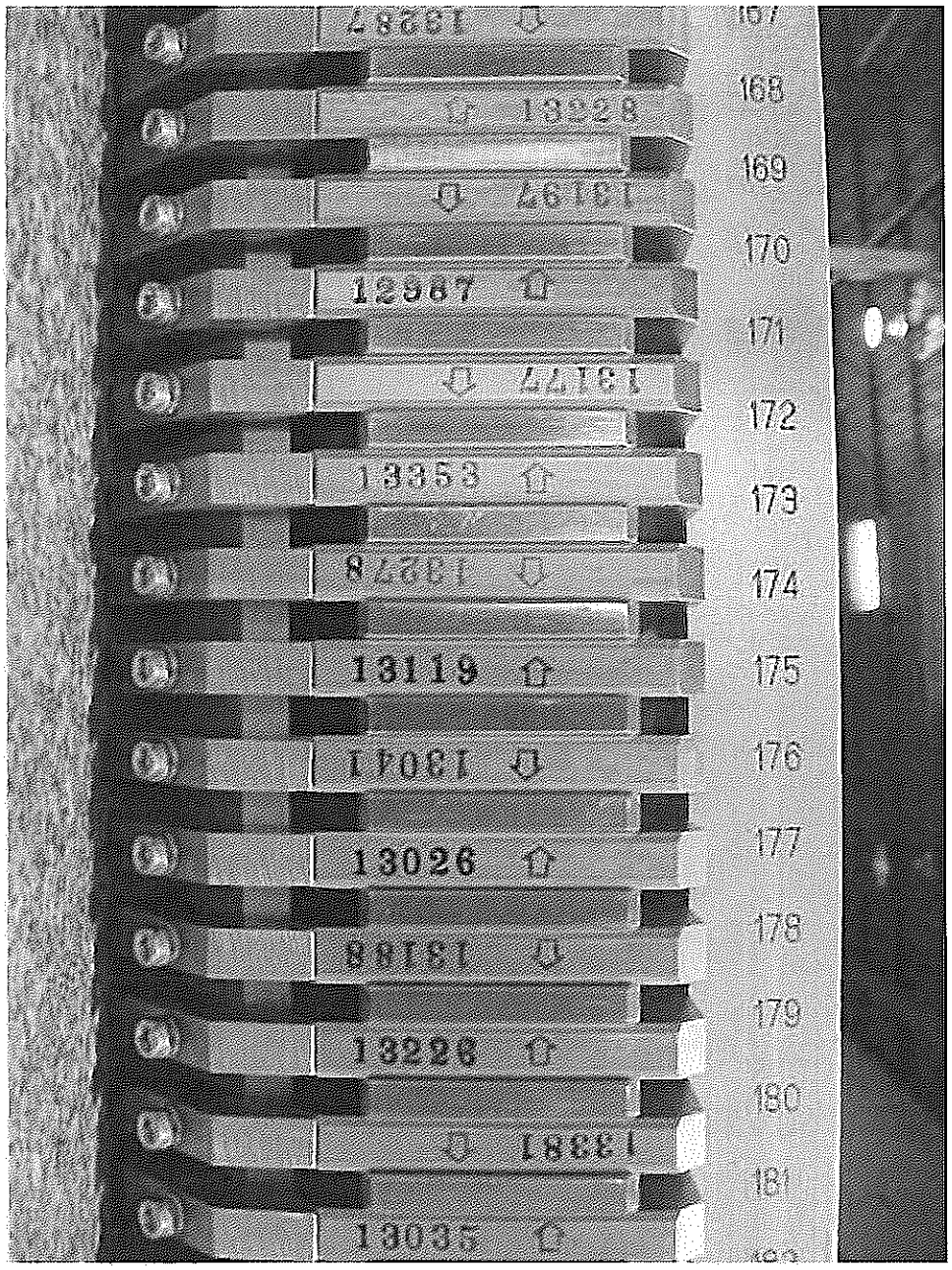
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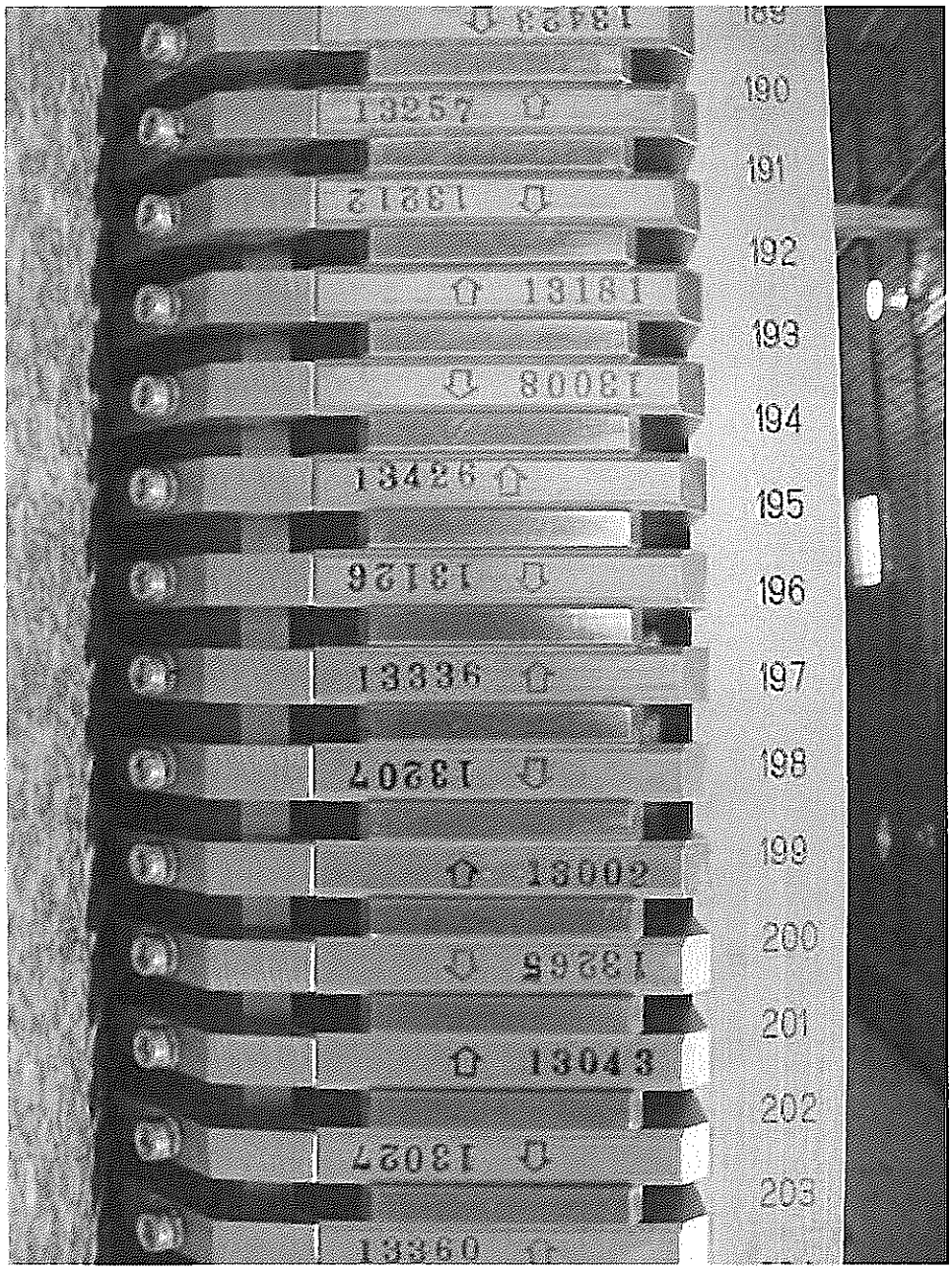
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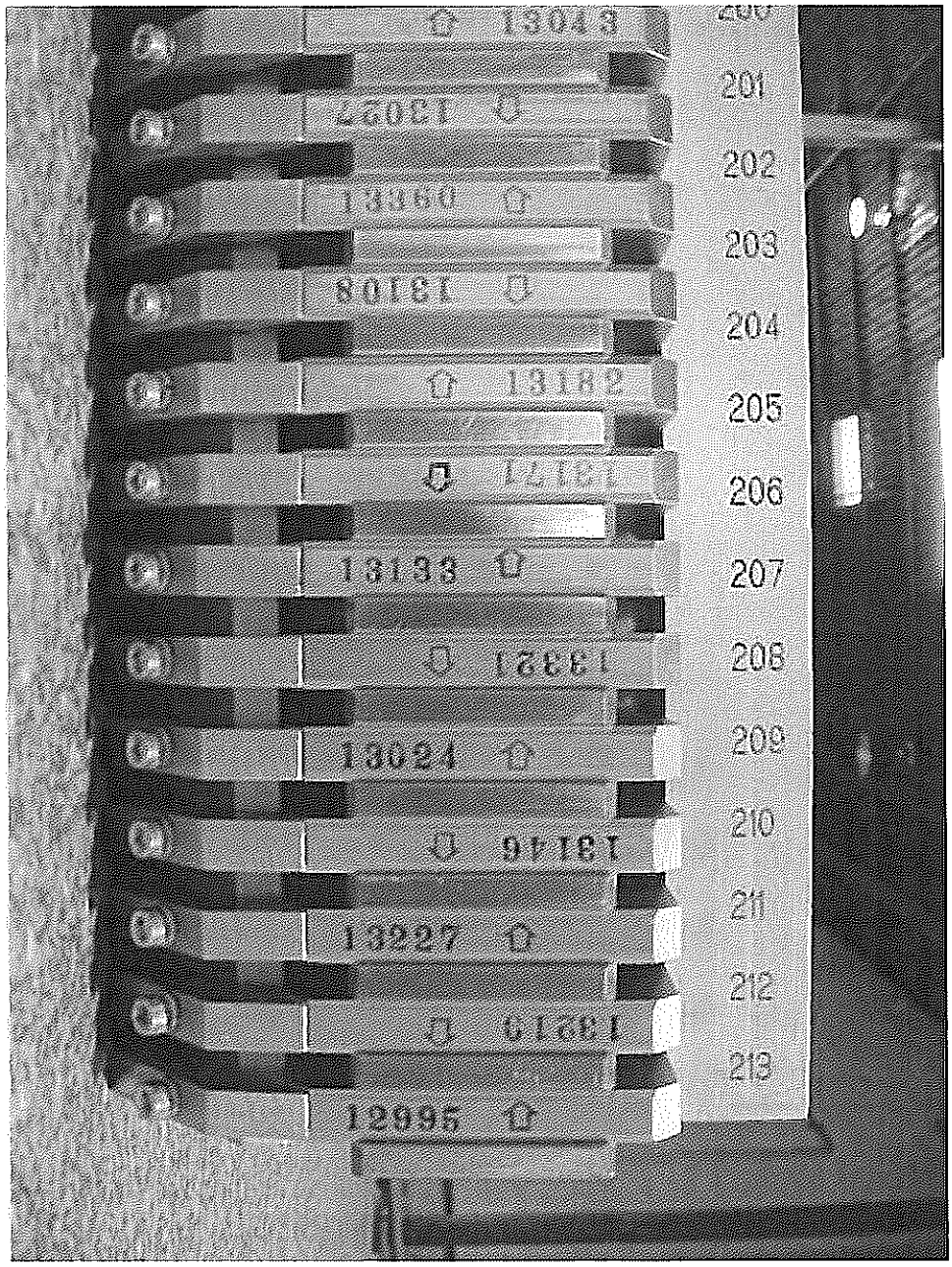
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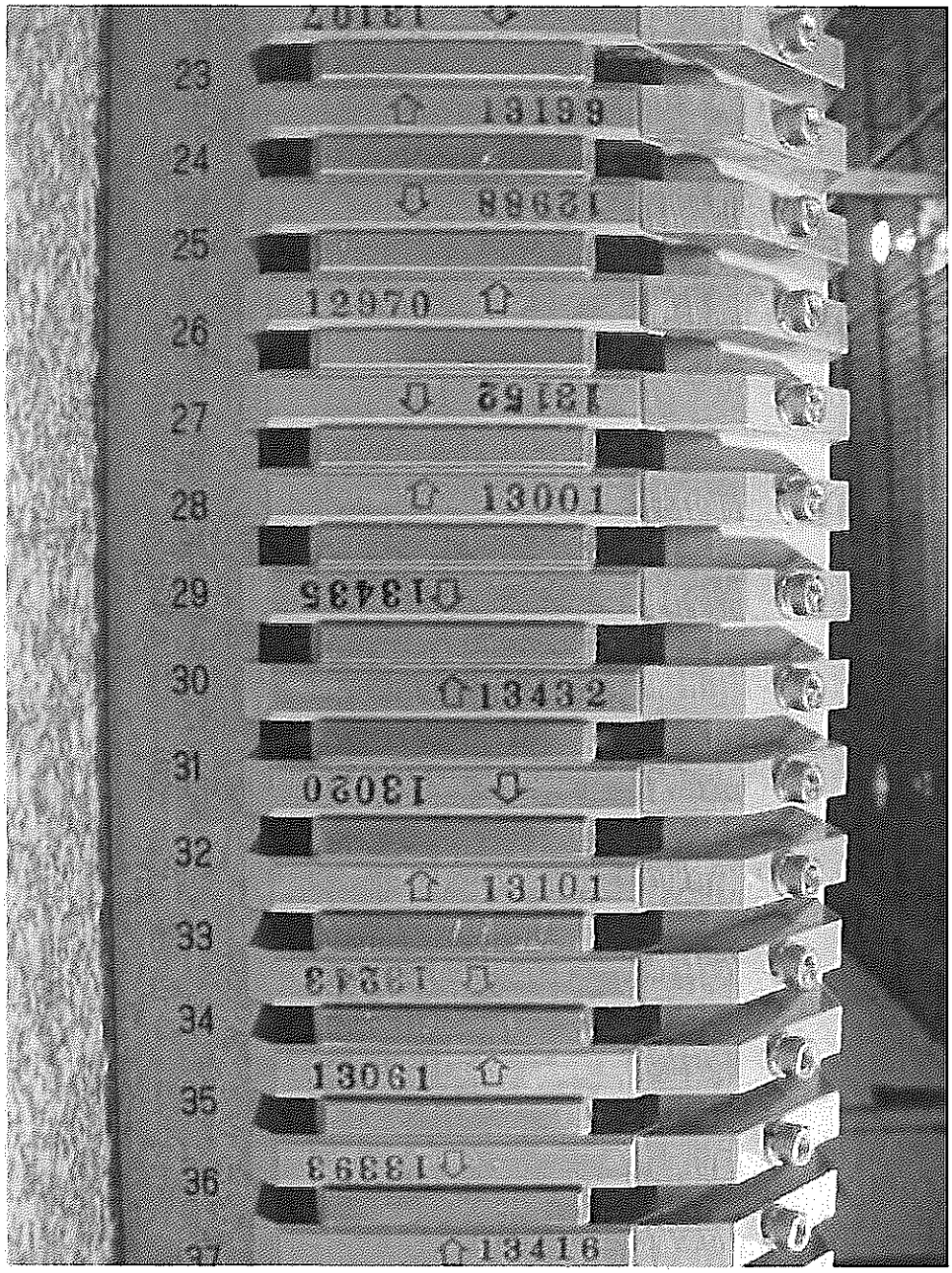

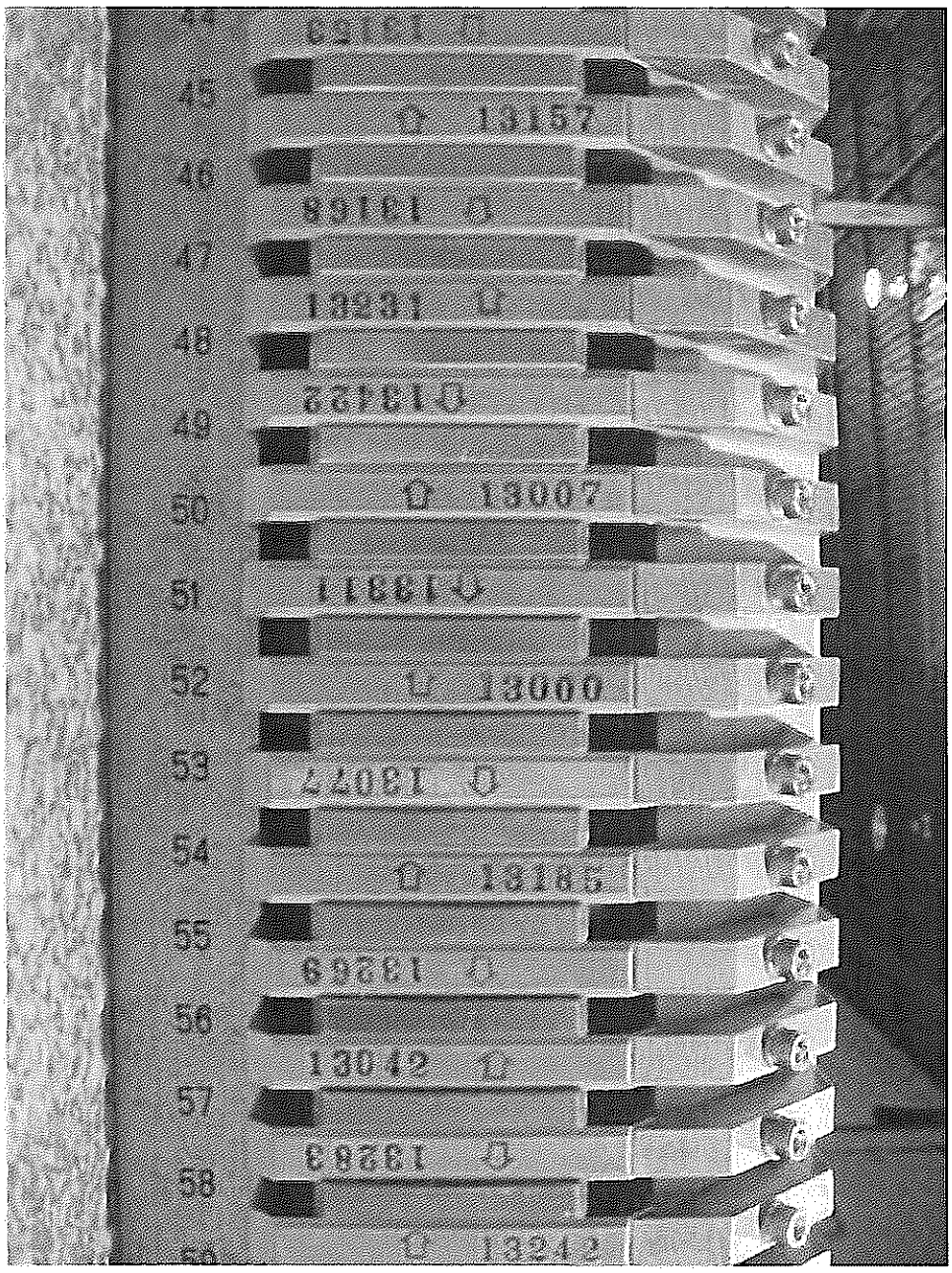
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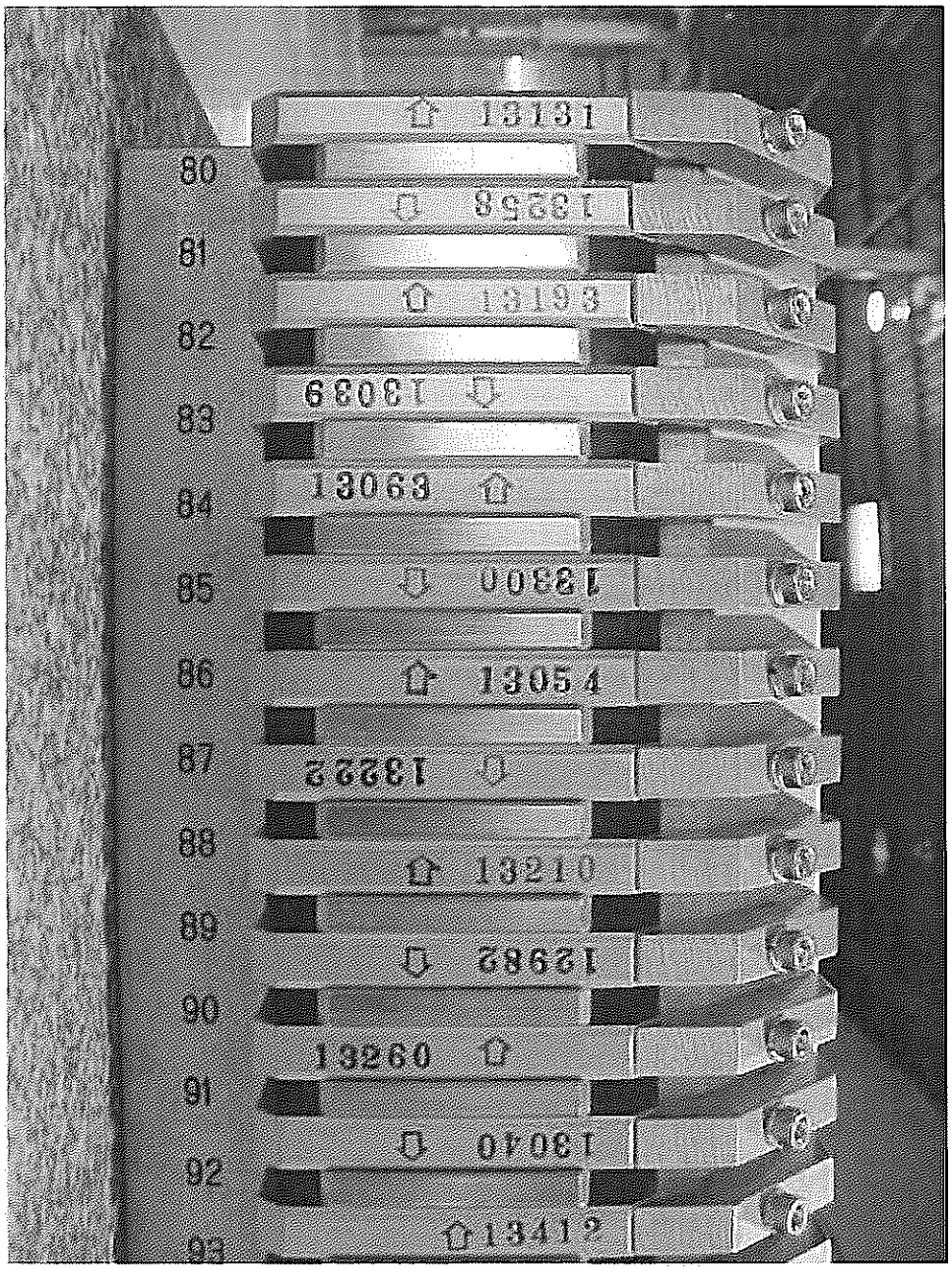
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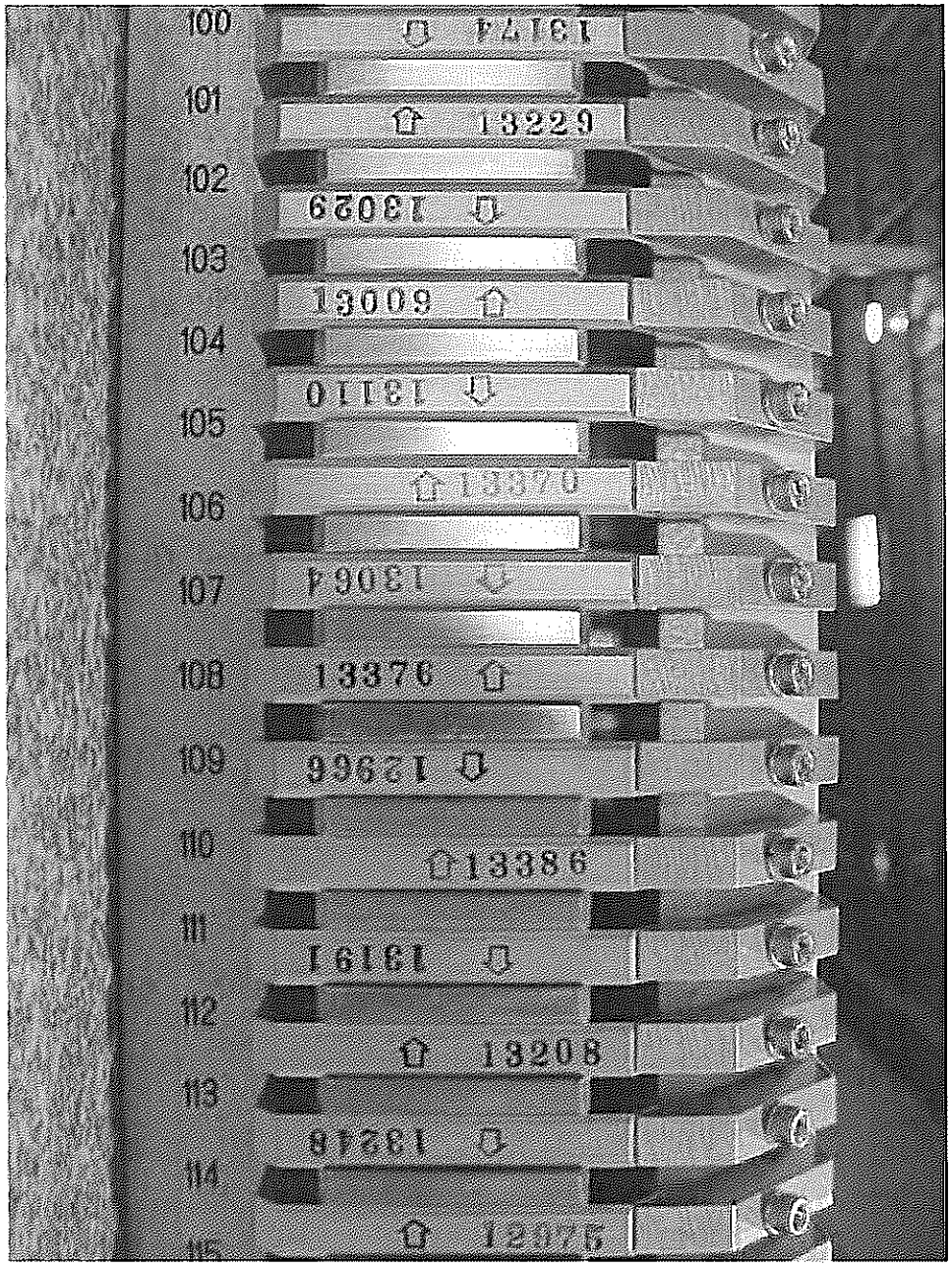
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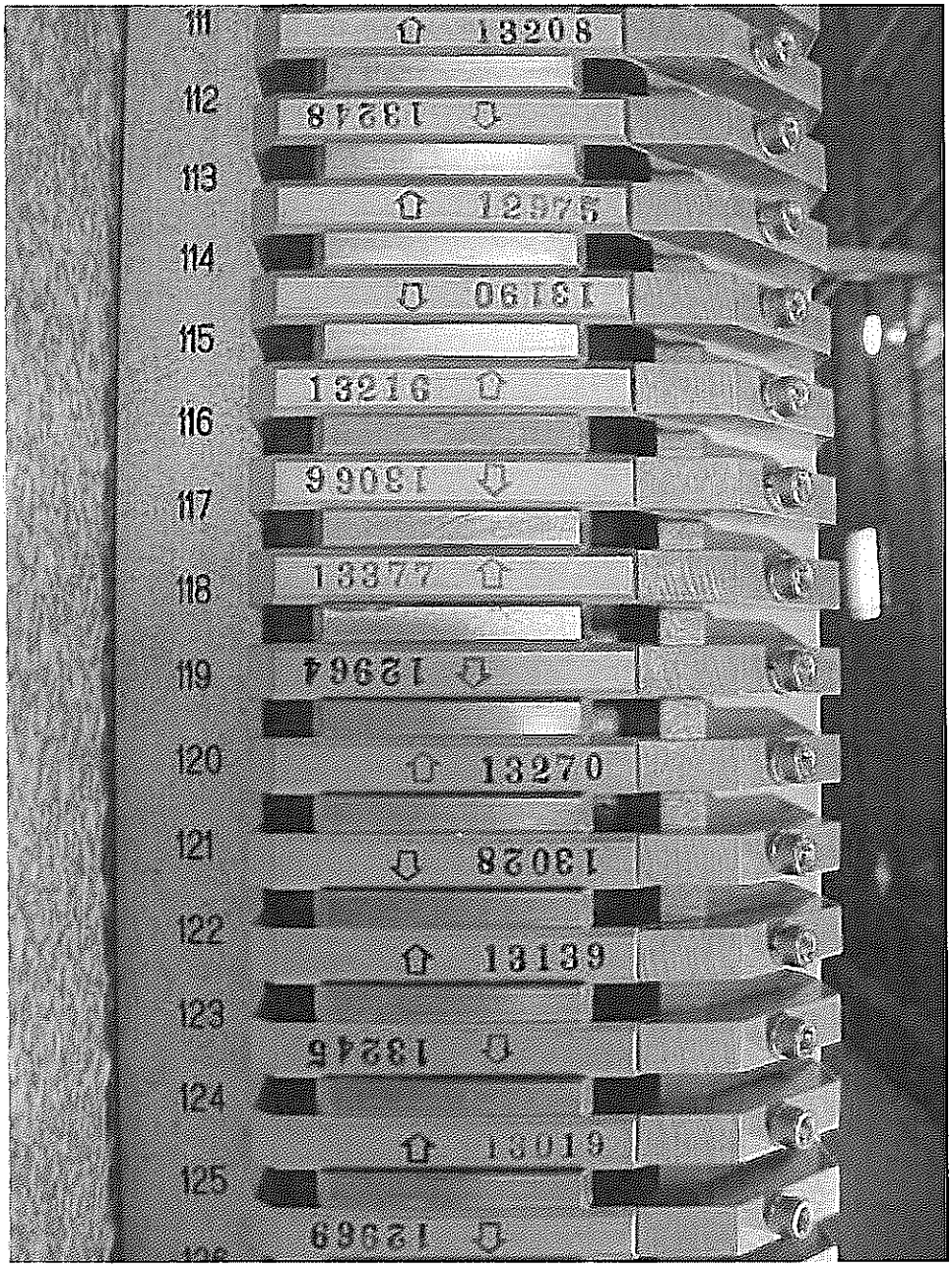
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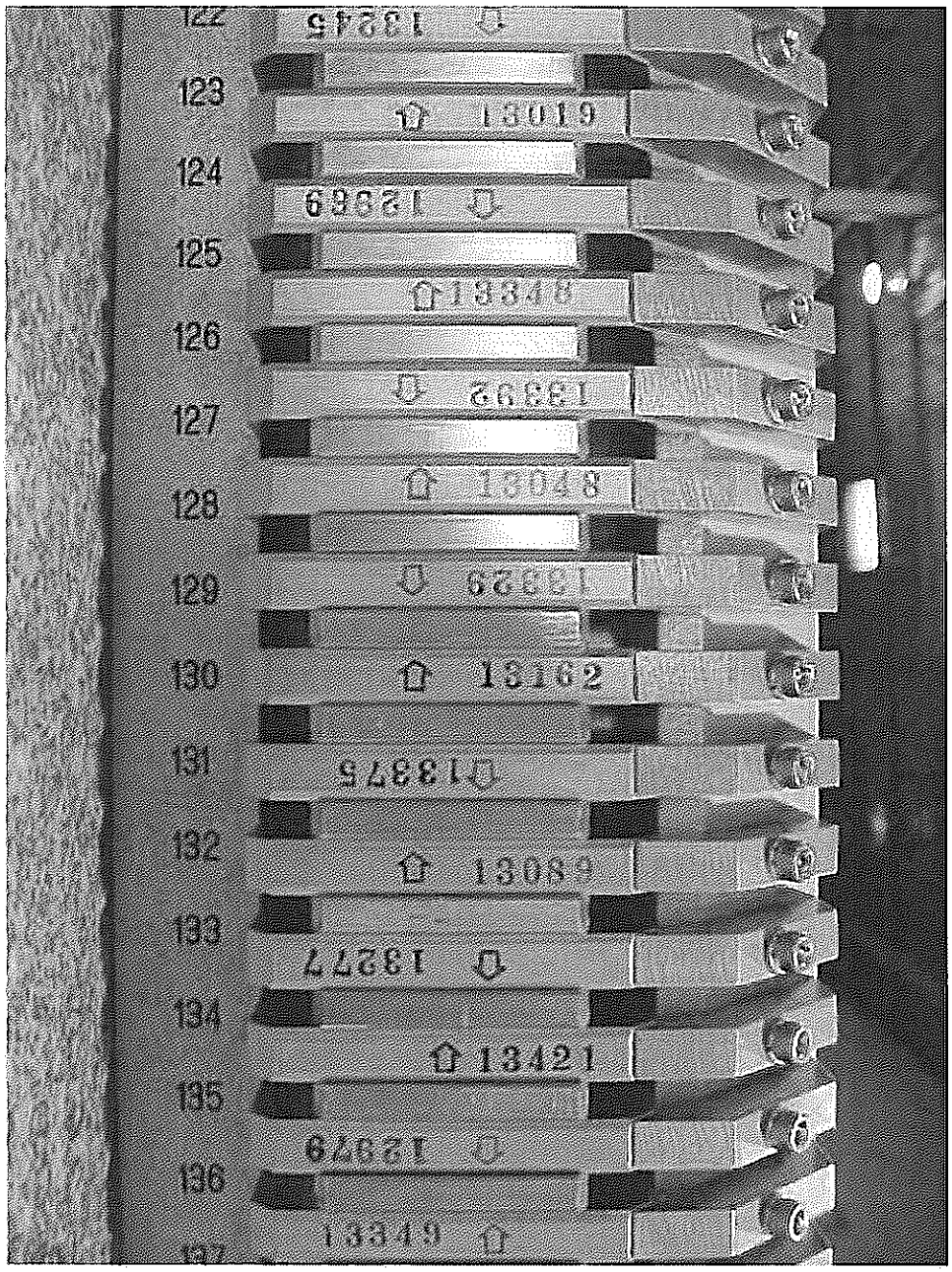

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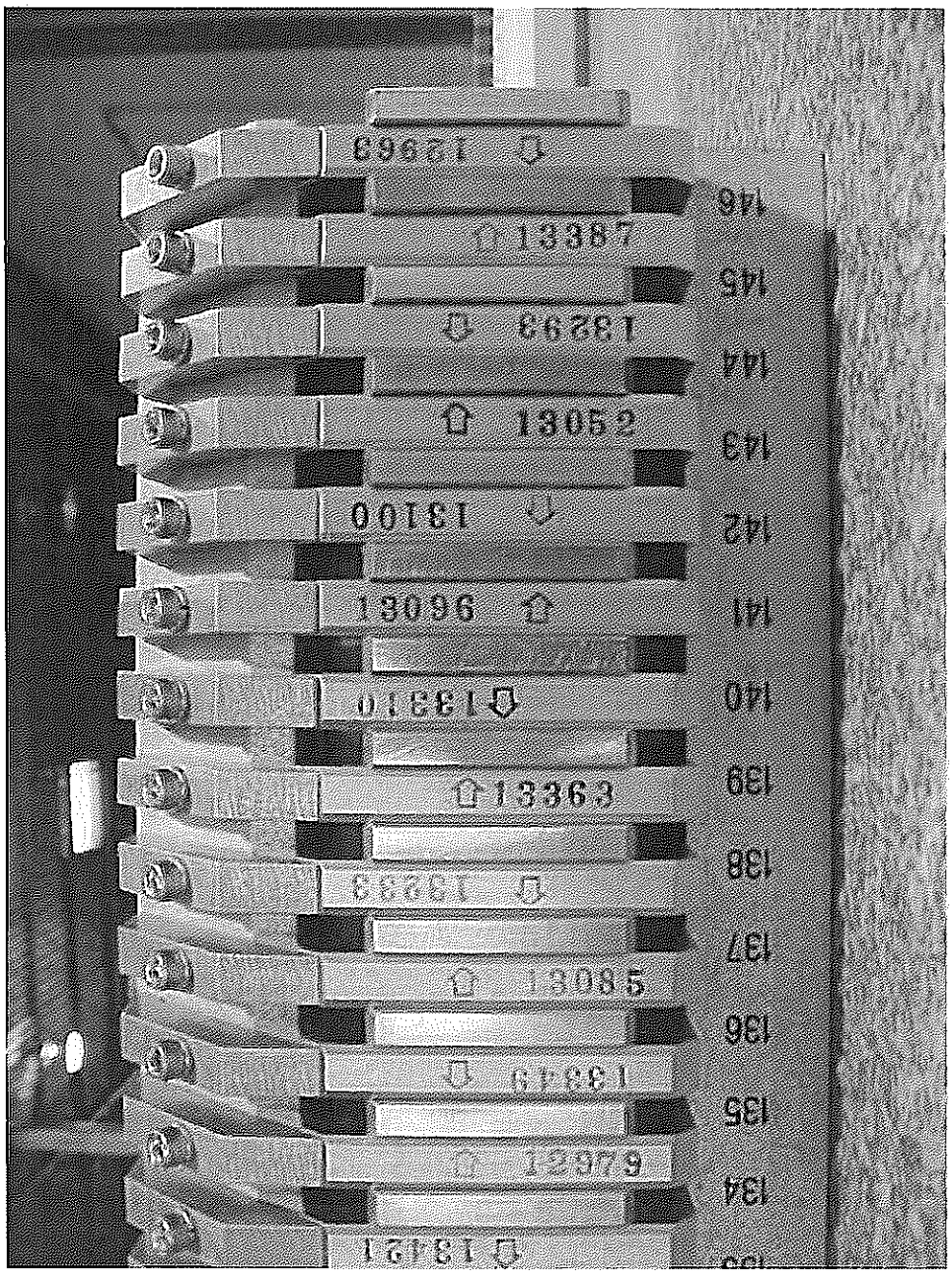
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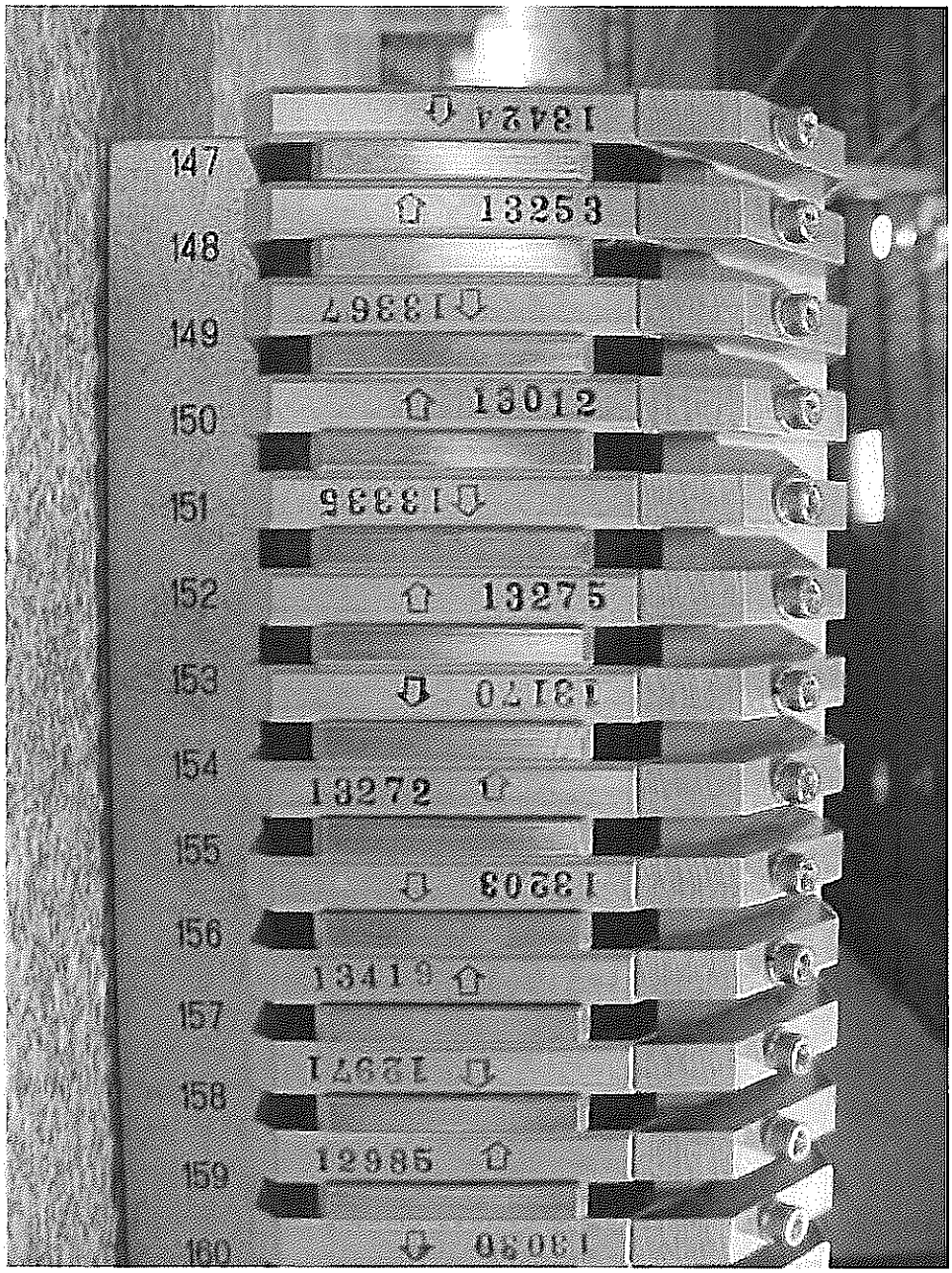
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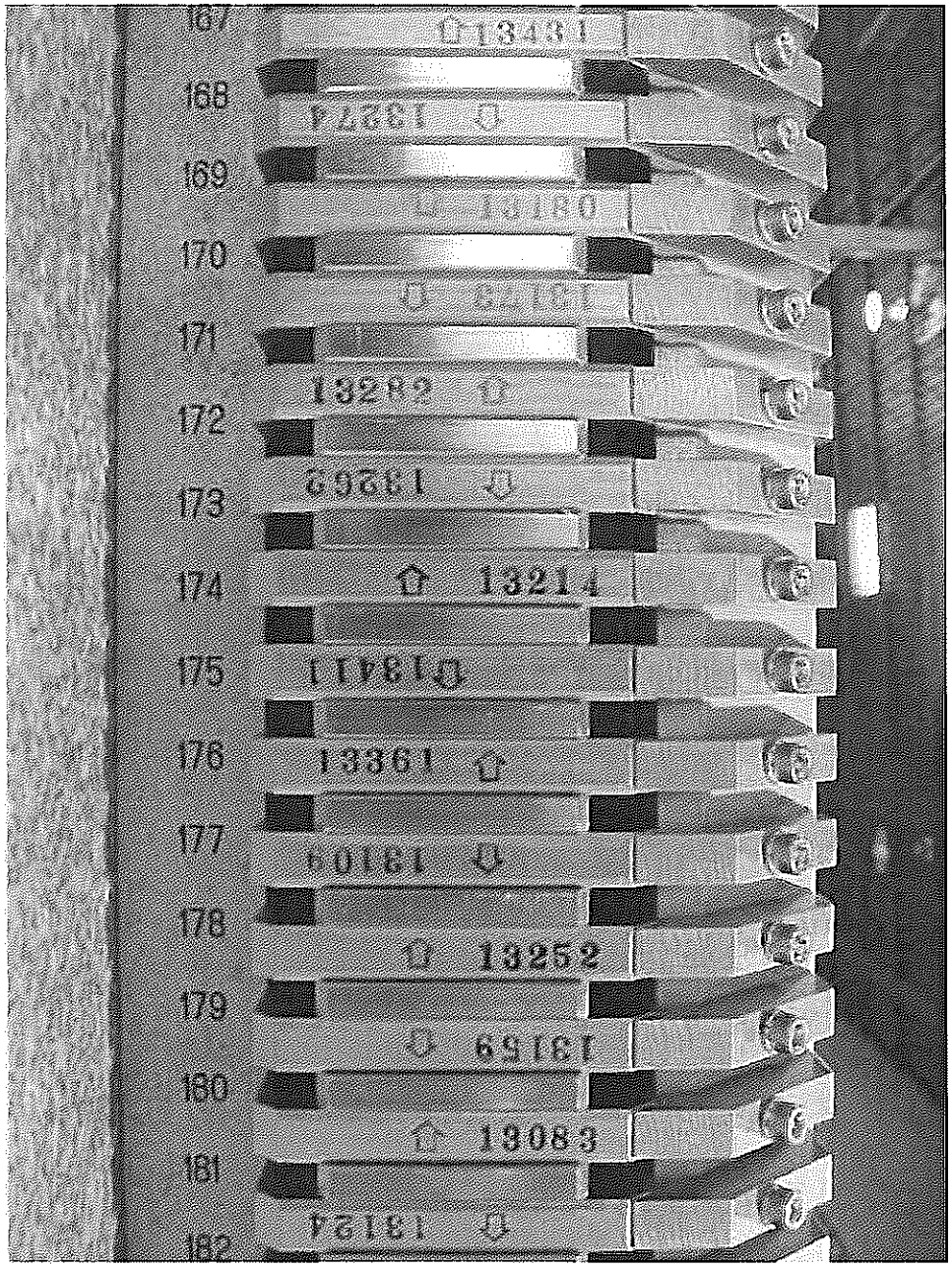
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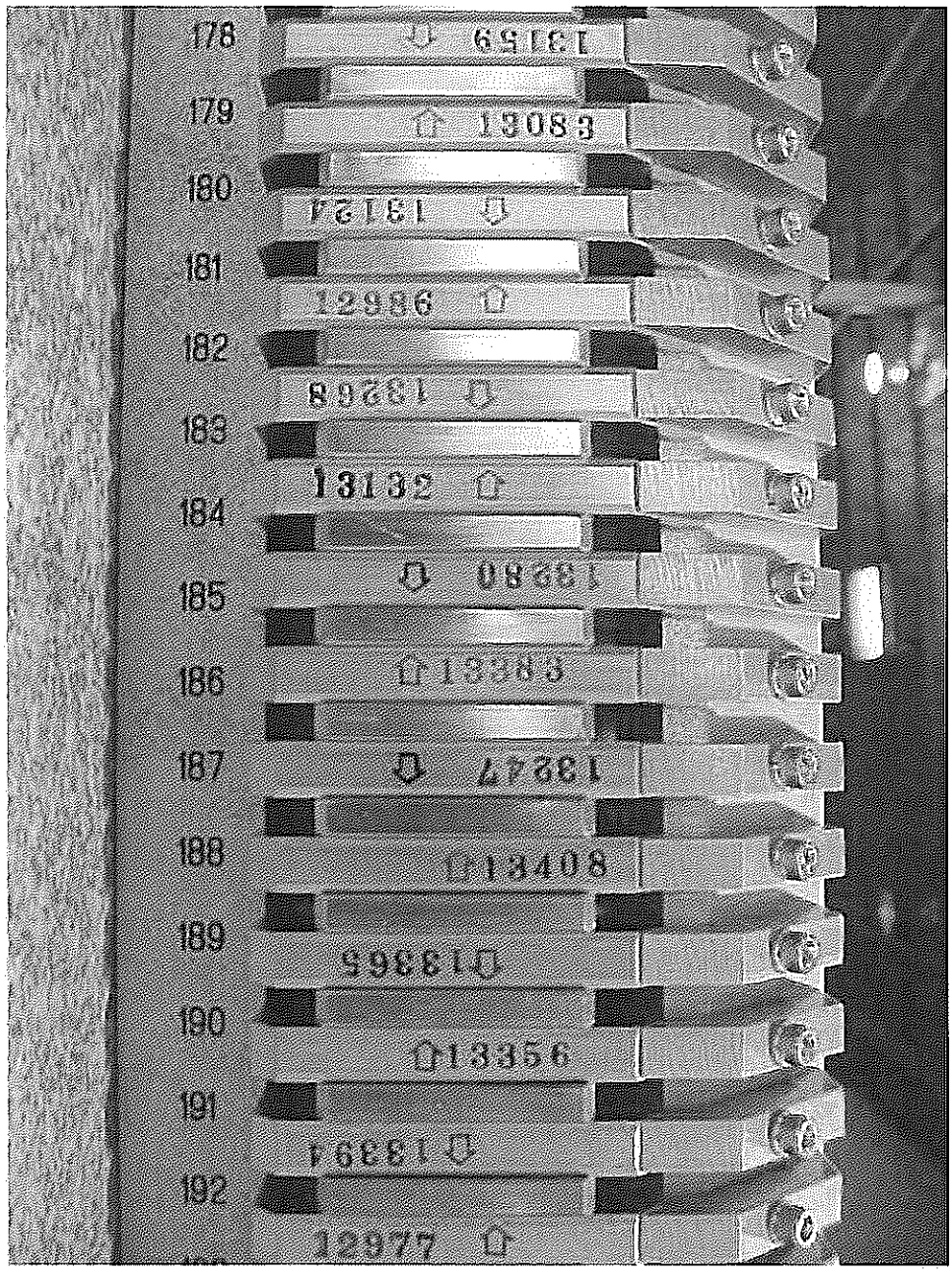
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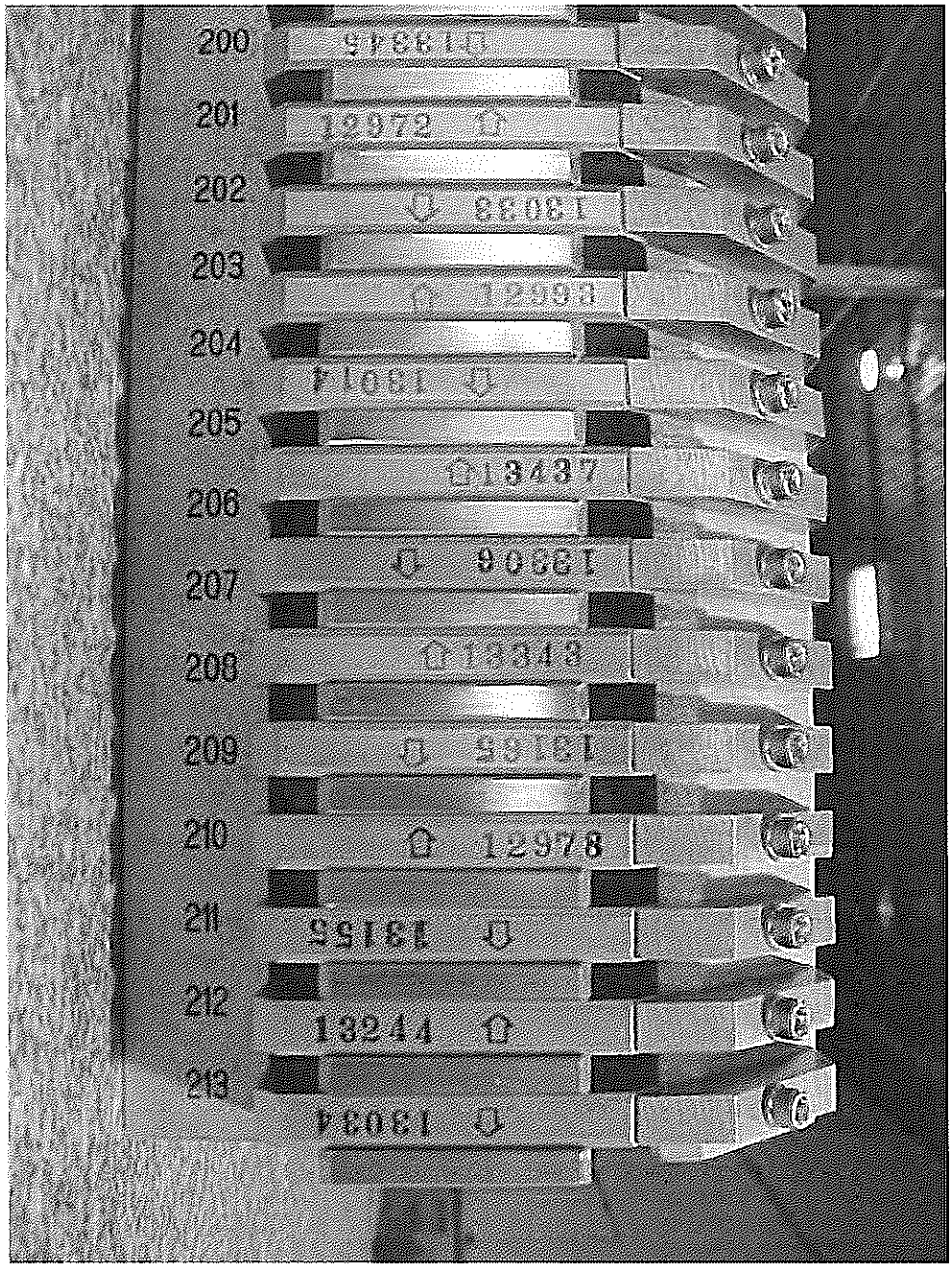
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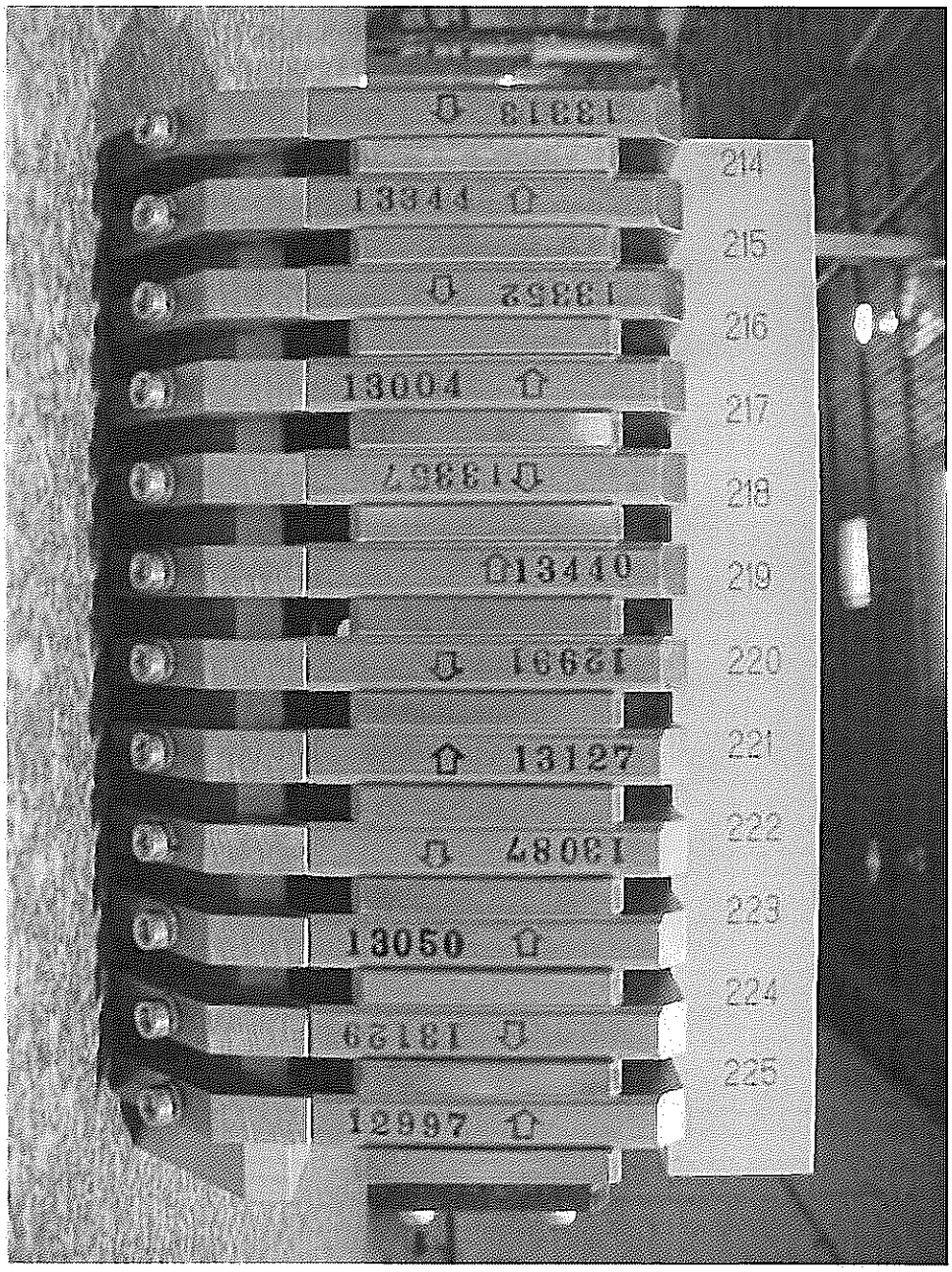
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1. DISTRIBUTION: LCLS Undulator Ass'y Contractors, Tom Barsz, and Glen Lawrence.

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

2. PAGE ONE OF 1 3. ACL NO. E5-020020

4. ORIGINATOR'S NAME & DIVISION Glen Lawrence/XFD 5. PHONE 2-9298 6. DATE 1/20/2005

7. PART NO. & NAME L143-110700 LCLS Undulator Strongback 8. QUANTITY 40

9. FOR INSPECTION, DELIVER TO BLDG. NO. N/A DIVISION ATTN:

10. AFTER INSPECTION, DELIVER TO BLDG. NO. N/A DIVISION ATTN:

11. REFERENCES AND/OR REMARKS: Strongbacks are to be delivered to undulator assembly contractor by machining contractor Undulator assembly contractor shall inspect strongback prior to acceptance, Argonne National Laboratory shall review all certification and machining vendor 's reported and optionally shall do on-site inspections..

12 STEP NO.	13 INSPECTION/TEST REQUIREMENT	14 INSPECTION TEST LOCATION	18 ACCEPTED BY OR NONCONFORMANCE REPORT NO.	19 DATE
1	Visual inspection of part for shipping damage. A) Were critical surfaces protected per SOW L143-00030 Section 4.1.4? B) Is there any visible damage?	Undulator Ass'y Contractor	Thomas Becker	12-14-06
2	Check Strongback is marked with serial number & part no.'s (ANL & SLAC) per SOW Section 4.1.3	Undulator Ass'y Contractor	Thomas Becker	12-14-06
3	Check all accompanying Certifications have correct part Serial number.	Undulator Ass'y Contractor	TODD CROW MTX QC 12	12-19-06
4	Check Material Certification for compliance with ASTM B381-03, Grade F2	Undulator Ass'y Contractor & ANL	TODD CROW MTX QC 12	12-19-06
5	Check Forging Annealing Certification for annealing conformance to AMS-H-81200A, Table V, commercial Pure, Bars & Forgings, including. Note 8	Undulator Ass'y Contractor & ANL	TODD CROW MTX QC 12	12-19-06
6	Check Rough Machining Anneal Certification for annealing conformance to AMS 2801B section3.2.9	Undulator Ass'y Contractor & ANL	TODD CROW MTX QC 12	12-19-06
7	Check the strongback contractor's reported dimensional measurements against the part drawing.	ANL		
8	Verify the strongback critical dimensions as listed in the SOW section 4.5.2 are in compliance with the print.	Undulator Ass'y Contractor	Thomas Becker	12-14-06
	L143-112000-05			
	SA-381-001-35			
	5A10359-28			

15. ORIGINATOR OF PLAN Glen Lawrence DATE 01/20/2005

16. PLAN REVIEWED/APPROVED BY DATE

17. QAR CONCURRENCE WITH PLAN DATE

Metalex
Manufacturing
Inc.

Metalex
Certified ISO 9001 Quality Management
Veteran Owned Business 30 Plus Years

#1-- INSIDE Pkg - Cust Copy

Packing List# 38201 Rel# 1 PAGE 1
Metalex Job# 2005-3814

Ship To: ARGONNE NATIONAL
LABORATORY
BLDG 201, OCF-PRO
9700 S CASS AVE.
ARGONNE IL 60439

Date: 6/13/06
Ship Via: REMAIN @ METALEX
PTA#
(prepaid shipments only)
BOL/Air Bill#
Prepaid: Collect:
Weight: Ctns: Zone:
Dimensions:

Attn: MICHAEL OPRONDEK
Customer PO: 5A06990

P.O. Item No.	Qty Ordered	Qty Shipped	Qty Back Ordered	Description
002	19	1	6	L143-110700 REV. 07 STRONGBACK S/N: 5A06990-28 -CERTIFICATE OF CONFORMANCE, INSPECTION DATA, AND CERTIFICATIONS ENCLOSED. REF: SDR'S #3801-001, #3801-004, #3801-006 TESTING SURVEILLANCE BY ANL HAS BEEN WAIVED PER MEETING BETWEEN TOM BARAZ (ANL QUALITY) & ROB SCHUERMANN (MX PROJECT ENGINEER)

Received By:

Printed Name _____ Signature _____ Date _____

MX3096 (30/02)

www.metalexmfg.com
sales@metalexmfg.com

5750 Cornell Road Cincinnati, Oh 45242-2083
Phone (513) 489-0507 Fax (513) 489-1020

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EMAIL: metalex@metalexmfg.com

Metalex
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ISO 9001:2000 and AS9100 Certified
Veteran Owned Business 30 Plus Years

CERTIFICATE OF CONFORMANCE

Date: 06/14/2006
Customer: Argonne National Laboratory
Bldg. 201, OCF-PRO
9700 S Cass Ave.
Argonne, Illinois 60439
Attention: Michael Oprondek

Metalex Job# 2005-3814
Purchase Order # 5A06990
MX Packing List # 38201

Metalex certifies that all material, processes, procedures, and dimensions are as called for on the purchase order, drawings, and/or amendments supplied by you.
All information concerning this part or parts, units and/or assemblies are on file at Metalex Manufacturing, Inc.

ITEM	QTY	PART NUMBER	REV	PART NAME	ID # *
0002	1	L143-110700	07	Strongback	5A06990-28

*IDENTIFICATION NUMBER INCLUDES SERIAL #, HEAT #, AND/OR LOT #.

COMMENTS: "First Article" submitted on Metalex Shipper #36794 dated 10/17/05 (Job#05-3801).

Metalex is in compliance with Statement of Workscope Document No. L143-110700, Revision 5, dated 09/05/05 and Strongback was successfully Vibration Stress Relieved per the Procedure in Appendix A.

Material from Heat Lot #G80J.

Reference SDR# 3801-001 (Material Substitution), SDR# 3801-004 (Modification), & SDR# 3801-006 (Modification).

Testing Surveillance by ANL has been wavied per meeting between Tom Barsz (ANL Quality) & Rob Schuermann (MX Project Engineer).

QE — Metalex Representative Signature

TODD CAUDILL — Print Name

MTX QC 12

6/14/2006 — Date

MX1011 (05/05)

To: METALEX MANUFACTURING INC
Address: 5750 CORNELL ROAD
CINCINNATI, OH 45242
Attention Of: PURCHASING AGENT

ATI Wah Chang
Allegheny Technologies
P.O. Box 460
Albany, Oregon 97321-0136
(541) 926-4211 FAX (541) 967-6948

PRODUCT CERTIFICATION

IN REGARD TO YOUR

Vendor Identification:	Wah Chang
Purchase Order No.:	58095-BL
Sales Order No.:	127418
Item No.:	1
Description:	Titanium Grade 2 Billet
Dimensions:	12.020-12.060" Dia. x 134.50-134.75" L
Specifications:	ASTM B381-05, AMS H 81200A and P.O.
Date:	February 1, 2006
Heat No.:	G80J
Alloy:	Ti-2
SFC No.:	1313155
Quantity Shipped (pcs.):	4
Weight Shipped (lbs.):	10008
Part No.:	5A06990-26,28,30,32

JMW

METALEX
QA DEPT.
ACCEPTED
DATE 3/13/06
BY TC

THE TEST REPORT FOLLOWS:
Material Condition: Forged, conditioned, annealed and machined.

INGOT CHEMISTRY IN PERCENT

Element	Alpha Spec.	Spec. Max.	TOP	MIDDLE	BOTTOM
C		0.08	0.01	0.01	0.01
Fe		0.30	0.06	0.06	0.06
H		0.015	0.001	0.001	0.0007
N		0.03	0.005	0.005	0.005
O		0.25	0.14	0.15	0.16
OTHERS_EACH		0.10	<0.10	<0.10	<0.10
OTHERS_TOTAL		0.30	<0.30	<0.30	<0.30
Ti	BALANCE				

CERTIFICATE OF CONFORMITY

This is to hereby certify that the listed material has been processed, annealed and tested in accordance with the specifications noted in the Purchase Order.

Certified By: R Louie, QA Supervisor \es 02/01/06

"Wah Chang Is A Registered/Certified ISO 9001:2000 and AS9100 Company."

JOB #3813-3816
PART # L143-110700

Purchase Order No.: 58095-BL
Sales Order No.: 127418
Item No.: 1
Heat No.: G80J
SFC No.: 1313155

ATI Wah Chang
Allegheny Technologies
P.O. Box 458
Albany, Oregon 97321-0138
(541) 926-4211 FAX (541) 967-6948

ROOM TEMPERATURE TENSILES (FOR INFO ONLY)

Test	Method	Offset	Gage	Units	Spec. Min.	Trans.
Tensile Strength:	ASTM E8			Ksi	50	70.0
Yield Strength:	ASTM E8	0.2%		Ksi	40	53.2
Elongation:	ASTM E8		1"	Pct	20	33
Reduction In Area:	ASTM E8			Pct	30	52

METALLURGICAL
QA DEPT.
ACCEPTED
DATE 3/13/06
BY TC

ATTN: Jack

ATI Wah Chang

ATTACHMENT No. 2
Wah Chang / Kach Machine Works P.O. 180122 Rev 4
CERTIFICATE OF CONFORMANCE
SFC 1313155

Kach Machine Works hereby certifies that all conversion processing for the above Purchase Order conforms to material and/or manufacturing requirements indicated in the drawing or specifications, as applicable. Inspection and/or test reports substantiating conformity are attached.

METALEX QA DEPT. ACCEPTED DATE 3/13/06 BY TC

Any exceptions, deviations, or non-conformances are listed below. (Attach additional sheets if necessary.)

All 4 BARS ARE STRAIGTH
WITH NO TAPER

Part # SA06990-26,28,30 & 32

Name

Foreman
Title

KACH MACHINE WORKS, Inc.

JCB#3814

3838 N BALLAST ST SWAN ISLAND PORTLAND, OREGON 97217

QUALITY CONTROL DIMENSION INSPECTION REPORT

CUSTOMER WAH CHANG DATE 1-25-06

PART NAME 12" DIA x 134 3/4" long BAR PART NO. 5A06990-28 SFC1313155

P.O.NO. 180122 ATI NO. PCS. 1 I.D. NO. B1

MATERIAL TITANIUM HEAT NO. G80J

DRAWING NO. REVISION

DIM. NO.	Given	Actual			
1	OD 12.060"/12.020"	12.050"			
2	LENGTH 134.75"/134.50"	134.720"			
3	Finish 125 Ra	75 Ra			
4					
5	BAR is	STRAIGTH	WITH NO	TAPER	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					

METALER QA DEPT. ACCEPTED DATE 3/13/06 BY R NTX QC 12

[signature]
INSPECTOR

HEAT TREAT PROCESS CERTIFICATION FORM

S.O. #: N/A

Heat #: a 80J

MOT # 437 28H

Date: 12-28-05

Start Time: 07:45

Finish Time: 15:45

Material ID's: A, B, C, D

Was the Lot Split? (yes) (no) (Circle one)

Furnace #: 9

Size: 13" (Rnd.) (RCS) (Plate) (Rect.)

Heat Treated to Specification: AMS-H-81200, Latest Revision

HEAT TREATING PROCEDURE:

STRESS Relieve

Anneal	Temp. 1100 °F	Time at Temp. 8 Hrs. +/- 15 mins.	To 8 Hrs. +/- 15 mins.
Beat Soln. Treat	Temp. ____ °F	Time at Temp. ____ Hrs. ____ mins.	To ____ Hrs. ____ mins.
Solution Treat	Temp. ____ °F	Time at Temp. ____ Hrs. ____ mins.	To ____ Hrs. ____ mins.
Duplex Anneal	Temp. ____ °F	Time at Temp. ____ Hrs. ____ mins.	To ____ Hrs. ____ mins.

Quench Media: (Furnace Cool) (Air Cool) (Fan Cool) (Water Quench)
(Circle One)

Heat Treatment Performed By: Jake Jeppsen

Date Operator Trained:

Supervisor Review:

Quality Assurance Review:

METALEX QA DEPT. ACCEPTED DATE 3/2/06 BY R

HEAT TREAT CHARTS IN JOB # 05-3613 FOLDER

HEAT TREAT PROCESS CERTIFICATION FORM

S. O. #: N/A

Heat #: G80J

MOT # 43728H

Date: 12-22-05

Start Time: 10:34

Finish Time: 21:05

Material ID's: A, B, C, D

Was the Lot Split? (yes) (no) (Circle one)

Furnace #: 9

Size: 13" (Rnd) (RCS) (Plate) (Rect.)

Heat Treated to Specification: AMS-H-81200, Latest Revision

HEAT TREATING PROCEDURE:

Anneal	Temp. 1250 °F	Time at Temp. 8 Hrs. ___ mins.	To 8 Hrs. +/- 15 min mins.	
Beat Soln. Treat	Temp. ___ °F	Time at Temp. ___ Hrs. ___ mins.	To ___ Hrs. ___ mins.	
Solution Treat	Temp. ___ °F	Time at Temp. ___ Hrs. ___ mins.	To ___ Hrs. ___ mins.	
Duplex Anneal	Temp. ___ °F	Time at Temp. ___ Hrs. ___ mins.	To ___ Hrs. ___ mins.	

Quench Media: (Circle One) (Furnace Cool) (Air Cool) (Fan Cool) (Water Quench)

Heat Treatment Performed By: Jule Jeppsen

Date Operator Trained:

Supervisor Review:

Quality Assurance Review:

METALEX QA DEPT. ACCEPTED DATE 3/13/06 BY TR

HEAT TREAT CHARTS TO JOB# 05-3813 FOLDER

PACKING LIST

ATI Wah Chang
Allegheny Technologies

Wah Chang
PO Box 460
1600 NE Old Salem Road
Albany, OR 97321-0460
ph: 541-967-6977 f: 541-967-6994

PURCHASE ORDER 58095-BL	SALES ORDER NUMBER 127418	DATE SHIPPED 02-FEB-06
BILL OF LADING NO. CN217992	GOVT CONTRACT NO.	DELIVERY No 75662
FREIGHT CARRIER IDI	GOVT. PRIORITY	INSPECTION WC
DELIVERY / FREIGHT TERMS FOB-COLLECT	EXPORT LICENSE NO.	PAYMENT TERMS NET 30 DAYS
DELIVERY POINT ALBANY, OR	CAS CODE NO	SALES PERSON ANTHONY S E

BILL TO:
METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242
United States

SHIP TO:
METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242
United States

SO LINE	SHIP LINE	CUST ITEM	ORD QTY	UOM	ITEM DESCRIPTION	PIECES	SPC NUMBER	HEAT/LOT NUMBER	QTY SHIPPED	NET WT LBS	QTY REMAIN
1	4	1	4.00	EACH	TI GR 2 BILLET Diameter: 12.020 - 12.060 IN Length: 134.50 - 134.75 IN ECCN: EAR99 Packaged In: PALLETS Number: 4 Sizes: 180X26X23 Net Weight: 10008.00 LBS Gross Weight: 11617.00 LBS DCC DOMESTIC THESE COMMODITIES ARE SUBJECT TO EXPORT CONTROLS. PRIOR UNITED STATES GOVERNMENT APPROVAL MAY BE REQUIRED FOR EXPORT AND/OR RE-EXPORT.	4	1313155	G80	4.00	10808.00	0

Del
MARLIN B. ANDERSON, LLC

RECEIVED
FEB 07 2006
METALEX MFG.
BY S.

Job# 3814

PART# L143-110700

OPP# 20

S/N 5A06990 28

Steve Wallace

3-23-06

TC 3/24/06 MTX 00 12

PART# L143-110700

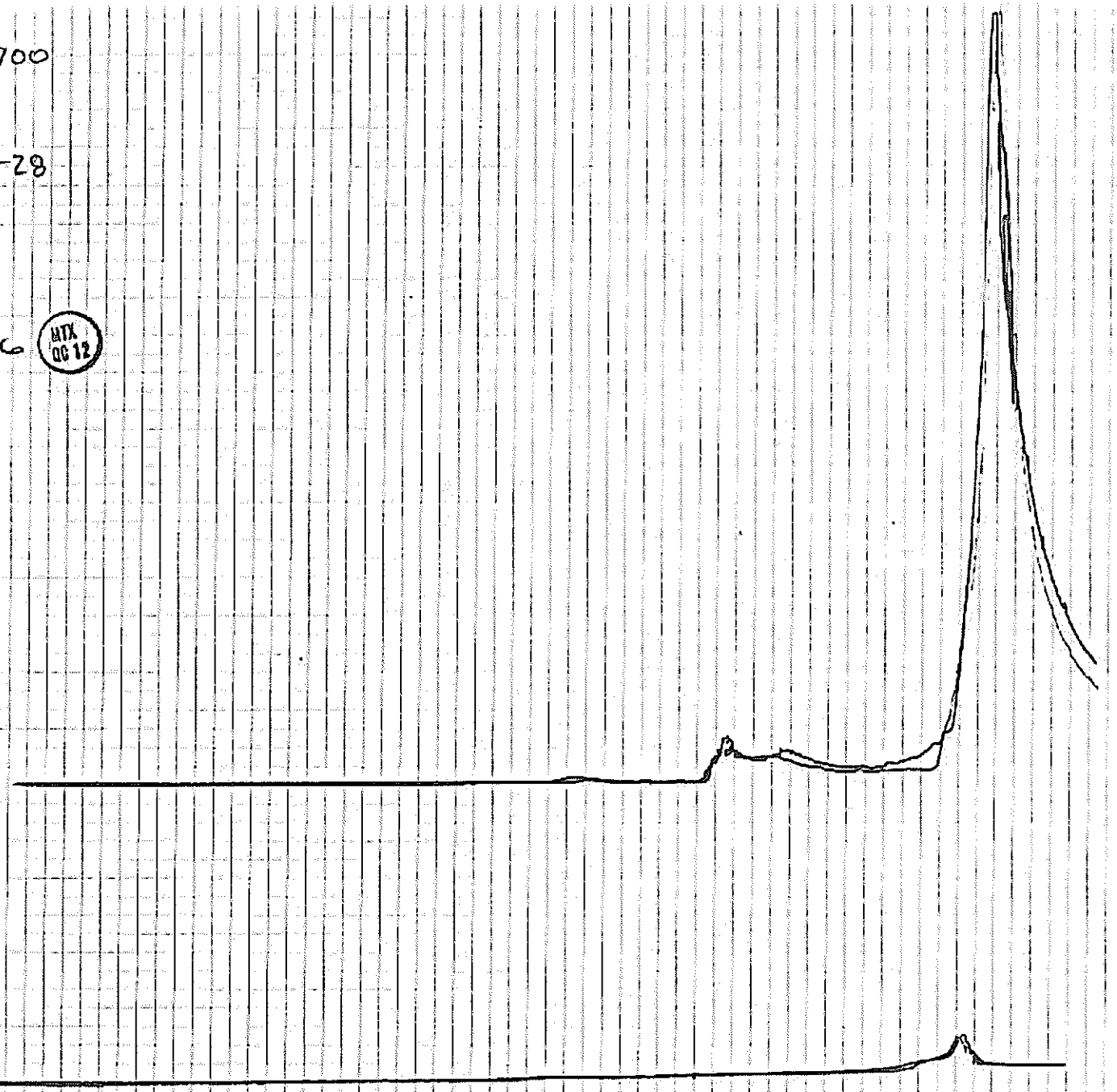
OPP# 50

S/N- 5A06990-28

Steve WALLACE

4-12-06

TC 4/12/06 MTX QC 12



JQ8#3814

SUPPLIER DISPOSITION REQUEST (SDR)

(Form ANL-311 includes instructions and continuation sheet)

Page 1 of 1

(CHECK ONE)

[✓] 1A. Deviation Request

[ ] 1B. Nonconformance Action Request

2. SDR No. 3801-001

3. SDR Date 06/23/2005

4. Supplier Name, Address, Telephone, Fax

Metalex Manufacturing Inc.
5750 Cornell Road
Cincinnati, Ohio 45242
513-489-0507
513-489-1020

5. Purchase Order No. 5A06990

6. Related Documents

6.1 Document No. L143-00030 Date

7. Qty.	8. Describe Nonconforming Condition	9. Identify Requirement	10. Cause & Corrective Action
	1.) Document No. L143-00030 Section 4.1.1 has the forging being made per ASTM B 381-03. The current revision level of this specification is ASTM B 381-05. Metalex supplier, ATI Wah Chang would like to work to the latest revision.	Metalex request direction from ANL on what revision applies to this contract. Metalex supplier, ATI Wah Chang needs this clear direction as soon as possible to continue with acceptance of the order.	

SUPPLIER'S COMMENTS (IF YES, EXPLAIN)

11. Affects Form, Fit or Function
[ ] Yes [✓] No

12. Affects Price
[ ] Yes [✓] No

Rob Schuermann - Director, Tech. Business Unit - 06/23/05

15. SUPPLIER REPRESENTATIVE – TITLE – DATE

13. Affects Delivery
[✓] Yes [ ] No This will hold up material supplier.

14. Recommended Disposition and Comments:

16. ANL REPRESENTATIVE – DATE

17. ANL Disposition and Remarks: Accept ASTM B381-05 as equivalent to ASTM B381-03 for our purposes in this procurement

18. Approved

7/1/05 TECHNICAL REPRESENTATIVE – DATE

7/1/05 QUALITY ASSURANCE REPRESENTATIVE – DATE

PROCUREMENT REPRESENTATIVE – DATE

JOB # 3814

SUPPLIER DISPOSITION REQUEST (SDR)

(Form ANL-31 includes instructions and continuation sheet)

Page 1 of 1

(CHECK ONE)

✓ 1A. Deviation Request

__ 1B. Nonconformance Action Request

2. SDR No. 3801-004

3. SDR Date 08/17/2005

4. Supplier Name, Address, Telephone, Fax

Metalex Manufacturing Inc.
5750 Cornell Road
Cincinnati, Ohio 45242
(513) 489-0507 phone
(513) 489-1020 fax

5. Purchase Order No. 5A06990

6. Related Documents

6.1 ANL drawing L143-110700 Rev. A Date

7. Qty.	8. Describe Nonconforming Condition	9. Identify Requirement	10. Cause & Corrective Action
	1) Along with this form, Metalex has attached a sketch named SDR 3801-004, pages 1 and 2. This sketch outlines some additional "for manufacturing process only" holes that Metalex is requesting permission to add to the Strongback details On each end of each part, (4) 5/8-11 tapped holes and (2) .6250" diameter dowel pin holes are requested to be added for internal use at Metalex.	Metalex requests direction from ANL on this item.	

SUPPLIER'S COMMENTS
IF YES, EXPLAIN:

11. Affects Form, Fit or Function
__ Yes ✓ No

12. Affects Price
__ Yes ✓ No

13. Affects Delivery
☐ Yes ☑ No Only if this is unresolved when raw material is arrives

14. Recommended Disposition and Comments:

Rob Schuermann - Director, Tech. Business Unit - 08/17/05

8/17/05

15. SUPPLIER REPRESENTATIVE - TITLE - DATE

16. ANL REPRESENTATIVE - DATE

17. ANL Disposition and Remarks: The requested modifications for internal Metalex use are allowed.

18. Approved

8-23-05

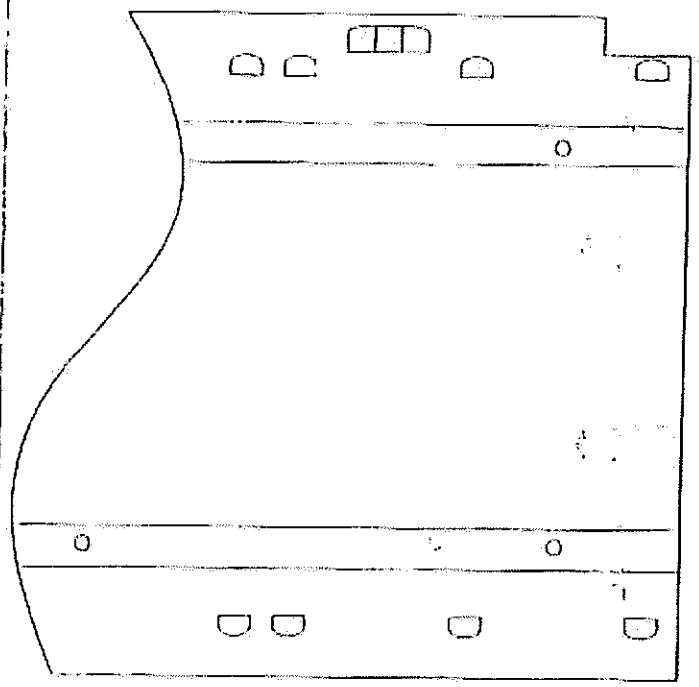
TECHNICAL REPRESENTATIVE - DATE

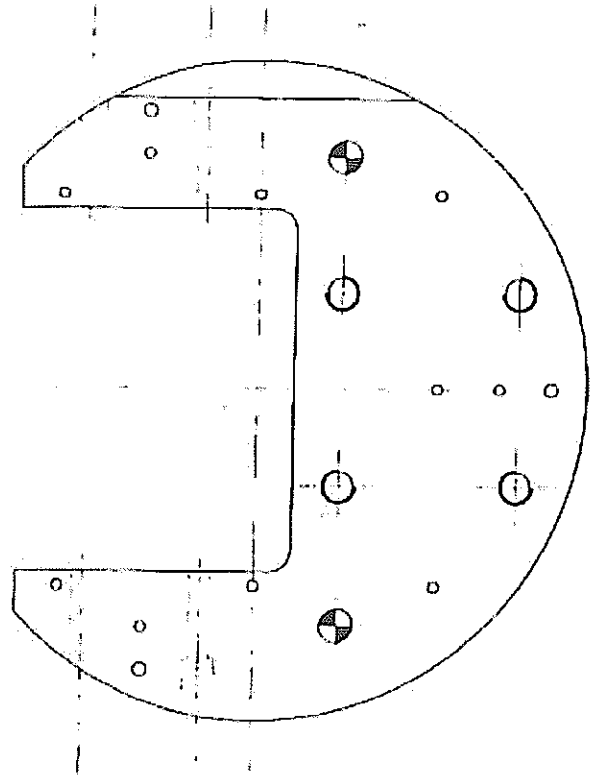
8/25/05

QUALITY ASSURANCE REPRESENTATIVE - DATE

8/26/05

PROCUREMENT REPRESENTATIVE - DATE





REV.	DATE	BY	DESCRIPTION

Metalex
CERTIFIED ISO 9001
QUALITY MANAGEMENT

STRONGBACK DEVIATION — ARGONNE

T.J.RAUCH — 17AUG05

T.J.RAUCH — 17AUG05 — SCALE FULL — INCH X METRIC

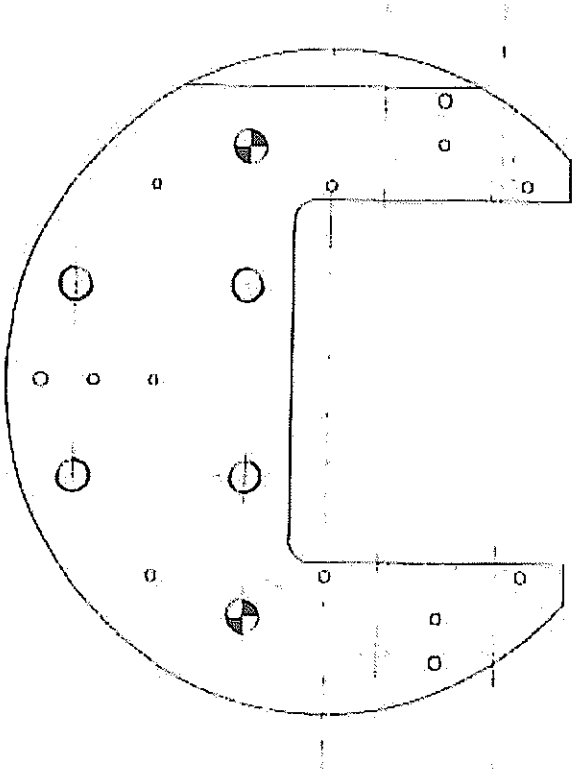
SHEET 2 OF 2 — 3801

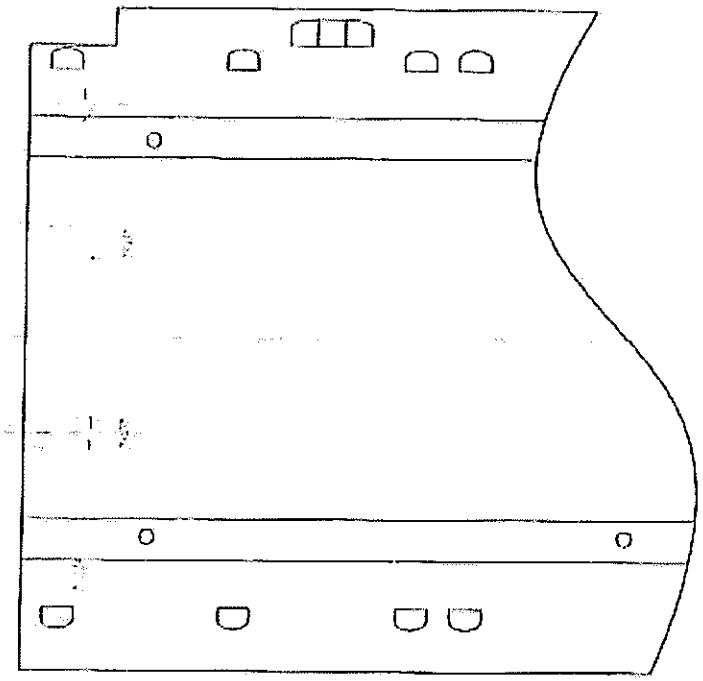
AutoCAD Release 14

DRAWING No. SDR 3801-004

REV. D

REV.	DATE	BY	DESCRIPTION





Metalex

CERTIFIED ISO 9001
QUALITY MANAGEMENT

STRONGBACK DEVIATION		ARGONNE	
T.J RAUCH	17AUG05		
T.J RAUCH	17AUG05	FULL	INCH X METRIC
1 OF 2 3801		DRAWING No. SDR 3801-004	REV D

AutoCAD Release 14

SUPPLIER DISPOSITION REQUEST (SDR)

(Form ANL-311 includes instructions and continuation sheet.)

Page 1 of 1

(CHECK ONE)

☑ 1A. Deviation Request

☐ 1B. Nonconformance Action Request

2. SDR No. 3801-006

3. SDR Date 11/03/2005

4. Supplier Name, Address, Telephone, Fax

Metalex Manufacturing Inc.
5750 Cornell Road
(513) 489-0507 phone
(513) 489-1020 fax

5. Purchase Order No. 5A06990

6. Related Documents

6.1 ANL drawing L143-110700 Rev.2 Date

7. Qty.	8. Describe Nonconforming Condition	9. Identity Requirement	10. Cause & Corrective Action
	1) Along with this form, Metalex has attached a sketch named MXPL143-110700-03. This sketch outlines some additional "for manufacturing process only" holes that Metalex is requesting permission to add to the production Stongback details. These three (3) .2500" diameter tooling holes located as shown will allow ease of manufacturing and inspection of the critical overall length of this detail.	Metalex requests direction and approval from ANL on this item.	

SUPPLIER'S COMMENTS
(IF YES, EXPLAIN)

11. Affects Form, Fit or Function
☐ Yes ☑ No

12. Affects Price
☐ Yes ☑ No

13. Affects Delivery
☐ Yes ☑ No

14. Recommended Disposition and Comments:

Recommend acceptance.

Rob Schuermann - Director, Tech. Business Unit - 11/03/05

Rob Schuermann 11/05/05

15. SUPPLIER REPRESENTATIVE – TITLE – DATE

16. ANL REPRESENTATIVE – DATE

17. ANL Disposition and Remarks: Acceptable

18. Approved

11/05/05

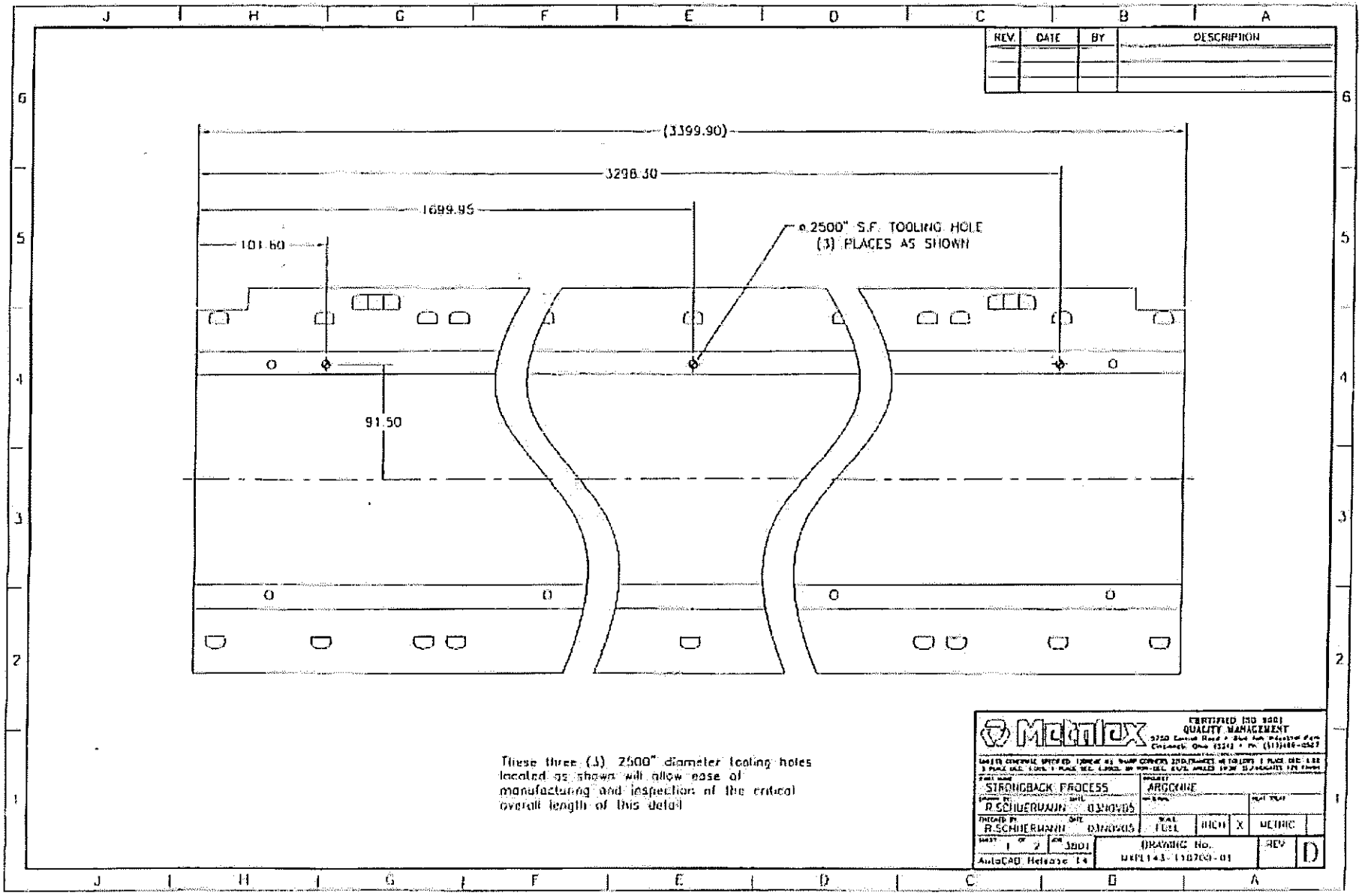
TECHNICAL REPRESENTATIVE – DATE

11/03/05

QUALITY ASSURANCE REPRESENTATIVE – DATE

11/3/05

PROCUREMENT REPRESENTATIVE – DATE


REV. DATE BY DESCRIPTION
(3399.90)
3298.30
1699.95
101.60
91.50
ø.2500" S.F. TOOLING HOLE
(3) PLACES AS SHOWN
These three (3) 2500" diameter tooling holes located as shown will allow ease of manufacturing and inspection of the critical overall length of this detail
Metalex
CERTIFIED ISO 9001
QUALITY MANAGEMENT
STRONGBACK PROCESS
ARGONNE
R.SCHUERMANN
03NOV05
R.SCHUERMANN
03NOV05
FULL
INCH
X
METRIC
1 OF 2
3801
DRAWING No.
REV
D
AutoCAD Release 14

Schuermann, Rob

From: Oprondek, Michael T. [moprondek@anl.gov]
Sent: Thursday, November 03, 2005 5:36 PM
To: Schuermann, Rob
Cc: Lawrence, Glen; Barsz, Thomas R.
Subject: metalex SDR 006
Attachments: metalex.pdf

<<metalex.pdf>>

Michael Oprondek, Procurement Department.
Argonne National Laboratory; operated for the
U. S. Department of Energy by the University of Chicago
phone 630 252 7069 fax 630 252 4517

Metalex Customized Machinery and Parts	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd. ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2005-3814	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110700	REV 07	P.O. Number 5A06990
	Date Rec'd N/A	P.O. No. N/A	Part Name STRONGBACK		
At Oper. 150	Serial Numbers: S/N: 5A06990-28 PRODUCTION		Customer Name ARGONNE NATIONAL LABORATORY		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
** ALL DIMENSIONS TO BE RECORDED IN MILLIMETERS **					
ALL DIMENSIONS APPLY AT A TEMPERATURE OF 20 DEGREES CELSIUS. PART MUST BE IN THERMAL EQUILIBRIUM DURING MEASUREMENTS AND AT THE SAME TEMPERATURE AT THE BEGINNING AND CONCLUSION OF THE MEASUREMENTS WITHIN +/-0.3 DEG. CELSIUS. ** THE PART TEMPERATURE BEFORE, DURING, AND AFTER DIMENSIONAL MEASUREMENT SHALL BE RECORDED BELOW**					
PART TEMPERATURE *BEFORE* INSPECTION	SOW 4.5.1	CONTACT THERMOMETER MX1794	20.46° C	MTX QC 16	
PART TEMPERATURE *DURING* INSPECTION	SOW 4.5.1	CONTACT THERMOMETER MX1794	20.3° C	MTX QC 16	
PART TEMPERATURE *AFTER* INSPECTION	SOW 4.5.1	CONTACT THERMOMETER MX1794	20.4° C	MTX QC 16	
DRAWING L143-110700					
MATERIAL DESCRIPTION: ASTM B381 F2 TITANIUM GRADE 2	A2	CERT#	CONFORMS	MTX QC 16	
ALL DIMENSIONS ARE IN MILLIMETERS, SURFACE FINISH IN MICRONS.	NOTE #1		INFORMATION ONLY	MTX QC 16	
REMOVE ALL BURRS AND BREAK SHARP EDGES 0.3mm MAX.	NOTE #2	VISUAL & RADIUS GAGE MX837 & MX838	CONFORMS	MTX QC 16	
UNLESS OTHERWISE SPECIFIED, SURFACE FINISH TO BE 6.4 MICRONS.	NOTE #3	PROFILOMETER MX1304	CONFORMS 6.4 OR BETTER	MTX QC 16	
.05 A B	D7	CMM MX1269	.04	MTX QC 16	
.05 A B	D2	CMM MX1269	.025	MTX QC 16	
1.6	D2	PROFILOMETER MX1304	CONFORMS 1.6 OR BETTER	MTX QC 16	
167.00 +.05 / -.00	C2	CMM MX1269	167.00 - 167.03	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 2	QTY ACC	QTY REJ
MTX QC 16	[signature]	6/13/06		1	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2005-3814	Qty 1

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110700	REV 07	P.O. Number 5A06990
	Date Rec'd N/A	P.O. No. N/A	Part Name STRONGBACK		
At Oper. 150	Serial Numbers: S/N: 5A06990-28 PRODUCTION		Customer Name ARGONNE NATIONAL LABORATORY		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
83.50 ±.08	C2	CMM MX1269	83.48 -83.52	MTX QC 16	
1.6	C2	PROFILOMETER MX1304	1.6/ OR BETTER	MTX QC 16	
⏥ .05	C2	CMM MX1269	w/in .015	MTX QC 16	
⏥ .05	C2	CMM MX1269	w/in .018	MTX QC 16	
⏥ .05	D1	CMM MX1269	w/in .016	MTX QC 16	
⊥ .1 A	D1	CMM MX1269	w/in .018	MTX QC 16	
// .05 A	E8	CMM MX1269	w/in .018	MTX QC 16	
ALL OTHER FEATURES ARE ACCEPTED PER METALEX OPERATOR ACCEPTANCE PROGRAM (OAP) MXWI17001 & OPERATOR SIGNOFF OF ROUTER OPERATIONS FOR COMPLIANCE TO ALL DRAWING FEATURES GENERATED WITHIN THAT DEFINED OPERATION.		ROUTER SIGNOFF MX5009	CONFORMS	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 2	QTY ACC	QTY REJ
MTX QC 16	[signature]	6/13/06		1	Ø

MX1010 (7/98)

12-14-06
Thomas P Becker

ANL Part/Revision Number: L143-112000-05
SLAC Part Number: SA-381-001-35
Assembly Serial Number: 5A10359-28
LOT28 magnets Serial # 12961-13440

Bottom Jaw

Slot Number	Serial No.	Main filed Orientation	x-axis orientation
1	13081	Upstream	Right
2	13006	Downstream	Right
3	13183	Upstream	Right
4	13414	Downstream	Left
5	13090	Upstream	Right
6	13128	Downstream	Left
7	13075	Upstream	Right
8	13256	Downstream	Left
9	13141	Upstream	Right
10	12981	Downstream	Left
11	13284	Upstream	Right
12	13200	Downstream	Right
13	13301	Upstream	Left
14	13059	Downstream	Left
15	13158	Upstream	Left
16	12990	Downstream	Left
17	13172	Upstream	Left
18	13088	Downstream	Right
19	13324	Upstream	Right
20	13334	Downstream	Left
21	13018	Upstream	Left
22	13225	Downstream	Right
23	13107	Upstream	Right
24	13199	Downstream	Right
25	12988	Upstream	Left
26	12970	Downstream	Left
27	13152	Upstream	Left
28	13001	Downstream	Right
29	13435	Upstream	Right
30	13432	Downstream	Right
31	13020	Upstream	Right
32	13101	Downstream	Right
33	13243	Upstream	Right
34	13061	Downstream	Left
35	13393	Upstream	Right
36	13416	Downstream	Right
37	13189	Upstream	Right
38	13072	Downstream	Right
39	13120	Upstream	Left
40	13325	Downstream	Left
41	13218	Upstream	Right
42	13358	Downstream	Left
43	13273	Upstream	Right

Top Jaw

Slot Number	Serial No.	Main filed Orientation	x-axis orientation
1	12976	Downstream	Right
2	13285	Upstream	Left
3	12989	Downstream	Right
4	13149	Upstream	Right
5	13076	Downstream	Right
6	13099	Upstream	Left
7	13236	Downstream	Left
8	13297	Upstream	Left
9	13005	Downstream	Left
10	13294	Upstream	Right
11	13420	Downstream	Right
12	12965	Upstream	Right
13	13022	Downstream	Right
14	13291	Upstream	Right
15	13056	Downstream	Left
16	13209	Upstream	Left
17	13413	Downstream	Left
18	13147	Upstream	Left
19	13409	Downstream	Left
20	13366	Upstream	Right
21	13298	Downstream	Right
22	13328	Upstream	Left
23	13427	Downstream	Left
24	13053	Upstream	Left
25	12998	Downstream	Left
26	13347	Upstream	Right
27	13403	Downstream	Left
28	13145	Upstream	Right
29	13288	Downstream	Right
30	13289	Upstream	Left
31	13221	Downstream	Left
32	13091	Upstream	Left
33	13097	Downstream	Left
34	13389	Upstream	Left
35	13232	Downstream	Left
36	13315	Upstream	Left
37	13161	Downstream	Right
38	13339	Upstream	Left
39	13235	Downstream	Left
40	13264	Upstream	Right
41	13220	Downstream	Right
42	13290	Upstream	Right
43	13224	Downstream	Left

44	13179	Downstream	Left
45	13153	Upstream	Right
46	13157	Downstream	Right
47	13168	Upstream	Right
48	13231	Downstream	Left
49	13422	Upstream	Right
50	13007	Downstream	Right
51	13311	Upstream	Right
52	13000	Downstream	Right
53	13077	Upstream	Right
54	13185	Downstream	Right
55	13269	Upstream	Right
56	13042	Downstream	Left
57	13283	Upstream	Right
58	13242	Downstream	Right
59	13406	Upstream	Right
60	13113	Downstream	Right
61	13398	Upstream	Right
62	13205	Downstream	Left
63	13135	Upstream	Right
64	13250	Downstream	Right
65	13317	Upstream	Left
66	13327	Downstream	Right
67	13332	Upstream	Right
68	13102	Downstream	Left
69	13016	Upstream	Left
70	13405	Downstream	Left
71	13385	Upstream	Left
72	13215	Downstream	Left
73	13267	Upstream	Left
74	13079	Downstream	Right
75	13399	Upstream	Right
76	13322	Downstream	Left
77	13355	Upstream	Left
78	13017	Downstream	Left
79	13025	Upstream	Left
80	13131	Downstream	Right
81	13258	Upstream	Left
82	13193	Downstream	Right
83	13039	Upstream	Right
84	13063	Downstream	Left
85	13300	Upstream	Left
86	13054	Downstream	Right
87	13222	Upstream	Right
88	13210	Downstream	Right
89	12982	Upstream	Left
90	13260	Downstream	Left
91	13040	Upstream	Left
92	13412	Downstream	Right
93	12962	Upstream	Right
94	13095	Downstream	Right
95	13166	Upstream	Left

44	13279	Upstream	Right
45	13038	Downstream	Right
46	13201	Upstream	Left
47	13388	Downstream	Left
48	13305	Upstream	Right
49	13428	Downstream	Left
50	13117	Upstream	Left
51	13055	Downstream	Left
52	13364	Upstream	Left
53	13295	Downstream	Left
54	13266	Upstream	Left
55	13439	Downstream	Left
56	13160	Upstream	Left
57	13086	Downstream	Left
58	13304	Upstream	Left
59	13415	Downstream	Left
60	13237	Upstream	Left
61	13036	Downstream	Left
62	13021	Upstream	Left
63	13239	Downstream	Right
64	13238	Upstream	Left
65	13137	Downstream	Left
66	13320	Upstream	Right
67	13371	Downstream	Right
68	13259	Upstream	Left
69	13104	Downstream	Right
70	13044	Upstream	Left
71	13402	Downstream	Left
72	13436	Upstream	Left
73	13167	Downstream	Right
74	13134	Upstream	Right
75	13176	Downstream	Right
76	13070	Upstream	Right
77	13384	Downstream	Right
78	13368	Upstream	Left
79	13230	Downstream	Left
80	13114	Upstream	Left
81	13330	Downstream	Left
82	13390	Upstream	Left
83	13013	Downstream	Right
84	13051	Upstream	Right
85	13299	Downstream	Right
86	13065	Upstream	Left
87	13211	Downstream	Left
88	13359	Upstream	Left
89	13251	Downstream	Left
90	13346	Upstream	Right
91	13333	Downstream	Left
92	13143	Upstream	Left
93	13112	Downstream	Left
94	13184	Upstream	Left
95	12968	Downstream	Right

96	13164	Downstream	Left
97	13071	Upstream	Left
98	13045	Downstream	Right
99	13067	Upstream	Right
100	13249	Downstream	Right
101	13174	Upstream	Left
102	13229	Downstream	Right
103	13029	Upstream	Right
104	13009	Downstream	Left
105	13110	Upstream	Right
106	13370	Downstream	Right
107	13064	Upstream	Right
108	13376	Downstream	Left
109	12966	Upstream	Right
110	13386	Downstream	Right
111	13191	Upstream	Right
112	13208	Downstream	Right
113	13248	Upstream	Right
114	12975	Downstream	Right
115	13190	Upstream	Left
116	13216	Downstream	Left
117	13066	Upstream	Right
118	13377	Downstream	Left
119	12964	Upstream	Right
120	13270	Downstream	Right
121	13028	Upstream	Left
122	13139	Downstream	Right
123	13245	Upstream	Right
124	13019	Downstream	Right
125	12969	Upstream	Right
126	13348	Downstream	Right
127	13392	Upstream	Left
128	13048	Downstream	Right
129	13329	Upstream	Left
130	13162	Downstream	Right
131	13375	Upstream	Right
132	13089	Downstream	Right
133	13277	Upstream	Right
134	13421	Downstream	Right
135	12979	Upstream	Right
136	13349	Downstream	Left
137	13085	Upstream	Right
138	13233	Downstream	Right
139	13363	Upstream	Right
140	13310	Downstream	Right
141	13096	Upstream	Left
142	13100	Downstream	Right
143	13052	Upstream	Right
144	13293	Downstream	Left
145	13387	Upstream	Right
146	12963	Downstream	Right
147	13424	Upstream	Left

96	13140	Upstream	Right
97	13187	Downstream	Left
98	13255	Upstream	Left
99	13047	Downstream	Right
100	13362	Upstream	Right
101	13418	Downstream	Right
102	13308	Upstream	Right
103	13003	Downstream	Left
104	13032	Upstream	Right
105	13337	Downstream	Left
106	13396	Upstream	Left
107	13351	Downstream	Left
108	13380	Upstream	Left
109	13438	Downstream	Right
110	13148	Upstream	Left
111	13144	Downstream	Left
112	13338	Upstream	Left
113	13015	Downstream	Left
114	13341	Upstream	Right
115	13217	Downstream	Left
116	13430	Upstream	Left
117	13407	Downstream	Left
118	13111	Upstream	Right
119	13196	Downstream	Right
120	13395	Upstream	Right
121	13331	Downstream	Right
122	12992	Upstream	Right
123	13213	Downstream	Left
124	13350	Upstream	Right
125	13011	Downstream	Left
126	13198	Upstream	Left
127	13062	Downstream	Left
128	13049	Upstream	Left
129	13175	Downstream	Left
130	13417	Upstream	Left
131	13092	Downstream	Left
132	13163	Upstream	Right
133	13094	Downstream	Right
134	13382	Upstream	Left
135	13434	Downstream	Left
136	13319	Upstream	Left
137	13240	Downstream	Left
138	13292	Upstream	Left
139	13397	Downstream	Right
140	13093	Upstream	Right
141	13312	Downstream	Left
142	13318	Upstream	Left
143	13223	Downstream	Left
144	13082	Upstream	Left
145	13340	Downstream	Right
146	13136	Upstream	Left
147	13254	Downstream	Left

148	13253	Downstream	Right
149	13367	Upstream	Right
150	13012	Downstream	Right
151	13335	Upstream	Right
152	13275	Downstream	Right
153	13170	Upstream	Left
154	13272	Downstream	Left
155	13203	Upstream	Left
156	13419	Downstream	Left
157	12971	Upstream	Right
158	12985	Downstream	Left
159	13080	Upstream	Left
160	13307	Downstream	Right
161	12980	Upstream	Left
162	13031	Downstream	Left
163	13125	Upstream	Right
164	13206	Downstream	Left
165	13323	Upstream	Right
166	13374	Downstream	Left
167	13401	Upstream	Right
168	13431	Downstream	Right
169	13274	Upstream	Right
170	13180	Downstream	Right
171	13173	Upstream	Left
172	13282	Downstream	Left
173	13262	Upstream	Right
174	13214	Downstream	Right
175	13411	Upstream	Right
176	13361	Downstream	Left
177	13109	Upstream	Right
178	13252	Downstream	Right
179	13159	Upstream	Left
180	13083	Downstream	Right
181	13124	Upstream	Right
182	12986	Downstream	Left
183	13268	Upstream	Right
184	13132	Downstream	Left
185	13280	Upstream	Left
186	13383	Downstream	Right
187	13247	Upstream	Left
188	13408	Downstream	Right
189	13365	Upstream	Right
190	13356	Downstream	Right
191	13394	Upstream	Right
192	12977	Downstream	Left
193	12984	Upstream	Right
194	13178	Downstream	Right
195	13123	Upstream	Right
196	13246	Downstream	Left
197	13276	Upstream	Right
198	13138	Downstream	Left
199	13202	Upstream	Right

148	13286	Upstream	Left
149	13068	Downstream	Left
150	13103	Upstream	Right
151	12973	Downstream	Left
152	13404	Upstream	Left
153	13169	Downstream	Right
154	13429	Upstream	Left
155	13030	Downstream	Right
156	13142	Upstream	Right
157	13400	Downstream	Left
158	13121	Upstream	Left
159	13326	Downstream	Left
160	13281	Upstream	Left
161	13118	Downstream	Left
162	13302	Upstream	Left
163	13150	Downstream	Left
164	13115	Upstream	Right
165	13098	Downstream	Left
166	13060	Upstream	Left
167	13433	Downstream	Right
168	13287	Upstream	Right
169	13228	Downstream	Right
170	13197	Upstream	Left
171	12987	Downstream	Left
172	13177	Upstream	Left
173	13353	Downstream	Left
174	13278	Upstream	Right
175	13119	Downstream	Left
176	13041	Upstream	Right
177	13026	Downstream	Left
178	13188	Upstream	Right
179	13226	Downstream	Left
180	13381	Upstream	Left
181	13035	Downstream	Left
182	13074	Upstream	Right
183	13379	Downstream	Right
184	12961	Upstream	Left
185	12999	Downstream	Right
186	13084	Upstream	Left
187	13271	Downstream	Left
188	13122	Upstream	Left
189	13151	Downstream	Left
190	13423	Upstream	Left
191	13257	Downstream	Left
192	13212	Upstream	Right
193	13181	Downstream	Right
194	13008	Upstream	Left
195	13426	Downstream	Left
196	13126	Upstream	Right
197	13336	Downstream	Left
198	13207	Upstream	Right
199	13002	Downstream	Right

200	13156	Downstream	Left
201	13345	Upstream	Right
202	12972	Downstream	Left
203	13033	Upstream	Left
204	12993	Downstream	Right
205	13014	Upstream	Right
206	13437	Downstream	Right
207	13306	Upstream	Left
208	13343	Downstream	Right
209	13165	Upstream	Left
210	12978	Downstream	Right
211	13155	Upstream	Right
212	13244	Downstream	Left
213	13034	Upstream	Right
214	13410	Downstream	Right
215	13069	Upstream	Left
216	13373	Downstream	Right
217	13303	Upstream	Right
218	13186	Downstream	Left
219	13116	Upstream	Left
220	12994	Downstream	Left
221	13154	Upstream	Left
222	13010	Downstream	Right
223	12996	Upstream	Left
224	12967	Downstream	Right
225	13057	Upstream	Right

200	13265	Upstream	Left
201	13043	Downstream	Right
202	13027	Upstream	Right
203	13360	Downstream	Left
204	13108	Upstream	Right
205	13182	Downstream	Right
206	13171	Upstream	Left
207	13133	Downstream	Left
208	13321	Upstream	Left
209	13024	Downstream	Left
210	13146	Upstream	Left
211	13227	Downstream	Left
212	13219	Upstream	Left
213	12995	Downstream	Left
214	13313	Upstream	Left
215	13344	Downstream	Left
216	13352	Upstream	Left
217	13004	Downstream	Left
218	13357	Upstream	Right
219	13440	Downstream	Right
220	12991	Upstream	Left
221	13127	Downstream	Right
222	13087	Upstream	Left
223	13050	Downstream	Left
224	13129	Upstream	Right
225	12997	Downstream	Left

For "X-Axis Orientation" column
"Right" stands for right-numbered surface should face to the undulator axis.
"Left" stands for left-numbered surface should face to the undulator axis.
This "Right", "Left" procedure applies for both Top and Bottom Jaw

For "Main-Field Orientation" column **(see Assembly Procedure Document)**
"Downstream" side corresponts to the direction of lower-numbered slot.
Arrow should point toward the lower numbered slots.
"Upstream" side corresponds to the direction of higher-numbered slot.
Arrow should point toward the higher numbered slots.

Spare magnets

serial No.	Reduced Magnetization
13425	33%
13369	80%
13354	
13316	
12983	
13078	
13309	
13023	

Sample magnets

serial No.
12974
13105
13192
13263
13378

13241
13261
13342
13037
13314
13073
13058
13106
13130
13195
13204
13194
13391
13046
13296
13372
13234

1. DISTRIBUTION: LCLS Undulator Ass'y Contractors, Tom Barsz, and Glen Lawrence

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

2. PAGE ONE OF 1

3. ACL NO. E5-026046

4. ORIGINATOR'S NAME & DIVISION Glen Lawrence XFD 5. PHONE 2-9298 6. DATE 1-24-05

7. PART NO. & NAME L143-110107 Magnet Structure last Pole
L143-110105 Magnet Structure Pole 8. QUANTITY 170
19030

9. FOR INSPECTION, DELIVER TO BLDG. NO. N/A DIVISION _____ ATTN: _____

10. AFTER INSPECTION, DELIVER TO BLDG. NO. N/A DIVISION _____ ATTN: _____

11. REFERENCES AND/OR REMARKS: The Magnet Poles are to be delivered to the Undulator Asembly Contractors by the Machining Contractor . Undulator Assembly Contractor shall inspect the Magnet Poles prior to acceptance. ANL shall review all Certifications and Machining Contractor's reported measurements & optionally perform on-site inspections.

12 STEP NO.	13 INSPECTION/TEST REQUIREMENT	14 INSPECTION TEST LOCATION	18 ACCEPTED BY OR NONCONFORMANCE REPORT NO.	19 DATE
1	Visual inspection of parts for shipping damage.	Undulator Ass'y Contractor	Thomas P Becker	12-14-06
2	Check that parts were "bagged and Tagged" with serial no.'s and part no.'s (ANL & SLAC) per SOW L143-00031,	Undulator Ass'y Contractor	Thomas P Becker	12-14-06
	Section 4.1.3.			
3	Check that parts were marked with serial numbers per SOW section 4.1.3.	Undulator Ass'y Contractor	Thomas P Becker	12-14-06
4	Check that accompanying Certifications have correct part serial numbers.	Undulator Ass'y Contractor	TODD CAUDIL MTX QC 12	12-19-06
5.	Check the material certification for compliance with ASTM A801, Type 1.	Undulator Ass'y Contractor & ANL	TODD CAUDIL MTX QC 12	12-19-06
6	Check the anneal certification for compliance with AMS-A801, or a specified material supplier's annealing schedule.	Undulator Ass'y Contractor & ANL	TODD CAUDIL MTX QC 12	12-19-06
7	Check that the machining Contractor's certified dimensional measurements are in compliance with the drawing.	ANL		
8	Verify the critical dimensions as listed in the SOW, Section 4.5.2 are in compliance with the drawing	Undulator Ass'y Contractor	Thomas P Becker	12-14-06
	L143-112000-05			
	SA-381-001-35			
	5A10359-28			

15. ORIGINATOR OF PLAN Glen Lawrence DATE 1-24-05

16. PLAN REVIEWED/APPROVED BY _____ DATE _____

17. QAR CONCURRENCE WITH PLAN _____ DATE _____

Metalex
Customized Machinery and Parts
CERTIFIED ISO 9001 QUALITY MANAGEMENT

Metalex Manufacturing
L143-112000 BOM/ASSY Undulator
Purchase Order No. 5A10359

LCLS Undulator poles inspection per L143-00076 Assembly Procedure:

Inspection - Poles / Magnets / Magnet Structure Bases

1. *Obtain the QA inspection reports for the* ***poles (drawing L143-110105)*** *and magnets (drawing L143-110106 - See appendix A for blank inspection reports). Randomly select 10% of the delivered poles and magnets and inspect them to a minimum precision of .0025mm to verify that they meet the critical drawing specifications.*

Assembly:

ANL Part/Revision Number: L143-112000-05
SLAC Part Number: SA-381-001-35
Assembly Serial Number: 5A10359-28

Inspection/Acceptance report or components for as-built drawings:

Part: L143-110105 Poles

Completed By: Thomas P Becker **Date:** 12-14-06

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12515

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.90	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12512

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	43.97	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12934

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.95	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11393

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.91	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12482

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.97	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.99	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 2227

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.97	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11184

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.95	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12540

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12557

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 4005

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.92	Accept/Reject
Pole Thickness	6.00	+0 / -.05	43.99	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 2163

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.99	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.97	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11530

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12928

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11545

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.90	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 2431

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.95	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.97	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 8286

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11535

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.94	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 4013

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.92	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 8315

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.92	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.97	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12795

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.90	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 9361

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12866

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11510

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12584

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12504

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11441

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.91	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 5056

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 8040

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.93	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 8279

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.90	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12841

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.91	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 8304

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 5100

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.99	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12530

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 10266

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	44.00	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 2166

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11466

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.95	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 8349

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.94	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 10935

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.93	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12925

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.92	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12831

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.91	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12533

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.95	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12518

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12927

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.94	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12503

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.93	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11273

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.99	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.96	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 1578

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.95	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11486

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.98	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12570

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.95	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 11546

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: HI-Teck

PART NAME: LCLS Magnet Structure Pole

DRAWING #: L143-110105

SERIAL #: 12896

P.O. #: 5A-05150

DATE: 10.19.06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Pole height	48.0	+0 / -.01	47.99	Accept/Reject
Pole Width	44.0	+0 / ~~-.01~~ -.1	43.96	Accept/Reject
Pole Thickness	6.00	+0 / -.05	5.98	Accept/Reject
Perpendicularity to A (both sides)	<= .01	N/A	<.01	Accept/Reject
Flatness of base	<= .01	N/A	<.01	Accept/Reject

INSPECTOR: Thomas P. Becker QA Supervisor:

TEST EQUIPMENT USED: MX 111, MX 1452, 587F, MX 0256, 587B

COMMENTS:

Pole width print dim = $44^{+0}_{-.1}$

1. DISTRIBUTION: LCLS Undulator Ass'y Contractors, Tom Barsz, and Glen Lawrence

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

2. PAGE ONE OF 1 3. ACL NO. E5-069069

4. ORIGINATOR'S NAME & DIVISION Glen Lawrence XFD 5. PHONE 2-9298 6. DATE 1-31-05

7. PART NO. & NAME L143-110106 Magnet Structure Magnet 8. QUANTITY 19200

9. FOR INSPECTION, DELIVER TO BLDG. NO. 401 DIVISION XFD ATTN: Glen Lawrence

10. AFTER INSPECTION, DELIVER TO BLDG. NO. 401 DIVISION XFD ATTN: Glen Lawrence

11. REFERENCES AND/OR REMARKS: Most of the magnets wil be drop shipped directly to the Undulator Assembly Contractor, who will only perform limited physical inspection of the parts as they are highly magnetized. A sampling from Each lot will be sent to ANL for verification of the magnetic field properties.

12 STEP NO.	13 INSPECTION/TEST REQUIREMENT	14 INSPECTION TEST LOCATION	18 ACCEPTED BY OR NONCONFORMANCE REPORT NO.	19 DATE
1	Visual inspection of parts for shipping damage..	Undulator Ass'y Contractor	Thomas P Barker	12-14-06
2	Visual inspection of parts for surface chips and pits.	Undulator Ass'y Contractor	Thomas P Barker	12-14-06
3	Dimensional check of part for conformance to the drawing.	Undulator Ass'y Contractor	Thomas P Barker	12-14-06
4	Review vendor certified test data agrees with SOW requirements	APS Bldg 401		
5	Review Vendor sort list for agreement with sort procedure.	APS Bldg 401		
6	On random sampling, inspect magnetic field with magnetic visualization film for magnetic defects.	APS Magnet Group		
7	On random sampling, confirm Magnetic Moment magnitude And vector components agree with vendor reports	APS Magnet Group		
8	On random sampling, verify the magnet's demagnetization and thermal stability	APS Magnet Group		
	L143-112000-05			
	SA-381-001-35			
	5A10359-28			

15. ORIGINATOR OF PLAN Glen Lawrence DATE 02-07-05

16. PLAN REVIEWED/APPROVED BY _____ DATE _____

17. QAR CONCURRENCE WITH PLAN _____ DATE _____

Metalex Manufacturing
L143-112000 BOM/ASSY Undulator
Purchase Order No. 5A10359

LCLS Undulator magnets inspection per L143-00076 Assembly Procedure:

Inspection - Poles / Magnets / Magnet Structure Bases

1. *Obtain the QA inspection reports for the poles (drawing L143-110105)* ***and magnets (drawing L143-110106 - See appendix A for blank inspection reports).*** *Randomly select 10% of the delivered poles and magnets and inspect them to a minimum precision of .0025mm to verify that they meet the critical drawing specifications.*

Assembly:

ANL Part/Revision Number: L143-112000-05
SLAC Part Number: SA-381-001-35
Assembly Serial Number: 5A10359-28

Inspection/Acceptance report or components for as-built drawings:

Part: L143-110106 Magnet

Completed By: Thomas P. Becker **Date:** 12-14-06

5750 Cornell Road • Blue Ash Industrial Park • Cincinnati, OH 45242
Phone (513) 489-0507 • Fax (513) 489-1020

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13081

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	56.995	Accept/Reject
Magnet Width	66.00	+/- .25	66.025	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX138 MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13006

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13183

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13414

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX15
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13090

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13128

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13075

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13256

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.80	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 1314 1

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 12981

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.02	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13284

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.025	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13, MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13200

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13301

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13059

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13158

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 12990

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13172

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13088

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	65.975	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13324

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13334

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	56.990	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13018

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13225

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13107

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.02	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13199

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13422

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13007

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.025	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13311

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	65.975	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13000

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.92	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13077

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13, MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13185

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13069

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13042

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13283

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.025	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13242

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	65.990	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13, MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13406

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13113

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13398

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13205

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13135

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13250

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13317

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13327

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	65.975	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13332

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.975	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13102

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13016

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.02	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13405

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.01	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13385

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	65.990	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 587K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Shin-Etsu

PART NAME: LCLS Magnet

DRAWING #: L143-110106

SERIAL #: 13215

P.O. #: 5A-06868

DATE: 12-14-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.00	Accept/Reject
Magnet Width	66.00	+/- .25	66.00	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Thomas P Becker
Thomas P. Becker

QA Supervisor:

TEST EQUIPMENT USED: 537K, MX1462, MX111, MX1452, MX851, MX13
MX2

COMMENTS:

CUSTOMER	SHIP DATE	GROSS WEIGHT	QUOTE		PACKING LIST
55230	06/16/06 SHP	3	05-1229282-	2 OF 6	
BILL TO: METALEX MFG INC		WORK ORDER **	ORDER DATE 06/15/06 ORD		

DELIVERY DATE	SHIP BRANCH	SELL BRANCH	WORK ORDER
06/19/06 DEL	02-GRR	05-DAY	2P3469

SHIP TO

METALEX MFG INC 01
5750 CORNELL
CINCINNATI OH 45242

1310 SCRIBNER NW, GRAND RAPIDS MI 49504-3267
Copper and Brass Sales
A ThyssenKrupp Materials NA company
ThyssenKrupp

CUSTOMER PO NUMBER	TERRITORY	ENTRY ID
64970-BL-5725	03	05BMK

BUYER	INSIDE SALES
BRIAN LAWSON, P.A.	BRIAN M. KARWOWSKI
BUYER TELEPHONE: (513)489-0539	INSIDE SALES TELEPHONE: (937)415-2620 52625

CUSTOMER SIGNATURE: DATE:

QUANTITY	ORDERED	SHIPPED
INVENTORY	0.72 LB	1.00
BILLING	1.00 PC	1.00
WAREHOUSE		1.00 PC

SHIP VIA / SHIPPING STATUS

INTERNAL	COMPLETE	PARTIAL	CANCEL
POOL-TO 05-DAY	X		

TO CUSTOMER: OUR TRUCK/OUR DEL-D1
FOB: ORIG
FREIGHT STATUS: PPD
BILL OF LADING:
PACKED WITH OTHER GOODS:
FINISHED GOODS LOCATION: WARN LABEL:1012

PART DESCRIPTION 209591-7

RD SM DIA HH BRASS ROD C36000, 1/4 (+-.0015)
NO PROCESSING - 48" ML, actual certs must be signed

Item 3

METALEX QA. DEPT ACCEPTED DATE 7/13/06 BY KKB

SPECIAL INSTRUCTIONS

FULL	SCRAP	FILLED BY	PACKED BY	QA AUDIT
		KS		

CUSTOMER RECEIVING HOURS	MAX SKID WEIGHT	LOADING INSTRUCTIONS	MAXIMUM BUNDLE WEIGHT
6:00 am - 12:00 pm	15000	CRANE, FORK	30000

BOXES	BARS	CASES	CUSHP	PKGS	SKIDS	BDLS	TUBES	CTNS	FLAT	COILS
				1						

INSPECTION RECORD

CERTIFICATE OF COMPLIANCE
We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:

P.P.J

ASTM-B16
ACTUAL CHEMICAL NOM PHYSICAL ROHS EXEMPT

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
M75585 01	1.00	LB	CHICAGO		0CJ4847 54097								

Job#5725
Part# L143-110113
P.O# 64970-BL

Del 6/20

RECEIVED
JUN 19 2006
METALEX MFG.
BY S.

STEVEN J. PARACI - General Manager: GRAND RAPIDS PRINTED 06/15/06 03:58 PM CONTROL NO 00090

COPPER AND BRASS SALES IS A DIVISION OF THYSSENKRUPP MATERIALS, INC.

Chicago Extruded Metals Company
1601 South 54th Ave.
Cicero, Illinois 60804-1898

METALEX
QA. DEPT.
ACCEPTED
DATE 7/13/06
BY KKB

Certificate of Compliance

Customer: COPPER & BRASS SALES
1310 SCRIBNER NW
GRAND RAPIDS MI 49504

Date: 3/27/06

Customer Order No: CJ4847

CXM Order No: 3044122 Rel# 000

Alloy: 3600

Date Shipped: 03-27-06

Temper: H02

Weight Shipped: 4408

Size: 0.2500 ROUND

Specification: ASTM B-16-00

CXM Item No: 54097

Customer Item No: 209591-7

Chemical Composition:

Copper %	61.62
Lead	2.920
Iron	.150
Tin	.170
Zinc	Remainder

Mechanical Properties:

Tensile Str. ksi	62.3
Yield Str. ksi	36.7
Elong 4D%	12.2
Rockwell - B	

SOLD TO _____
DATE _____
CUSTOMER P.O. _____
CUSTOMER P/N _____
SHIPPER NO. _____
QUANTITY _____
BY _____
COPPER and BRASS SALES INC.

EU Directive 2002/95/EC/RoHS Compliant

Samples taken from the subject material have been tested with results above and found to conform to the specification requirements.

CHICAGO EXTRUDED METALS CO

Quality Control

CUSTOMER	SHIP DATE	GROSS WEIGHT	QUOTE	PACKING LIST
55230	06/19/06 SHP	36	05-1229282-	1 OF 6 TEST RESULTS
BILL TO: METALEX MFG INC	WORK ORDER **		ORDER DATE: 06/15/06 ORD	

DELIVERY DATE	SHIP BRANCH	SELL BRANCH	WORK ORDER
06/19/06 DEL	05-DAY	05-DAY	5R4099

SHIP TO

METALEX MFG INC 01
5750 CORNELL
CINCINNATI OH 45242

6700 POE AVENUE, DAYTON OH 45414-2590

Copper and Brass Sales
A ThyssenKrupp Materials NA company
ThyssenKrupp

CUSTOMER P.O. NUMBER	TERRITORY	ENTRY ID
64970-BL-5725	03	05BMK

BUYER	INSIDE SALES
BRIAN LAWSON, P.A.	BRIAN M. KARWOWSKI

BUYER TELEPHONE	INSIDE SALES TELEPHONE
(513)489-0539	(937)415-2620 52625

CUSTOMER SIGNATURE: DATE:

QUANTITY	ORDERED	SHIPPED
INVENTORY	35.28 LB	36.00
BILLING	1.00 PC	1.00
WAREHOUSE		1.00 PC

SHIP VIA: INTERNAL

SHIPPING STATUS: COMPLETE X | PARTIAL | CANCEL

TO CUSTOMER: OWN TRUCK/OUR DEL-D1

FOB: ORIG

BILL OF LADING:

FREIGHT STATUS: PPD

PACKED WITH OTHER GOODS:

FINISHED GOODS LOCATION: WARN LABEL:1001

PART DESCRIPTION 020354-7

RECT 6061-T6511 EXTR ALUMINUM BAR, 1-1/4 (+/-.012) X 2 (+/.024) X 12 FT ML
NO PROCESSING - 144" ML, actual certs must be signed

METALEX QA. DEPT. ACCEPTED DATE 6/22/06 BY KKB MTX DC 18

Item 2

SPECIAL INSTRUCTIONS

P/N L143-110109
L143-110110

FILM	SCRAP	FILLED BY	PACKED BY	Q/A AUDIT
		KT		

CUSTOMER RECEIVING HOURS	MAX SKID WEIGHT	LOADING INSTRUCTIONS	MAXIMUM BUNDLE WEIGHT
6:00 am - 12:00 pm	15000	CRANE, FORK	30000

BUYER	BARS	CASES	CUSHP	PKGS	SKIDS	BDLS	TUBES	CTNS	FLAT	COILS
	1									

INSPECTION RECORD

TEST RESULTS -----

CERTIFICATE OF COMPLIANCE
We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:

AMS-QQ-A-200/8

ROHS COMPLIANT

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
[illegible]	1.00	PC	KAISER	0CL2973	686 204	1							

DEL

RECEIVED
JUN 19 2006
METALEX MFG.
BY S.W.

6/20

BRIT T. MARLIN - General Manager: DAYTON PRINTED 06/15/06 07:01 PM CONTROL NO 00108

COPPER AND BRASS SALES IS A DIVISION OF THYSSENKRUPP MATERIALS, INC.

KAISER ALUMINUM
MATERIAL CERTIFICATION

KAISER ALUMINUM
4111 S 74 E Ave

Tulsa, OK 74145

COPPER & BRASS SALES (PICK UP)
CUSTOMER PICK-UP - TULSA
6700 POE AVE
DAYTON, OH 45414

COPPER & BRASS SALES
SOUTHFIELD MI 48086 CL2973 06/08/06
SOLD TO PURCHASE ORDER DATE PRINTED

SOLD TO PURCHASE ORDER DATE PRINTED

020354-7/ 1.250 X 2.000 SC RECT BAR
CUSTOMER PART NUMBER DESCRIPTION

804454-001 686 204 6061-T6511
RELEASE-ITEM LOT ALLOY/TEMPER

MECHANICAL PROPERTY RESULTS

REFERENCE	SAMPLE#	UTS(KSI)	YTS(KSI)	%Elong in 2"	HARDNESS	CONDUCT.	BEND
686 204	0001 0001	55.4	51.7	12.7		N/A	N/A

CHEMICAL COMPOSITION (WT%), ALUMINUM REMAINDER

6061 LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Others Ea	Others Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00

Item#2

METALEX
QA. DEPT.
MTX QC 18
ACCEPTED
DATE 6/22/06
BY KKB

APPLICABLE REQUIREMENTS:

ASTM-B221-02-STENCILED
ASME-SB221 1998 SECT II
AMS-QQ-A-200/8
UNS#96061

Kaiser Aluminum & Chemical Corp. ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file, subject to examination.

Job# 5725
PART# L143-110109
& L143-110110
PO# 64970-BL

PRECISION BRAND

ISO 9001:2000 Certified Company

PRECISION BRAND PRODUCTS, INC.
2250 CURTISS STREET
DOWNERS GROVE, IL 60515 USA
PHONE: (630) 969-7200 FAX: (630) 969-0310

PO# 65853-BL
J+L Industrial
Michelle Lafferty

Wednesday, 07/26/2006

This is to certify that to the best of our knowledge and belief, all values shown below are correct and true and the material complies with the specifications shown.

J&L Part Number
PBP-44505M
BL 7-26-06
Job#5681/5725

METALEX
QA. DEPT
ACCEPTED
DATE 8/9/06
BY KKB

COLOR CODED SHIM

.0005 - .005 POLYESTER
.0075 - .060 POLYVINYL CHLORIDE (PVC)

	.0005 - .005	.0075 - .030	.040 - .060
TENSILE STRENGTH	30,000 PSI	6,600 PSI	14,000 PSI
ULTIMATE ELONGATION	90%	180%	180%
FOLDING ENDURANCE (MIT)	>100,000	37,000	37,000
TEAR STRENGTH (ELMENDORF)	20 g/mil	--	--
MOISTURE ABSORPTION	0.8%	0.15%	0.15%
THICKNESS TOLERANCE	+/- 5%	+/- 5%	+/- 5%
COMPRESSION @ 5,000 PSI	1.0%	0.7%	0.7%
SERVICE TEMPERATURE	-90ΘF - 300ΘF	-10ΘF - 155ΘF	-10ΘF - 155ΘF
MEETS SPECIFICATION:	L-P-377	L-P-535	L-P-535

P/N L143-110704

www.precisionbrand.com

CUSTOMER	SHIP DATE	GROSS WEIGHT	QUOTE		PACKING LIST
55230	06/16/06 SHP	190	05-1229282-	4 OF 6	
BILL TO: METALEX MFG INC		WORK ORDER **	ORDER DATE 06/15/06 ORD		

DELIVERY DATE	SHIP BRANCH	SELL BRANCH	WORK ORDER
06/19/06 DEL	31-ELK	05-DAY	VM4419

SHIP TO

METALEX MFG INC 01
5750 CORNELL
CINCINNATI OH 45242

58144 CHARLOTTE AVE, ELKHART IN 46517
Copper and Brass Sales
A ThyssenKrupp Materials NA company
ThyssenKrupp

CUSTOMER P.O. NUMBER	TERRITORY	ENTRY ID
64970-BL-5725	03	05BMK

BUYER	INSIDE SALES
BRIAN LAWSON, P.A.	BRIAN M. KARWOWSKI
BUYER TELEPHONE: (513)489-0539	INSIDE SALES TELEPHONE: (937)415-2620 52625

CUSTOMER SIGNATURE: DATE:

QUANTITY	ORDERED	SHIPPED
INVENTORY	170.05 LB	170.00
BILLING	16.00 PC	16.00
WAREHOUSE		16.00 PC

SHIP VIA / SHIPPING STATUS

INTERNAL	COMPLETE	PARTIAL	CANCEL
POOL-TO 05-DAY	X		

TO CUSTOMER: OUR TRUCK/OUR DEL-D1
FOB: ORIG
FREIGHT STATUS: PPD
BILL OF LADING
PACKED WITH OTHER GOODS
FINISHED GOODS LOCATION

PART DESCRIPTION 088407-2

CAST ALUMINUM TOOLING PLATE, 2.500 (+-.005)
SAW 5.25" (+.064,-0) X 7.937" (+.064,-0), actual certs must be signed

Item 5

METALEX MTX QC 18
QA. DEPT.
ACCEPTED
DATE 6/22/06
BY KKB

SPECIAL INSTRUCTIONS

FULL	SCRAP	FILLED BY	PACKED BY	Q/A AUDIT
		DW		

CUSTOMER RECEIVING HOURS	MAX SKID WEIGHT	LOADING INSTRUCTIONS	MAXIMUM BUNDLE WEIGHT
6:00 am - 12:00 pm	15000	CRANE, FORK	30000

BOXES	BARS	CASES	CUSHP	PKGS	SKIDS	BDLS	TUBES	CTNS	FLAT	COILS
					1					

INSPECTION RECORD

CERTIFICATE OF COMPLIANCE
We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:

ROHS COMPLIANT

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
G99025 22	5.00	PC	ALCOA M	0CE0551	9217		G71753 08	4.00	PC	ALCOA M	0CC8549	9182	
G71753 09	4.00	PC	ALCOA M	0CC8549	9182		N43922 11	3.00	PC	ALCOA M	0CK5444	9283	

Del

Job# 5725
PART# L143-110801
&
L143-110901
P.O# 64970-BL

6/20

RECEIVED
JUN 19 2006
METALEX MFG.
BY S.L.

CUSTOMER	SHIP DATE	GROSS WEIGHT	QUOTE		PACKING LIST
55230	06/20/06 SHP	2600	05-1229282-	6 OF 6	

BILL TO:
METALEX MFG INC

WORK ORDER

ORDER DATE 06/15/06 ORD

DELIVERY DATE	SHIP BRANCH	SELL BRANCH	WORK ORDER
06/21/06 DEL	31-ELK	05-DAY	VM4421

SHIP TO:
METALEX MFG INC
5750 CORNELL
CINCINNATI OH 45242

01

58144 CHARLOTTE AVE. ELKHART IN 46517
ThyssenKrupp Materials NA
Copper and Brass Sales Division
ThyssenKrupp
Copper and Brass Sales is a division of ThyssenKrupp Materials NA, Inc.

CUSTOMER SIGNATURE: DATE:

CUSTOMER NO NUMBER	TERRITORY	ENTRY ID
64970-BL-5725	03	05BMK

BUYER: BRIAN LAWSON, P
INSIDE SALES: BRIAN M. KARWOWSKI
BUYER TELEPHONE: (513)469-0539
INSIDE SALES TELEPHONE: (987)415-2620 52625

SHIP VIA: INTERNAL POOL-TO 05-DAY
SHIPPING STATUS: COMPLETE X | PARTIAL | CANCEL
TO CUSTOMER: OUR TRUCK/OUR DEL-STBY
FOB: ORIG
BILL OF LADING:
FREIGHT STATUS: PPD

QUANTITY	ORDERED		SHIPPED
INVENTORY	2550.73	LB	2552.00
BILLING	48.00	PC	48.00
WAREHOUSE			48.00 PC

PACKED WITH OTHER GOODS
FINISHED GOODS LOCATION

PART DESCRIPTION: 088407-2

CAST ALUMINUM TOOLING PLATE, 2.500 (+-.005)
SAW 5.25" (+.064,-0) X 39.812", (+.064,-0)
actual certs must be signed

Attn: Brian Lawson

SPECIAL INSTRUCTIONS

PULL	SCRAP	FILLED BY	PACKED BY	Q/A AUDIT
		DWQ		

CUSTOMER RECEIVING HOURS	MAX SKID WEIGHT	LOADING INSTRUCTIONS	MAXIMUM BUNDLE WEIGHT
6:00 am - 12:00 pm	15000	CRANE, FORK	30000

SCRWA	BARS	CASES	CUSHP	PKGS	SKIDS	BDLS	TUBES	CTNS	FLAT	COILS
					1					

INSPECTION RECORD														

CERTIFICATE OF COMPLIANCE
We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products.
The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:

ROHS COMPLIANT

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
021824 00	36.00	PC	ALCOA M		0CL0111 9322		1 021826 00	12.00	PC	ALCOA M		0CL0111 9322	

Anne Biggs - Vice President of Quality Copper and Brass Sales

PRINTED 06/15/06 01:42 PM CONTROL NO 00117

JOB#5725
PART# L143-111001
-111101
P.O.# 64970-BL

CUSTOMER	SHIP DATE	GROSS WEIGHT	QUOTE		PACKING LIST
55230	06/16/06 SHP	165	05-1229282-	5 OF 6	
BILL TO: METALEX MFG INC		WORK ORDER **	ORDER DATE 06/15/06 ORD		

DELIVERY DATE	SHIP BRANCH	SELL BRANCH	WORK ORDER
06/19/06 DEL	31-ELK	05-DAY	VM4420

SHIP TO:

METALEX MFG INC 01
5750 CORNELL
CINCINNATI OH 45242

58144 CHARLOTTE AVE, ELKHART IN 46517
Copper and Brass Sales
A ThyssenKrupp Materials NA company
ThyssenKrupp

CUSTOMER P.O. NUMBER	TERRITORY	ENTRY ID
64970-BL-5725	03	05BMK

BUYER	INSIDE SALES
BRIAN LAWSON, P.A.	BRIAN M. KARWOWSKI
BUYER TELEPHONE: (513)489-0539	INSIDE SALES TELEPHONE: (937)415-2620 52625

CUSTOMER SIGNATURE: DATE:

QUANTITY	ORDERED	SHIPPED
INVENTORY	154.42 LB	~~154.00~~
BILLING	15.00 PC	15.00
WAREHOUSE		

SHIP VIA / SHIPPING STATUS

INTERNAL	COMPLETE	PARTIAL	CANCEL
POOL-TO 05-DAY	X		

TO CUSTOMER: OUR TRUCK/OUR DEL-D1
FOR: ORIG
BILL OF LADING:
FREIGHT STATUS: PPD
PACKED WITH OTHER GOODS:
FINISHED GOODS LOCATION:

PART DESCRIPTION 088407-2

CAST ALUMINUM TOOLING PLATE, 2.500 (+-.005)
SAW 5.25" (+.064,-0) X 7.687" (+.064,-0), actual certs must be signed

Item 6

METALEX MTX
QA. DEPT. 06 18
ACCEPTED
DATE 6/26/06
BY KKB

SPECIAL INSTRUCTIONS

FULL	SCRAP	FILLED BY	PACKED BY	Q/A AUDIT
		GLD		

CUSTOMER RECEIVING HOURS	MAX SKID WEIGHT	LOADING INSTRUCTIONS	MAXIMUM BUNDLE WEIGHT
6:00 am - 12:00 pm	15000	CRANE, FORK	30000

BOXES	BARS	CASES	CUSHP	PKGS	SKIDS	BDLS	TUBES	CTNS	FLAT	COILS
					1					

INSPECTION RECORD

CERTIFICATE OF COMPLIANCE
We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:

ROHS COMPLIANT

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
N55627 03	6.00	PC	ALCOA M	0CK7268	9283		N55627 04	6.00	PC	ALCOA M	0CK7268	9283	
N43922 10	3.00	PC	ALCOA M	0CK5444	9283								

Del

Job# 5725
Part# L143-111201
& L143-111301
P.O# 64970-BL

RECEIVED
JUN 19 2006
METALEX MFG.
BY S.W.

6/20

STEVEN J. FARACI · General Manager: ELKHART PRINTED 06/15/06 03:45 PM CONTROL NO 00116

COPPER AND BRASS SALES IS A DIVISION OF THYSSENKRUPP MATERIALS, INC.

CERTIFICATE OF TEST

Certification Date
16-JUN-2006

CUSTOMER ORDER NUMBER
64976-BL-5725

CUSTOMER PART NUMBER
ITEM 3

EARLE M. JORGENSEN COMPANY
601 REDNA TERRACE
P.O. BOX 15100
CINCINNATI OH 45215

Invoice Number
S960437

SOLD TO: METALEX MANUFACTURING
5750 CORNELL RD
CINCINNATI OH 45242

SHIP TO: METALEX MFG
5750 CORNELL ROAD
CINCINNATI OH 45242

Description: 1018 CF BAR ASTM A108
1/2 RD X 12' R/L
HEAT: 746151 ITEM: 501059
Line Total: 8 LB

Specifications:
ASTM A108 99 ASTM A331 95 00 ASTM A311 B95 00

CHEMICAL ANALYSIS

C	MN	SI	S	P
0.18	0.82	0.23	0.04	0.01

RCPT: R288069
MILL : NUCOR COLD FINISH
COUNTRY OF ORIGIN : USA

Job #5725
Part # L143-110119
PO # 64976-BL

METALEX MTX
QA. DEPT.
ACCEPTED
DATE 6/22/06
BY KRB

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.

TERRY RYNARD

Paul Barnhart
MANAGER, QUALITY ASSURANCE

PM1.017

MILL TEST REPORT

NUCOR COLD FINISH
A DIVISION OF NUCOR CORPORATION
2800 N. GOVERNOR WILLIAMS HIGHWAY
DARLINGTON, SOUTH CAROLINA 29540
FAX 843-395-8759
TELEPHONE 843-395-8689

PAGE - 1

CUSTOMER P.O.
BILL OF LADING P761917002-126
010200

DATE 1/07/05

SOLD TO

EARLE M. JORGENSEN STEEL
601 REDNA TERRACE
BOX 15100
CINCINNATI, OH
45215

SHIP TO

EARLE M. JORGENSEN STEEL
601 REDNA TERRACE
BOX 15100
CINCINNATI, OH
45215

GRADE	SIZE	PROD	HEAT NO.	C	Mn	Si	S	P	V	Cu	Ni	Cr	Mo	Pb	CUST. PART #
1018	1/2	RD	745270	.17	.80	.25	.030	.010							501059
1018	1/2	RD	746151	.18	.82	.23	.040	.010							501059
															R288069

PHYSICAL PROPERTIES

GRADE	SIZE	PROD	HEAT NO.	YIELD (ksi)	TENSILE (ksi)	El% (in 2")	ROA %	HARDNESS (SCALE)	COMMENTS

Job#5725
METALEX MTX
QA. DEPT. QC-18
ACCEPTED
DATE 6/22/06
BY RKB
P/N
L143-110119
P.O.#
64976
Item#3

SPECIAL INSTRUCTIONS:
ROUNDS UP TO & INCLUDING 2.5" ARE 100% EDDY CURRENT TESTED
COUNTRY OF ORIGIN FOR 12L14 MATERIAL:

TERRY CIESLINSKI

QUALITY ASSURANCE METALLURGIST
ALL COLD DRAWN CARBON STEEL LISTED ABOVE MEETS ASTM A108-99 SPECIFICATIONS.
ALL COLD DRAWN ALLOY STEEL LISTED ABOVE MEETS ASTM A331-95 (REAPP2000) SPECIFICATIONS.
ALL COLD DRAWN STRESS RELIEVED STEEL LISTED ABOVE MEETS ASTM A311-B95 (REAPP2000) SPECIFICATIONS.

Earle M. Jorgensen Co. Original test report for the order shown below.
EMJ SID#:S960437 CUSTOMER:METALEX MEG P.O:64976-BL-5725 CUST. PART#:ITEM 3
QTY: 8.018 DATE:06-06-16 SIGNATURE:TERRY RYNARD

CERTIFICATE OF TEST

Certification Date
16-JUN-2006

CUSTOMER ORDER NUMBER
64976-BL-5725

CUSTOMER PART NUMBER
ITEM 2

EARLE M. JORGENSEN COMPANY
601 REDNA TERRACE
P.O. BOX 15100
CINCINNATI OH 45215

Invoice Number
S960438

SOLD TO: METALEX MANUFACTURING
5750 CORNELL RD
CINCINNATI OH 45242

SHIP TO: METALEX MFG
5750 CORNELL ROAD
CINCINNATI OH 45242

Description: 1018 CF BAR ASTM A108
3/16 X 8 FLATS X 12' R/L
HEAT: 571622 ITEM: 502771

Line Total: 61.2 LB

Specifications:
ASTM A108 93

CHEMICAL ANALYSIS

C	MN	P	S	SI	AL	TI	CR
0.19	0.65	0.006	0.008	0.03	0.041	0.001	0.1

MO	CU	NI	N	B
0.028	0.21	0.07	0.007	0.0001

RCPT: R568656
MILL : CLINGAN STEEL INC COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED IN AREA	HARDNESS RB
					83

METALEX MTY
QA. DEPT.
ACCEPTED
DATE 6/22/06
BY KKB

Job# 5725
PART# L143-110114
P.O# 64976-BL

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.

TERRY RYNARD

Paul Barnhart
MANAGER, QUALITY ASSURANCE

PM1.017

EMJ SID#:5960438 CUSTOMER:METALEX MFG P.O:64976-BL:5725 CUST. PART#:ITEM 2 QTY: 61,260 DATE:06-06-16 SIGNATURE:TERRY RYNARD

CLINGAN STEEL, INC.
CERTIFIED TEST REPORT

R 568656

11/10/05

TO:
EMJ CORPORATION CHICAGO
1900 MITCHELL BLVD.
SCHAUMBURG, IL 60193

SHIP TO:
EMJ CORPORATION CHICAGO
1900 MITCHELL BLVD.
SCHAUMBURG, IL 60193

Cust. P/O#: P032728-423 Part No.: 502771

STEEL,.1875 X 8.00 X 144.00

GRADE: C1018 PER ASTM A108-93 SQUARE EDGE

B/L Date 11/10/05 Bill/Ladng# 093368
Sales Ordr: 078583 01

Tag# 924451 01 Heat# 571622 MasterTag# 922078 01

C : .190	Mn: .650	P : .006	S : .008
Si: .030	Al: .041	Ti: .001	
Cr: .100	Mo: .028	Cu: .210	
Ni: .070	N : .007		B : .0001

Rockwell: B83

MELTED & MFG IN U.S.A.

Sales Ordr: 078583 01

Tag# 924452 01 Heat# 571622 MasterTag# 922078 01

C : .190	Mn: .650	P : .006	S : .008
Si: .030	Al: .041	Ti: .001	
Cr: .100	Mo: .028	Cu: .210	
Ni: .070	N : .007		B : .0001

Rockwell: B83

MELTED & MFG IN U.S.A.

Job#5725

METALEX MTX
QA. DEPT. QC 18
ACCEPTED
DATE 6/22/06
BY KKB

P/N L143-110114
P.O.# 64976
Item# 2

Continued...

EMJ SID# S960438 CUSTOMER:METALEX MFG P.O:64976-BL-5725 CUST. PART# ITEM 2 QTY: 61 260 DATE:06-06-16 SIGNATURE:TERRY RYNARD

CLINGAN STEEL, INC.
CERTIFIED TEST REPORT

11/10/05

TO:
EMJ CORPORATION CHICAGO
1900 MITCHELL BLVD.
SCHAUMBURG, IL 60193

SHIP TO:
EMJ CORPORATION CHICAGO
1900 MITCHELL BLVD.
SCHAUMBURG, IL 60193

Cust. P/O#: PB32728-423 Part No.: 502771

STEEL,.1875 X 8.00 X 144.00

GRADE: C1018 PER ASTM A108-93 SQUARE EDGE

B/L Date 11/10/05 Bill/Ladng# 093368

Job#5725
METALEX MTX
QA. DEPT. QC 18
ACCEPTED
DATE 6/22/06
BY KKB

P/N L143-110114
P.O.# 64976

WE HEREBY CERTIFY THE ABOVE FIGURES ARE ACCURATELY STATED, MEET YOUR MATERIAL REQUIREMENTS AND ARE TRACEABLE IN OUR RECORDS.

CLINGAN STEEL, INC.
QUALITY ASSURANCE MANAGER QMF 17

CERTIFICATE OF TEST

Certification Date
16-JUN-2006

CUSTOMER ORDER NUMBER
64976-BL-5725

CUSTOMER PART NUMBER
ITEM 1

EARLE M. JORGENSEN COMPANY
601 REDNA TERRACE
P.O. BOX 15100
CINCINNATI OH 45215

Invoice Number
S960436

SOLD TO: METALEX MANUFACTURING
5750 CORNELL RD
CINCINNATI OH 45242

SHIP TO: METALEX MFG
5750 CORNELL ROAD
CINCINNATI OH 45242

Description: 1018 CF BAR ASTM A108
1/4 X 3/4 FLATS X 12' R/L
HEAT: CI134628 ITEM: 502781

Line Total: 7.6 LB

Specifications:
ASTM A108 93

CHEMICAL ANALYSIS

C	MN	P	S	AL	B	CR	CU
0.18	0.67	0.011	0.027	0.007	0.0002	0.09	0.17

MO	N	NI	SI	SN	V
0.02	0.009	0.07	0.15	0.011	0.002

RCPT: R636656
MILL : CHARTER WIRE

COUNTRY OF ORIGIN : USA

STRAND CAST REDUCTION RATIO 145.0 TO 1

METALEX
QA. DEPT. MTX QC 18
ACCEPTED
DATE 6/22/06
BY KKB

COMMENTS
MELT SOURCE ALTON STEEL USA
SILICON KILLED COARSE GRAIN

Job# 5725
PART# L143-110112
P.O# 64976-BL

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.

TERRY RYNARD

Paul Barnhart
MANAGER, QUALITY ASSURANCE

PM1.017

EMJ SID#:S960436 CUSTOMER:METALEX MFG P.O.64976-BL.5725 CUST PART# ITEM 1 QTY. 7,657 DATE:06-06-16 SIGNATURE:TERRY RYNARD

CHARTER WIRE
A Division of Charter Manufacturing Co., Inc.
114 N. Jackson Street
Milwaukee, Wisconsin 53202-6297
(414) 390-3000
(414) 390-3031 Fax

R 636656

DATE: 01/18/2006

CERTIFICATE OF MATERIAL AND SPECIFICATION

CUSTOMER: EMJ
CUSTOMER'S P.O. NO: P849582002
Customer Item: 502781
SIZE: .250 X .750
GRADE: AISI 1018
HEAT NO: cl134628

SALES ORDER NO: S42327
WORKORDER: 11011631
ITEM NO: 11070
SPEC 1: ASTM A108-93
SPEC 2:
SPEC 3:

CHEMICAL ANALYSIS: C: .1800 Mn .6700 P: .0110 S: .0270
AL .0070 B: .0002 Cr .0900 Cu .1700
Mo .0200 N: .0090 Ni .0700 Si .1500
Sn .0110 V: .0020

MILL SPECIFICATIONS: Hot Roll Source: CHARTER STEEL (USA)
Melt Source: ALTON STEEL (USA)
Casting Practice: STRAND
Killing Practice/Grainsize: SILICON KILLED COARSE GRAIN
Reduction Ratio: 145 TO 1

Job#5725

METALEX MTX QC 18
QA. DEPT.
ACCEPTED
DATE 6/22/06
BY KKB

P/N L143-110112
P.O.# 64976
Item#1

HEAT ANALYSIS IS FROM THE PACKING LIST RECEIVED BY CHARTER FROM OUR RAW MATERIAL SUPPLIER.

QUALITY ASSURANCE/CONTINUOUS IMPROVEMENT MANAGER

ORIGINAL

CUSTOMER	SHIP DATE	GROSS WEIGHT	QUOTE	PACKING LIST
55230	06/19/06 SHP	22	05-1229282-	3 OF 6 TEST RESULTS
			ORDER DATE 06/15/06 ORD	

BILL TO	WORK ORDER	DELIVERY DATE	SHIP BRANCH	SELL BRANCH	WORK ORDER
METALEX MFG INC	**	06/19/06 DEL	05-DAY	05-DAY	5R4100

SHIP TO

METALEX MFG INC 01
5750 CORNELL
CINCINNATI OH 45242

6700 POE AVENUE, DAYTON OH 45414-2590

Copper and Brass Sales
A ThyssenKrupp Materials NA company
ThyssenKrupp

CUSTOMER NUMBER	TERRITORY	ENTRY ID
64970-BL-5725	03	05BMK

INSIDE SALES	
BRIAN LAWSON, P.A.	BRIAN M. KARWOWSKI
(513)489-0539	(937)415-2620 52625

CUSTOMER SIGNATURE: DATE:

QUANTITY	ORDERED	SHIPPED
INVENTORY	21.17 LB	22.00
BILLING	2.00 PC	~~2.00~~
WAREHOUSE		2.00 PC

SHIP VIA	SHIPPING STATUS		
	COMPLETE X	PARTIAL	CANCEL

TOTAL STOCK	FOB	PACKED WITH OTHER GOODS
[illegible] DEL-01	ORIG	

BILL OF LADING	FREIGHT STATUS	FINISHED GOODS LOCATION
	PPD	WARN LABEL:1001

PART DESCRIPTION 019980-2

RECT 6061-T6511 EXTR ALUMINUM BAR, 1/2(+/-.009)X 1-1/2 (+/-.014) X 12 FT ML
NO PROCESSING - 144" ML, actual certs must be signed

Item#4

METALEX QA. DEPT. ACCEPTED DATE 6/22/06 BY KKB MTX OC 18

P/N: L143-110115

SPECIAL INSTRUCTIONS

FILE	SCRAP	FILLED BY	PACKED BY	Q/A AUDIT
		KT		

DELIVERY HOURS	MAX SKID WEIGHT	LOADING INSTRUCTIONS	MAXIMUM BUNDLE WEIGHT
6:00 am - 12:00 pm	15000	CRANE, FORK	30000

BOXES	BARS	CASES	CUSHP	PKGS	SKIDS	BDLS	TUBES	CTNS	FLAT	COILS
						1				

INSPECTION RECORD

TEST RESULTS -----

CERTIFICATE OF COMPLIANCE
We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:
[illegible] 2 AMS-QQ-A-200/8

ROHS COMPLIANT

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
[illegible]	2.00	PC	KAISER	0CK2598	348 071	2							

DEC

RECEIVED
JUN 19 2006
METALEX MFG.
BY S.U

kw 6/20

[illegible] - General Manager: DAYTON PRINTED 06/15/06 09:07 PM CONTROL NO 00109

COPPER AND BRASS SALES IS A DIVISION OF THYSSENKRUPP MATERIALS, INC.

KAISER ALUMINUM
FABRICATED PRODUCTS

CERTIFIED TEST REPORT

http://www.KaiserAluminum.com

KAISER ALUMINUM
FABRICATED PRODUCTS
9700 SOUTH HARLEM AVE
BRIDGEVIEW, IL 60455

CUSTOMER PO NUMBER:	CUSTOMER PART NUMBER:	PRODUCT DESCRIPTION:			
CK2598	019980-2/STK	0.500 X 1.500 SQ COR RECT BAR			
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:
984773	001	05/17/2006	348 071	6061	T6511
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:
773.000 LB	73.000 PCS	932658			12.000 FT

SHIP TO:
COPPER & BRASS SALES
6700 POE AVENUE
DAYTON, OH 45414 USA

SOLD TO:
COPPER & BRASS SALES
PO BOX 5116
SOUTHFIELD, MI 48086-5116 USA

METALEX
QA. DEPT.
ACCEPTED
DATE 6/22/06
BY KKB

Item#4

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS(KSI)	YTS(KSI)	%Elong in 2	HARDNESS	CONDUCT.	BEND
[illegible]	0001	0001	51.0	48.3	16.6		N/A	N/A
[illegible]044556	0001	0002	50.5	47.9	19.7		N/A	N/A
[illegible]044556	0001	0003	51.0	47.7	16.6		N/A	N/A
[illegible]044556	0001	0004	50.6	47.4	13.4		N/A	N/A
[illegible]044556	0001	0005	52.1	48.8	17.4		N/A	N/A
[illegible]044556	0001	0006	49.4	46.8	15.3		N/A	N/A
[illegible]044556	0001	0007	50.0	46.7	14.0		N/A	N/A
[illegible]044556	0001	0008	50.5	47.8	16.3		N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40		0.15		0.8	0.04			NA	NA	NA		

APPLICABLE REQUIREMENTS:

[illegible]-B221-02-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061

Job# 5725
PA(#L143-110115
P.O# 64970-BL

CERTIFICATION

Kaiser Aluminum & Chemical Corp. ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that set on Kaiser's general terms & conditions of sale. Test reports are on file, subject to examination.

Frank E. Watson, Quality Assurance Manager

Plant Serial: 00141159

Kaiser Order Number: 984773

Line Item: 001

KAISER ALUMINUM
FABRICATED PRODUCTS

CERTIFIED TEST REPORT

http://www.KaiserAluminum.com

KAISER ALUMINUM
FABRICATED PRODUCTS
9700 SOUTH HARLEM AVE
BRIDGEVIEW, IL 60455

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

Job #5725
METALEX
QA. DEPT.
ACCEPTED
DATE 6/22/06
BY RKB
MTX QC 18

P/N L143-110115
P.O.# 64970
Item# 4

CERTIFICATION

Kaiser Aluminum & Chemical Corp. ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file, subject to examination.

Frank E. Watson, Quality Assurance Manager

Plant Serial: 00141159

Kaiser Order Number: 984773

Line Item: 001

CERTIFICATE OF TEST

Certification Date
26-MAY-2006

CUSTOMER ORDER NUMBER
64752-BL-5681

CUSTOMER PART NUMBER
ITEM 1

EARLE M. JORGENSEN COMPANY
601 REDNA TERRACE
P.O. BOX 15100
CINCINNATI OH 45215

Invoice Number
S956531

SOLD TO: METALEX MANUFACTURING
5750 CORNELL RD
CINCINNATI OH 45242

SHIP TO: METALEX MFG
5750 CORNELL ROAD
CINCINNATI OH 45242

Description: 1018 CF BAR ASTM A108
3/16 X 1/2 FLATS X 12' R/L
Line Total: 3.8 LB
HEAT: CL132712 ITEM: 502748

Specifications:
ASTM A108 93

CHEMICAL ANALYSIS

C	MN	P	S	B	CR	CU	MO
0.16	0.71	0.008	0.029	0.0001	0.09	0.2	0.01

N	NI	SI	SN	TI	V
0.007	0.06	0.25	0.009	0.001	0.001

RCPT: R251728
MILL : CHARTER WIRE
COUNTRY OF ORIGIN : US

STRAND CAST REDUCTION RATIO 284.0 TO 1

COMMENTS
MELT SOURCE: STEEL DYNAMICS
HOT ROLL SOURCE: CHARTER STEEL
SILICON KILLED COARSE GRAIN

METALEX
QA. DEPT.
ACCEPTED
DATE 6/6/06
BY KKB

Job# ~~5681~~ 5725
PART# L143-110108
P.O# 64752 S.W
6-20-06

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination.

We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes.

Material did not come in contact with mercury while in our possession.

Paul Barnhart
MANAGER, QUALITY ASSURANCE

FM1.017

CHARTER WIRE
A Division of Charter Manufacturing Co., Inc.
114 N. Jackson Street
Milwaukee, Wisconsin 53202-6297
(414) 390-3000
(414) 390-3031 Fax

R 251728

DATE: 11/12/2004

CERTIFICATE OF MATERIAL AND SPECIFICATION

CUSTOMER: EMJ
CUSTOMER'S P.O. NO: P743436001
Customer Item: 502748
SIZE: .1875 X .500
GRADE: AISI 1018
HEAT NO: cl132712

SALES ORDER NO: s37410
WORKORDER: 06100003
ITEM NO: 09043
SPEC 1: ASTM A108-93
SPEC 2:
SPEC 3:

CHEMICAL ANALYSIS: C: .1600 Mn .7100 P: .0080 S: .0290
B: .0001 Cr .0900 Cu .2000 Mo .0100
N: .0070 Ni .0600 Si .2500 Sn .0090
Ti .0010 V: .0010

MILL SPECIFICATIONS: Hot Roll Source: CHARTER STEEL (USA)
Melt Source: STEEL DYNAMICS (USA)
Casting Practice: STRAND
Killing Practice/Grainsize: SILICON KILLED COARSE GRAIN
Reduction Ratio: 284 TO 1

Job#5681
METALEX
QA DEPT.
ACCEPTED
DATE 6/6/06
BY KKB
MTX QC 18

P/N L143-110108
P.O.# 64752
Item# 1

HEAT ANALYSIS IS FROM THE PACKING LIST RECEIVED BY CHARTER FROM OUR RAW MATERIAL SUPPLIER.

QUALITY REPRESENTATIVE

ORIGINAL

CUSTOMER	SHIP DATE	GROSS WEIGHT	QUOTE		PACKING LIST
55230	06/30/06 SHP		05-1229286-	1 OF 1	TEST RESULTS
BILL TO: METALEX MFG INC		WORK ORDER **	ORDER DATE 06/15/06 ORD		

DELIVERY DATE	SHIP BRANCH	SELL BRANCH	WORK ORDER
07/05/06 DEL	02-GRR	05-DAY	2P3472

SHIP TO

METALEX MFG INC 01
5750 CORNELL
CINCINNATI OH 45242

1310 SCRIBNER NW, GRAND RAPIDS MI 49504-3287

Copper and Brass Sales
A ThyssenKrupp Materials NA company
ThyssenKrupp

CUSTOMER P.O. NUMBER	TERRITORY	ENTRY ID
64970-BL-5725	03	05BMK

BUYER	INSIDE SALES
BRIAN LAWSON, P.A.	BRIAN M. KARWOWSKI
BUYER TELEPHONE	INSIDE SALES TELEPHONE
(513)489-0539	(937)415-2620 52625

CUSTOMER SIGNATURE: DATE:

QUANTITY	ORDERED	SHIPPED
INVENTORY	654.23 LB	~~640.00~~
BILLING	654.23 LB	640.00
WAREHOUSE		

SHIP VIA / SHIPPING STATUS

INTERNAL	COMPLETE	PARTIAL	CANCEL
POOL-TO 05-DAY	X		

TO CUSTOMER: OUR TRUCK/OUR DEL-D1
FOB: ORIG
FREIGHT STATUS: PPD
BILL OF LADING:
PACKED WITH OTHER GOODS: 2P1680
FINISHED GOODS LOCATION: WARN LABEL:1013

PART DESCRIPTION 310373-6

ALUMINUM BRONZE PLATE AMPCO 8 C614/C613, .3125 (+-.019)
SAW 48" X 36" (+.064,-0), LINE ITEM#: 1.
Test Results Attn to: QA Department. , actual certs must be signed Item#1

4pcs

METALEX
QA. DEPT
ACCEPTED
DATE 7/10/06
BY KKB

SPECIAL INSTRUCTIONS

P/N L143-110104

FULL	SCRAP	FILLED BY	PACKED BY	Q/A AUDIT
		JM		

CUSTOMER RECEIVING HOURS	MAX SKID WEIGHT	LOADING INSTRUCTIONS	MAXIMUM BUNDLE WEIGHT
6:00 am - 12:00 pm	15000	CRANE, FORK	30000

BOXES	BARS	CASES	CUSHP	PKGS	SKIDS	BDLS	TUBES	CTNS	FLAT	COILS
INSPECTION RECORD										

TEST RESULTS - - - - -

CERTIFICATE OF COMPLIANCE
We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state. For MSDS sheets go to www.copperandbrass.com/msds or call 248-233-5682. We hereby certify that the material above complies with the following specifications:
ASTM-B169

ROHS COMPLIANT

TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS	TAG NO	QUANTITY	UOM	VENDOR	VEND PO	HEAT/LOT	PCS
042931 00	640.00	LB	REVEREC	0CK5986	532/4386								

DEL
RECEIVED
JUL 05 2006
METALEX MFG.
BY S.

STEVEN J. FARACI - General Manager: GRAND RAPIDS PRINTED 06/30/06 01:40 PM CONTROL NO 00044

COPPER AND BRASS SALES IS A DIVISION OF THYSSENKRUPP MATERIALS, INC

Revere Copper Products, Inc.

24 North Front Street New Bedford, MA 02740
Phone: (508) 999-5601 Fax: (508) 991-2115

CERTIFICATE OF TEST

PAGE 1

DATE CODE: 179

ORDER FROM:
COPPER AND BRASS SALES
ATTN: ACCOUNTS PAYABLE
P O BOX 5116
SOUTHFIELD MI 48086-5116

SHIPPED TO:
TMX/COPPER AND BRASS SALES
1310 SCRIBNER AVENUE NORTH WEST
GRAND RAPIDS MI 49504-3287

DATE: 6/28/06
REVERE NO: 33549 ITEM#: 01
CUSTOMER ORDER NUMBER:
CK5986

MATERIAL INFORMATION:

ALUMINUM BRONZE SHEET
C61300/C61400 / AMPCO 8
SOFT TEMPER
48" X 144" X .3125"

ASTM B 169-2001
P/N 310373-6
ROHS COMLIANT

CHEMICAL COMPOSITION

PIECES	LOT	HEAT	COPPER Cu	TIN Sn	LEAD Pb	IRON Fe	NICKEL Ni	MANGANESE Mn	PHOSPHORUS P	CARBON C	SULFUR S	ZINC Zn	SILICON Si	ALUMINUM Al	ARSENIC As
4	4386	532	90.00	.260	.00	2.58	.00	.16	.004			.03	.01	6.92	

NICKEL INCLUDES COBALT

PHYSICAL AND MECHANICAL PROPERTIES

LOT	HEAT	YIELD STRENGTH 0.5% Ext. Psi	TENSILE STRENGTH Psi	ELONGATION % in 2 inches	BEND in degrees	RESISTIVITY ohms/g/m2	ASTM F68 CLASS	ROCKWELL/ BRINELL
4386	532	38,000	83,500	50	120			
4386	532	37,900	82,600	48	120			

Job# 5725
PART# L143-110104
P.O# 64970-BL

Metalex
6 30 06
PO 64970-BL-5725
243472
640 #
CHB

METALEX Bl. Co. QA. DEPT. ACCEPTED DATE 7/10/06 BY KKB

WE HEREBY CERTIFY THAT ~~EACH LOT~~ HAS BEEN SAMPLED, TESTED, AND INSPECTED IN ACCORDANCE WITH THE ABOVE SPECIFICATIONS AND HAS MET THE REQUIREMENTS. THE MATERIAL HAS NOT BEEN WELD REPAIRED.

JORG SCHAFFSTEIN
Q.C. ADMINISTRATOR

ML2-1 02/01

Quantity Shipped	Unit	Description	Revision	Job Number
6	EA	L143-111301 BASE, HOLDER MAGNET STRUCT 7.75 X 5 X 2 MIC-6 CAST ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL	00	20759-03

ITEM # 3

CRITICAL PART**HANDLE VERY CAREFULLY
CLEAR ANODIZE PER AMS-2471, REV F
SODIUM DICHROMATE SEAL REQUIRED
CERTIFICATION REQUIRED
OPERATION# 70
JO# 5725
3 BOXES
LOC# 5-183

METALEX QA DEPT. MTX QC 18
ACCEPTED
DATE 10/11/06
BY KKB

THIS CERTIFIES THAT THE ABOVE PARTS, METAL FINISH BY TECHMETALS INCORPERATED WERE PLATED/PROCESSED IN ACCORDANCE WITH THE PURCHASE ORDER SHOWN ABOVE. OBJECTIVE QUALITY EVIDENCE FOR THIS ORDER IS ON FILE AT OUR FACILITY AND AVAILIBLE FOR CUSTOMER/GOVERMENT REVIEW.

CERTIFING THE PROCESS ONLY

Thomas A. Stahl
Inspector's Initials
Techmetals Incorporated

S/N(S): -18, -20, -22, -24, -26, -28, -30 & -32
TC 12/14/06 MTX QC 12

FROM :Bld 5 PRODUCTION TECHMETALS FAX NO. :9372531982 Oct. 11 2006 02:55PM P7

-1/N(S): -112, -212, -312
-114, -214, -314
-116 -216, -316
ITEM #1, #2
For ~~SOFA~~
PACKAGE TC
10/10/06

MTX OC 12

Techmetals Incorporated

TECHMETALS, INC.

2200 EAST FIRST STREET
Dayton, OH 45403
Phone: 937-253-5311
Fax: 937-253-1982

METALEX QA DEPT ACCEPTED DATE 10/12/06 BY KKB

Revised Metal Finishing Certification

To: METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242

United States

From: Techmetals Incorporated
2200 EAST FIRST STREET
Dayton, OH 45403

Packing List No: 24533
Shipping Date: 09/20/06

Today's Date: 10/11/06
PO Number: 66464-JS

	Quantity Shipped	Unit	Description	Revision	Job Number
ITEM # 1	9	EA	L143-111101 HOLDER MAGNET STRUCT 39.50 X 5 X 2.50 MIC-6 ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** **WRAP TO PROTECT & KEEP CLEAN** CLEAR ANODIZE PER AMS-2471 F, SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 JO# 5681 3 BOXES LOC# 5-183	01	20759-01
ITEM #2	9	EA	L143-111001 HOLDER MAGNET STRUCT 39.50 X 5 X 2.50 MIC-6 ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** **WRAP TO PROTECT & KEEP CLEAN** CLEAR ANODIZE PER AMS-2471 F, SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 JO# 5681 3 BOXES LOC# 5-183	01	20759-02

FROM :BI4 S PRODUCTION TECHMETALS FAX NO. :9372531982 Oct. 11 2006 02:55PM P6

TECHMETALS, INC.

METALEX
QA. DEPT.
ACCEPTED
DATE 10/2/06
BY KKB
MTX QC 18

Metal Finishing Certification

To: METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242
United States

From: Techmetals Incorporated
2200 EAST FIRST STREET
Dayton, OH 45403

Packing List No: 24891 **Today's Date:** 09/26/06
Shipping Date: 09/26/06 **PO Number:** 66827-BL-5725

Quantity Shipped	Unit	Description	Revision	Job Number
8	EA	L143-111201 BASE, HOLDER MAGNET STRUCT (UPPER RIGHT) 7.75 X 5 X 2 MIC-6 CAST ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** CLEAR ANODIZE PER AMS-2471, REV F SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 1 BOX LOC# 5-379		21175-01
8	EA	L143-110901 BASE, HOLDER MAGNET STRUCT (LOWER LEFT) 7.75 X 5 X 2 MIC-6 CAST ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** CLEAR ANODIZE PER AMS-2471, REV F SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 1 BOX LOC# 5-379		21175-02

SNCS: -18, -20, -22, -24, -26, -28, -30, & -32.
TK 12/14/06
MTX QC 12
FOR BOTH LINE ITEMS

Quantity Shipped	Unit	Description	Revision	Job Number

THIS CERTIFIES THAT THE ABOVE PARTS, METAL FINISHED BY TECHMETALS, INC., WERE PLATED/PROCESSED IN ACCORDANCE WITH THE PURCHASE ORDER SHOWN ABOVE.

OBJECTIVE EVIDENCE FOR THIS ORDER IS ON FILE AT OUR FACILITY AND AVAILABLE FOR CUSTOMER/GOVERNMENT REVIEW.

METALEX
QA. DEPT. MTX OC 18
ACCEPTED
DATE 9/30/06
BY KKB

TM
QA
4

Inspector's Initials
Techmetals Incorporated

TECHMETALS, INC.

2200 EAST FIRST STREET
Dayton, OH 45403
Phone: 937-253-5311
Fax: 937-253-1982

METALEX
QA. DEPT.
ACCEPTED
DATE 11/22/06
BY KKB

MTX QC 18

NOV 15 2006

Metal Finishing Certification

To: METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242

United States

From: Techmetals Incorporated
2200 EAST FIRST STREET
Dayton, OH 45403

Packing List No: 26422
Shipping Date: 10/24/06

Today's Date: 10/30/06
PO Number: 67330-JS-5725

Quantity Shipped	Unit	Description	Revision	Job Number
24	EA	L143-111001 HOLDER MAGNET STRUCT 39.50 X 5 X 2.50 MIC-6 ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** **WRAP TO PROTECT & KEEP CLEAN** ***MATCH TO PROVIDED COLOR SAMPLE*** CLEAR ANODIZE PER AMS-2471 F, SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 3 CASES LOC# 5-857	02	22488-01

THIS CERTIFIES THAT THE ABOVE PARTS, METAL FINISH BY TECHMETALS INCORPERATED WERE PLATED/PROCESSED IN ACCORDANCE WITH THE PURCHASE ORDER SHOWN ABOVE. OBJECTIVE QUALITY EVIDENCE FOR THIS ORDER IS ON FILE AT OUR FACILITY AND AVAILIBLE FOR CUSTOMER/GOVERMENT REVIEW.

CERTIFING THE PROCESS ONLY

Inspector's Initials
Techmetals Incorporated

S/N(s): -118, -218, -318
-120, -220, -320
-122, -222, -322
-124, -224, -324
-126, -226, -326
-128, -228, -328
-130, -230, -330
-132, -232, -332

TC 12/14/06
12/14

MTX QC 12

TECHMETALS, INC.

Metal Finishing Certification

METALEX
QA. DEPT. OC 18 MTX
~~ACCEPTED~~
DATE 10/27/06
BY KKB

Requested Revised Cert

To: METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242
United States

From: Techmetals Incorporated
2200 EAST FIRST STREET
Dayton, OH 45403

Packing List No: 26422
Shipping Date: 10/24/06
Today's Date: 10/24/06
PO Number: 67330-JS-5725

Quantity Shipped	Unit	Description	Revision	Job Number
24	EA	L143-111001 HOLDER MAGNET STRUCT 39.50 X 5 X 2.50 MIC-6 ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** **WRAP TO PROTECT & KEEP CLEAN** ***MATCH TO PROVIDED COLOR SAMPLE*** CLEAR ANODIZE PER AMS-2471 F, SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 3 CASES LOC# 5-857	~~01~~ 02 TC 10/26/06	22488-01

THIS CERTIFIES THAT THE ABOVE PARTS, METAL FINISHED BY TECHMETALS, INC., WERE PLATED/PROCESSED IN ACCORDANCE WITH THE PURCHASE ORDER SHOWN ABOVE.

OBJECTIVE EVIDENCE FOR THIS ORDER IS ON FILE AT OUR FACILITY AND AVAILABLE FOR CUSTOMER/GOVERNMENT REVIEW.

RECEIVED
OCT 24 2006
METALEX MFG.
BY _____

Thomas A. Stall
JW# 10-24-06
Inspector's Initials
Techmetals Incorporated

CINCINNATI BLACK OXIDE CERTIFICATION

THIS IS TO CERTIFY THAT THE FOLLOWING PARTS HAVE BEEN PROCESSED AND INSPECTED TO MEET AMS 2485 J CERTIFICATION

COMPANY NAME: METALEX MANUFACTURING
PURCHASE ORDER NUMBER: 66844-BL
PARTS PROCESSED:

Job#5725

QUANTITY	PART NUMBER	DESCRIPTION
36 pcs	L143-110108 REV. **	

METALEX QA. DEPT. ACCEPTED DATE 10/12/06 BY KKB

SIGNATURE Marcia Vitolo

DATE CERTIFIED: 10.11.06

CERTIFICATION NO. 101106-002

CINCINNATI BLACK OXIDE
4510 MUHLHAUSER ROAD
CINCINNATI, OHIO 45011
PHONE 513-874-1333
FAX 513-874-4846

CINCINNATI ABRASIVE SUPPLY COMPANY

5700 Hillside Avenue
Cincinnati, Ohio 45233
Phone: 513-941-8866 Fax: 513-941-8963

06415725

METALEX
QA. DEPT.
ACCEPTED
DATE 10/27/06
BY FKB

MTX DC 18

CERTIFICATION

Company Metalex Date: 10/16/06

P. O. # 66877 S. O. # 5725

Cincinnati Abrasive Shipper# 24913 No. of pcs. 421

Certification Spec # AMS 2485 (J)

Part Numbers L143-110111-**

Wrap to protect · Black oxide per AMS 2485 Rev J

This is to certify that all work supplied by Cincinnati Abrasive Supply Company is treated with Black Oxide in accordance with the above specification.

Cincinnati Abrasive Supply Company

CINCINNATI BLACK OXIDE CERTIFICATION

THIS IS TO CERTIFY THAT THE FOLLOWING PARTS HAVE BEEN PROCESSED AND INSPECTED TO MEET AMS 2485 J CERTIFICATION

COMPANY NAME: Metalex Manufacturing Inc
PURCHASE ORDER NUMBER: 68706-JS
PARTS PROCESSED:

QUANTITY	PART NUMBER	DESCRIPTION
32 pcs	#L143-110114-01	Screen

METALEX MFG. QA. DEPT. ACCEPTED DATE 12/14/06 BY KKB

SIGNATURE [signature]

DATE CERTIFIED: 12/7/06

CERTIFICATION NO. 120706-001

CINCINNATI BLACK OXIDE
4510 MUHLHAUSER ROAD
CINCINNATI, OHIO 45011
PHONE 513-874-1333
FAX 513-874-4846

RECEIVED DEC 07 2006 METALEX MFG. BY [signature]

CINCINNATI BLACK OXIDE CERTIFICATION

THIS IS TO CERTIFY THAT THE FOLLOWING PARTS HAVE BEEN PROCESSED AND INSPECTED TO MEET AMS 2485 J CERTIFICATION

COMPANY NAME: METALEX MFG.
PURCHASE ORDER NUMBER: 67627-JG
PARTS PROCESSED:

QUANTITY	PART NUMBER	DESCRIPTION
112	LL143-110119-REV. **	SPACER

Job#5725

METALEX
QA. DEPT
ACCEPTED
DATE 11/6/06
BY KKB

SIGNATURE Marcia Vitolo

DATE CERTIFIED: 10.27.06

CERTIFICATION NO. 102706-001

CINCINNATI BLACK OXIDE
4510 MUHLHAUSER ROAD
CINCINNATI, OHIO 45011
PHONE 513-874-1333
FAX 513-874-4846

TECHMETALS, INC.

345 Springfield St. Dayton, OH 45403-1240

Metal Finishing Certification

METALEX
QA DEPT.
ACCEPTED
DATE 11/29/06
BY KKB

To: METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242
United States

From: Techmetals Incorporated
2200 EAST FIRST STREET
Dayton, OH 45403

Packing List No: 27814
Shipping Date: 11/16/06
Today's Date: 11/16/06
PO Number: 68010-JS-5725

Quantity Shipped	Unit	Description	Revision	Job Number
130	EA	L143-110115-01 STOPPER 2 X 1.375 X 0.50 6061-T651 ALUMINUM CERT CLEAR ANODIZE/SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** CLEAR ANODIZE PER AMS-2471, REV F SODIUM DICHROMATE SEAL REQUIRED WRAP TO PROTECT & KEEP CLEAN CERTIFICATION REQUIRED OPERATION# 40 1 BOX LOC# 5-302		23736-01

THIS CERTIFIES THAT THE ABOVE PARTS, METAL FINISHED BY TECHMETALS, INC., WERE PLATED/PROCESSED IN ACCORDANCE WITH THE PURCHASE ORDER SHOWN ABOVE.

OBJECTIVE EVIDENCE FOR THIS ORDER IS ON FILE AT OUR FACILITY AND AVAILABLE FOR CUSTOMER/GOVERNMENT REVIEW.

Mark D. Phillips TM QA 11

Inspector's Initials
Techmetals Incorporated

Ph 937-253-6111 Fax: 937-253-5086

TECHMETALS, INC.

345 Springfield St. Dayton, OH 45403-1240

Metal Finishing Certification

METALEX
QA. DEPT
ACCEPTED
DATE 10/10/06
BY KKB

To: METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242
United States

From: Techmetals Incorporated
2200 EAST FIRST STREET
Dayton, OH 45403

Packing List No: 25333
Shipping Date: 10/04/06
Today's Date: 10/04/06
PO Number: 66861-JS-5725

Quantity Shipped	Unit	Description	Revision	Job Number
8	LOT	L143-110801 BASE, HOLDER MAGNET STRUCT 7.75 X 5 X 2 MIC-6 CAST ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** **MATCH TO SAMPLE** CLEAR ANODIZE PER AMS-2471, REV F SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 1 BOX LOC# 5-530		21605-01

THIS CERTIFIES THAT THE ABOVE PARTS, METAL FINISHED BY TECHMETALS, INC., WERE PLATED/PROCESSED IN ACCORDANCE WITH THE PURCHASE ORDER SHOWN ABOVE.

OBJECTIVE EVIDENCE FOR THIS ORDER IS ON FILE AT OUR FACILITY AND AVAILABLE FOR CUSTOMER/GOVERNMENT REVIEW.

S/N (5): -18, -20, -22, -24, -26, -28, -30, & -32

Thomas A Stahl
10-4-06
Inspector's Initials
Techmetals Incorporated

TR 12/14/06

MTX OC 12

TECHMETALS, INC.
345 Springfield St. Dayton, OH 45403-1240

Metal Finishing Certification

METALEX MTX
QA. DEPT. QC 18
ACCEPTED
DATE 11/29/06
BY KKB

To: METALEX MANUFACTURING INC
5750 CORNELL ROAD
CINCINNATI, OH 45242
United States

From: Techmetals Incorporated
2200 EAST FIRST STREET
Dayton, OH 45403

Packing List No: 27661 **Today's Date:** 11/14/06
Shipping Date: 11/14/06 **PO Number:** 68002-JS-5725

Quantity Shipped	Unit	Description	Revision	Job Number
24	EA	L143-111101 HOLDER MAGNET STRUCT 39.50 X 5 X 2.50 MIC-6 ALUMINUM CERT CLEAR ANODIZE / SODIUM DICHROMATE SEAL ***CRITICAL PART**HANDLE VERY CAREFULLY*** **WRAP TO PROTECT & KEEP CLEAN** CLEAR ANODIZE PER AMS-2471 F, SODIUM DICHROMATE SEAL REQUIRED CERTIFICATION REQUIRED OPERATION# 70 2 BOXES LOC# 5-234	02	23493-01

THIS CERTIFIES THAT THE ABOVE PARTS, METAL FINISHED BY TECHMETALS, INC., WERE PLATED/PROCESSED IN ACCORDANCE WITH THE PURCHASE ORDER SHOWN ABOVE.

OBJECTIVE EVIDENCE FOR THIS ORDER IS ON FILE AT OUR FACILITY AND AVAILABLE FOR CUSTOMER/GOVERNMENT REVIEW.

SN(S): -118, -218, -318
-120, -220, -320
-122, -222, -322
-124, -224, -324
-126, -226, -326
-128, -228, -328
-130, -230, -330
-132, -232, -332

TC 12/14/06 MTX QC 12

TM QA

Inspector's Initials
Techmetals Incorporated

Date.08/15/06

Job#5681/5725

METALEX QA. DEPT. MTX OC 18
ACCEPTED
DATE 8/22/06
BY RKB

Certificate of Compliance

METALEX
5750 CORNELL RD.
CINCINNATI, OH 45242
To METALEX Quality Assurance,

This is to certify that ***321*** pieces of Part No. ***L143-110703*** covered by your P.O. No. ***65852-BL*** have been manufactured and inspected to the highest standards in accordance with all specifications stated on supplied print and P.O.

Hi-Tech Manufacturing
4637 North 25th Avenue
Schiller Park, Illinois 60176
JOSEPH J. BOURKE

HI-TECH Manufacturing Inc.

INSPECTION REPORT

PART# L143-110703 REV# — DESCRIPTION: PEAK FILED SHIM

JOB # 52669 CUSTOMER : ARGONNE DATE 08-08-06

QUANTITY: 300 PCS INSPECTED BY: ILYA SAMPLE SIZE 10 Pcs

Inspection Report First Article

Inspected Criteria		Inspection Results	Disposition	
#	Inspected Dimension	Range	Accepted	Rejected
1	9. 0 +0 /-0.1	8.915 – 8.9948	✓	
2	6.2 +0.1 / -0	6.108 -6.0706	✓	
3	2X156.5 +0.5 /-0 DEGREE	2X158.0 – 158.5	✓	
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

Remarks : Decimal:. Accepted by Emil Vrachteenberg

Form IR Rev. 08/98

JOB415081/5/05

METALEX
QA. DEPT.
ACCEPTED
DATE 8/7/06
BY KKB

CRAFTS TECHNOLOGY
Precision Fabrication of Ultra-Hard Materials

Crafts Technology
91 Joey Drive
Elk Grove Village, IL 60007
UPS ACCT# 4E3-E38

Ph: 847-758-3100
Fax: 847-758-0162

Pack List

Number: 8358 Date: 20-Jul-06

To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Ship To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Terms	Ship Via
Net 21 days	UPS RED

Quantity	Description
297 each	Part: L143-110702 Rev: 01 TAPER SHIM Job: 2717 PO: 64975-BL Line:
	Thank you for your order This is to certify that the materials, parts and/or processes furnished against the above referenced purchase order were manufactured in accordance with the customer drawing and revision level shown Crafts Technology/Quality Control Department Daryl Barlow

Clans Technology, Inc.

FINAL INSPECTION REPORT

DATE 7-20-06

INSPECTOR [illegible]

JOB NUMBER 2717

PART NUMBER L143-110702

DESCRIPTION TAPER SHIM

CUSTOMER METALEX

DATE	SEQ	OPN		INSP CLK#	DRAWING DIM./TOLERANCE	ACTUAL MEASUREMENT NO 1	NO 2	NO 3	NO 4
					.394	.397	.3982		
					5.118 ±.007	5.124	5.125		
					RAD .079 ±.008 2PL	.075	.082		
					.500 ±.008	.5032	.5045		
					.008	.009	.010		
					.004	.0045	.0061		
					.075 ±.0008	.0752	.0756		
					.087 ±.0008	.0872	.0876		
					⏥ .003	.0006	.0025		

OK TO SHIP DS 7-20-06

ANCHOR METAL FINISHING, INC.

BLACK OXIDE ON STEEL

"Specialists in the Field"

9355 BERNICE • SCHILLER PARK, ILLINOIS 60176 • PHONE: (708) 678-4304 • FAX: (708) 678-7331

Crafts technology

METALCRAFT
QA. DEPT.
ACCEPTED
DATE 8/7/06
BY KKB

Gentlemen:

This is to certify that parts listed below have been black oxided in accordance with AMS 2485J (Aerospace) specifications.

Very truly yours,

Alex

ANCHOR METAL FINISHING, INC.

Shipping Ticket No. 264262

Your P.O. NO. 7473

Date 07-31-06

Part NO. L143-110702

Quantity 300 pcs

PO 64975 - BC - 5681

Stripco Inc.

• STEEL SLITTING AND EDGE CONDITIONING
• PRECISION COLD ROLLING

58595 Magnolia Drive • Mishawaka, IN 46545
Phone: (574) 258-7800 • Fax: (574) 258-7813

PACKING LIST

PACKING SLIP NUMBER
187483

SLED
D**

~~617-645-9966~~

DUE DATE 3/24/05 TT

SOLD TO:
Alro Steel Jackson
3100 East High Street
P.O. Box 927
Jackson, MI 49203

SHIP TO:
Alro Steel Pottenville
5059 Alro Park Drive
Pottenville, MI 48876

DATE OF ORDER	DATE SHIPPED	CUSTOMER ORDER NO.	SHIPPED VIA	DEPT.	TERMS
3/08/05	3/30/05	PO PO 5077044	HILLTOP FARMS	90	1/2-10 NET 30

QTY. ORD.	JOB NUMBER	DESCRIPTION	QTY. SHIPPED	QTY. B.O.
	BILL-OF-LADING-->	TRK DRIVER--> HILLTOP	PREPAID/S	
2,000	6355301	1/8 X .437" X 144.00" CR 1018		
	OSS WGT	2,199		
	TAG#	337369	2,199	
	LOCATION	CKA		
	PCS/COIL	990		CNT TOTAL 990

CERTIFIED RECORD OF METALLURGICAL PROPERTIES

STRID#	Carb	Mang	Phos	Sulf	Sil	Alum	Chrm	Moly	Heat#
147220	.150	.61	.006	.007	.030	.029	.08	.027	H3689
Yld=	66,899	Ten=	77,427	ElgX=22.45	Dis=	0			

RECEIVED
MAR 30 2005
By

ALRO STEEL/METAL
RT04483400

REJECTIONS WILL BE HONORED ONLY IF RETURNED IN ORIGINAL FORM SOLD.

A Service Charge of 1½% per month (18% per year) will be added to all invoices that are 30 days past the Date of Invoice. Title to merchandise does not pass until goods are fully paid for.
Claims for errors, deficiencies, or imperfections must be made within 10 days after receipt of goods. The Seller's responsibility for material in transit ceases when it passes into the hands of the transportation company. "We hereby certify that we have complied with all requirements of the Fair Labor Standards Act of 1938, as amended."

CHECK BOX IF COLLECT ☐
Load Approved: Cpt
Load must be secured and weather protected
Driver: [signature]

RECEIVED BY: X

DATE RECEIVED: 3-30-05

CUSTOMER COPY

Job#5681/5725

METALEX
QA. DEPT.
ACCEPTED
DATE 8/7/06
BY KKB

CRAFTS TECHNOLOGY
Precision Fabrication of Ultra-Hard Materials

Crafts Technology
91 Joey Drive
Elk Grove Village, IL 60007
UPS ACCT# 4E3-E38

Ph: 847-758-3100
Fax: 847-758-0162

Pack List

Number: 8377 Date: 24-Jul-06

To	Ship To
Metalex Manufacturing, Inc. 5750 Cornell Road Cincinnati, OH 45242 USA	Metalex Manufacturing, Inc. 5750 Cornell Road Cincinnati, OH 45242 USA
Ph: 513-489-0507 Fax: 513-489-1020	Ph: 513-489-0507 Fax: 513-489-1020

Terms	Ship Via
Net 21 days	UPS

Quantity	Description
314 each	Part: L143-110702 Rev: 01 TAPER SHIM Job: 2717 PO: 64975-BL Line:
	Thank you for your order This is to certify that the materials, parts and/or processes furnished against the above referenced purchase order were manufactured in accordance with the customer drawing and revision level shown Crafts Technology/Quality Control Department

Crafts Technology, Inc.

FINAL INSPECTION REPORT

DATE 7-20-06

INSPECTOR [illegible]

JOB NUMBER 2717

PART NUMBER L143-110702

DESCRIPTION TAPER SHIM

CUSTOMER METALEX

DATE	SEQ	OPN		INSP CLK#	DRAWING DIM./TOLERANCE	ACTUAL MEASUREMENT NO 1	NO 2	NO 3	NO 4
					.394	.397	.3982		
					5.118 ±.007	5.124	5.125		
					RAD. .079 ±.008 2PL	.075	.082		
					.500 ±.008	.5032	.5045		
					.008	.009	.010		
					.004	.0045	.0061		
					.075 ±.0008	.0752	.0756		
					.087 ±.0008	.0872	.0876		
					⏥ .003	.0006	.0025		

OK TO SHIP DS 7-20-06

ANCHOR METAL FINISHING, INC.

BLACK OXIDE ON STEEL

"Specialists in the Field"

5355 FRANCE • SCHILLER PARK, ILLINOIS 60176 • PHONE: (708) 678-4304 • FAX: (708) 678-7331

Crafts Technology

METALEX
QA. DEPT.
ACCEPTED
DATE 8/7/06
BY KKB
MTX
OC 18

Gentlemen:

This is to certify that parts listed below have been black-oxided in accordance with AMS 2485J (Aerospace) specifications.

Very truly yours,

Alex

ANCHOR METAL FINISHING, INC.

Shipping Ticket No. 264279

Your P.O. NO. 7480

Date 07-31-06

Part NO. L143-110702

Quantity 314 pcs

PO 64975 - BC - 5681

Stripco Inc.

- STEEL SLITTING AND EDGE CONDITIONING
- PRECISION COLD ROLLING

58595 Magnolia Drive • Mishawaka, IN 46545
Phone: (574) 258-7800 - Fax: (574) 258-7812

PACKING LIST

PACKING SLIP NUMBER
187483

GLED
D**

DUE DATE 3/24/05 TT

TO:
Alro Steel Jackson
3100 East High Street
P.O. Box 927
Jackson, MI 49203

SHIP TO:
Alro Steel Potterville
5859 Alro Park Drive
Potterville, MI 48876

E OF ORDER	DATE SHIPPED	CUSTOMER ORDER NO.	SHIPPED VIA	DEPT.	TERMS
3/08/05	3/30/05	PO PO 5077044	HILLTOP FARMS	90	1/2-10 NET 30

QTY. ORD.	JOB NUMBER	DESCRIPTION	QTY. SHIPPED	QTY. B.O.
	BILL-OF-LADING(=:	FRM DRIVER=) HILLTOP	PREPAID/S	
2,000	6355301	1/8 X .437" X 144.00" CR 1018		
	OSS WGT	2,199		
	TAG#	337369	2,199	
	LOCATION	CKA		
	PCS/COIL	990		CNT TOTAL 990

CERTIFIED RECORD OF METALLURGICAL PROPERTIES

STRID#	Carb	Mang	Phos	Sulf	Sil	Alum	Chrm	Moly	Heat#
147220	.150	.61	.006	.007	.030	.029	.08	.027	H3689
Yld=	66,899	Ten=	77,427	ElgX=22.45	Dls=	0			

RECEIVED
MAR 30 2005
By

ALRO STEEL/METAL
RT04483400

REJECTIONS WILL BE HONORED ONLY IF RETURNED IN ORIGINAL FORM SOLD.

A Service Charge of 1½% per month (18% per year) will be added to all invoices that are 30 days past the Date of Invoice. Title to merchandise does not pass until goods are fully paid for.
Claims for errors, deficiencies, or imperfections must be made within 10 days after receipt of goods. The Seller's responsibility for material in transit ceases when it passes into the hands of the transportation company. "We hereby certify that we have complied with all requirements of the Fair Labor Standards Act of 1938, as amended."

CHECK BOX IF COLLECT ☐
Load Approved: Cot
Load must be secured and weather protected
Driver: [signature]

RECEIVED BY: X

DATE RECEIVED: 3-30-05

CUSTOMER COPY

15725

METALEX
QA. DEPT
ACCEPTED
DATE 8/7/06
BY KKB

CRAFTS TECHNOLOGY
Precision Fabricator of Ultra-Hard Materials

Crafts Technology
91 Joey Drive
Elk Grove Village, IL 60007
UPS ACCT# 4E3-E38

Ph: 847-758-3100
Fax: 847-758-0162

Pack List

Number: 8434 Date: 03-Aug-06

To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Ship To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Terms	Ship Via
Net 21 days	UPS

Quantity	Description
300 each	Part: L143-110702 Rev: 01 TAPER SHIM Job: 2717 PO: 64975-BL Line:
	Thank you for your order This is to certify that the materials, parts and/or processes furnished against the above referenced purchase order were manufactured in accordance with the customer drawing and revision level shown Crafts Technology/Quality Control Department Manufactured in the USA

Crafts Technology, Inc.

FINAL INSPECTION REPORT

DATE 08-02-04

INSPECTOR John A.

JOB NUMBER 2717

PART NUMBER L143-110702

DESCRIPTION TAPER SHIM

CUSTOMER METALEX

DATE	SED	OPN		INSP CLK	DRAWING DIM./TOLERANCE	ACTUAL MEASUREMENT NO 1	NO 2	NO 3	NO 4
					.394	.395	.397	.396	.396
					5.118 ±.007	5.124	5.124	5.125	5.123
					RAD .079 ±.008 2PL	.075	.078	.080	.082
					.500 ±.008	.5025	.5042	.5035	.5035
					.008	.0102	.010	.0102	.010
					.004	.0045	.006	.006	.0045
					.075 ±.0008	.0758	.0754	.0750	.0752
					.087 ±.0008	.0869	.0872	.0876	.0872
					⏥ .003	.0005	.0015	.002	.0015
						5	6	7	8
					.394	.395	.396	.395	.395
					5.118 ±.007	5.125	5.125	5.124	5.125
					RAD .079 ±.008 2PL	.082	.083	.080	.082
					.500 ±.008	.5035	.5030	.5045	.5020
					.008	.0102	.010	.0103	.010
					.004	.0049	.005	.0042	.0062
					.075 ±.0008	.0749	.0754	.0755	.0746
					.087 ±.0008	.0870	.0871	.0872	.0872
					⏥ .003	.0005	.0023	.001	.0015
						9			
					.394	.396			
					5.118 ±.007	5.124			
					RAD .079 ±.008 2PL	.083			
					.500 ±.008	.5035			
					.008	.010			
					.004	.0045			
					.075 ±.0008	.0751			
					.087 ±.0008	.0869			
					⏥ .003	.0005			

ANCHOR METAL FINISHING, INC.

BLACK OXIDE ON STEEL

"Specialists in the Field"

3355 BERNICE • SCHILLER PARK, ILLINOIS 60176 • PHONE: (708) 678-4304 • FAX: (708) 678-7331

Crafts Technology

METALEX
QA. DEPT.
ACCEPTED
DATE 8/1/06
BY KKB

Gentlemen:

This is to certify that parts listed below have been black-oxided in accordance with AMS 2485J (Aerospace) specifications.

Very truly yours,

Alex

ANCHOR METAL FINISHING, INC.

Shipping Ticket No. 269872

Your P.O. NO. 7525

Date 07-31-06

Part NO. L143-110702

Quantity 300 pcs

PO 64975 - BC - 5681

Stripco Inc.

- STEEL SLITTING AND EDGE CONDITIONING
- PRECISION COLD ROLLING

55595 Magnolia Drive • Mishawaka, IN 46545
Phone: (574) 258-7800 • Fax: (574) 258-7813

PACKING LIST

PACKING SLIP NUMBER
SLED D** 187483

~~617-446-9906~~

DUE DATE 3/24/05 TT

SOLD TO:
Alro Steel Jackson
3100 East High Street
P.O. Box 927
Jackson, MI 49203

SHIP TO:
Alro Steel Potterville
5059 Alro Park Drive
Potterville, MI 48876

S OF ORDER	DATE SHIPPED	CUSTOMER ORDER NO.	SHIPPED VIA	DEPT.	TERMS
3/08/05	3/30/05	PV PV 5077044	HILLTOP FARMS	90	1/2-10 NET 30

QTY. ORD.	JOB NUMBER	DESCRIPTION	QTY. SHIPPED	QTY. S.O.
	BILL-OF-LADING=>	TRK DRIVER=> HILLTOP	PREPAID/S	
2,000	6355301	1/8 X .437" X 144.00" CR 1018		
	GRS WGT	2,199		
	TAG#	337369	2,199	
	LOCATION	CKA		
	PCS/COIL	990		CNT TOTAL 990

CERTIFIED RECORD OF METALLURGICAL PROPERTIES

STRID#	Carb	Mang	Phos	Sulf	Sil	Alum	Chrm	Moly	Heat#
147220	.150	.61	.006	.007	.030	.029	.08	.027	H3689
Yld=	66,899	Ten=	77,427	ElgX=22.45	Dia=	0			

RECEIVED MAR 30 2005 By

ALRO STEEL/METAL RT04483400

REJECTIONS WILL BE HONORED ONLY IF RETURNED IN ORIGINAL FORM SOLD.

A Service Charge of 1½% per month (18% per year) will be added to all invoices that are 30 days past the Date of Invoice. Title to merchandise does not pass until goods are fully paid for.
Claims for errors, deficiencies, or imperfections must be made within 10 days after receipt of goods. The Seller's responsibility for material in transit ceases when it passes into the hands of the transportation company. "We hereby certify that we have complied with all requirements of the Fair Labor Standards Act of 1938, as amended."

CHECK BOX IF COLLECT ☐
Load Approved: Cpt
Load must be secured and weather protected
Driver: [signature]

RECEIVED BY: X

DATE RECEIVED: 3-30-05

NSF 10.4.1.1 Rev1

CUSTOMER COPY

KKB 8/22/06

CRAFTS TECHNOLOGY
Precision Fabricator of Ultra-Hard Materials

Crafts Technology
91 Joey Drive
Elk Grove Village, IL 60007
UPS ACCT# 4E3-E38

Ph: 847-758-3100
Fax: 847-758-0162

METALEX MFG INC
QA. DEPT.
ACCEPTED
DATE 8/22/06
BY KKB

Job# 5681

Pack List 5725

Number: 8455 Date: 09-Aug-06

To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Ship To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Terms	Ship Via
Net 21 days	UPS

Quantity	Description
300 each	Part: L143-110702 Rev: 01 TAPER SHIM Job: 2717 PO: 64975-BL Line:
	Thank you for your order This is to certify that the materials, parts and/or processes furnished against the above referenced purchase order were manufactured in accordance with the customer drawing and revision level shown Crafts Technology/Quality Control Department Dwayne Barker Manufactured in the USA

Clarts Technology, Inc.

FINAL INSPECTION REPORT

DATE 08-8-06

INSPECTOR [illegible]

JOB NUMBER 2717

PART NUMBER L143-110702

DESCRIPTION TAPER SHIM

CUSTOMER METALEX

DATE	SEQ	OPN		INSP CLK#	DRAWING DIM./TOLERANCE	ACTUAL MEASUREMENT NO 1	NO 2	NO 3	NO 4
					.394	.3935	.3976	.3965	.3975
					5.118 ±007	5.123	5.125	5.125	5.125
					RAD .079 ±008 2PL	.0720	.079	.082	.081
					.500 ±008	.501	.503	.502	.501
					.008	.010	.011	.010	.010
					.004	.006	.005	.006	.005
					.075 ±0008	.0754	.0757	.0755	.0758
					.087 ±0008	.0875	.0872	.0871	.0872
					⏥ .003	.0006	.001	.0015	.0015
						5	6	7	8
					.394	.3962	.3961	.3959	.3968
					5.118 ±007	5.126	5.125	5.123	5.126
					RAD .079 ±008 2PL	.082	.079	.081	.082
					.500 ±008	.502	.503	.503	.504
					.008	.010	.011	.009	.011
					.004	.006	.005	.006	.005
					.075 ±0008	.0755	.0757	.0751	.0756
					.087 ±0008	.0877	.0872	.0870	.0872
					⏥ .003	.0017	.002	.0015	.0020
						9			
					.394	.3975			
					5.118 ±007	5.125			
					RAD .079 ±008 2PL	.084			
					.500 ±008	.503			
					.008	.010			
					.004	.006			
					.075 ±0008	.0752			
					.087 ±0008	.0871			
					⏥ .003	.0015			

QTY 300 P/S# 8455

ANCHOR METAL FINISHING, INC.

BLACK OXIDE ON STEEL

"Specialists in the Field"

9355 BERNICE • SCHILLER PARK, ILLINOIS 60176 • PHONE: (708) 678-4304 • FAX: (708) 678-7331

Crafts Technology

P.O# 64975

METALEX
QA. DEPT.
ACCEPTED
DATE 8/22/06
BY KKB

P/L# 8455

Gentlemen:

This is to certify that parts listed below have been black-oxided in accordance with AMS 2485J (Aerospace) specifications.

Very truly yours,

Jonathan

ANCHOR METAL FINISHING, INC.

Shipping Ticket No. 269615

Your P.O. NO. 7530

Date 8-4-06

Part NO. L143-110702

Quantity 300

Stripco Inc.

• STEEL SLITTING AND EDGE CONDITIONING
• PRECISION COLD ROLLING

56598 Magnolia Drive • Mishawaka, IN 46545
Phone: (574) 258-7800 • Fax: (574) 258-7812

PACKING LIST

PACKING SLIP NUMBER
SLED D** 187483

~~517-645-2904~~

DUE DATE 3/24/05 TT

SOLD TO:	SHIP TO:
Alro Steel Jackson 3100 East High Street P.O. Box 927 Jackson, MI 49203	Alro Steel Pottenville 5059 Alro Park Drive Pottenville, MI 48876

DATE OF ORDER	DATE SHIPPED	CUSTOMER ORDER NO.	SHIPPED VIA	DEPT.	TERMS
3/08/05	3/30/05	PV PV 5077044	HILLTOP FARMS	90	1/2-10 NET 30

QTY. ORD.	JOB NUMBER	DESCRIPTION	QTY. SHIPPED	QTY. B.O.
	BILL-OF-LADING(=)	TRK DRIVER=) HILLTOP	PREPAID/S	
2,000	6355301	1/8 X .437" X 144.00" CR 1018		
	ORS WGT	2,199	2,199	
	TAG#	337369		
	LOCATION	CKA		CNT TOTAL
	PCS/COIL	990		990

CERTIFIED RECORD OF METALLURGICAL PROPERTIES

STRID#	Carb	Mang	Phos	Sulf	Sil	Alum	Chrm	Moly	Heat#
147220	.150	.61	.006	.007	.030	.029	.08	.027	H3689
Yld=	66,899 Ten=		77,427 Elg%=22.45 Bls= 0						

RECEIVED
MAR 30 2005
BY

ALRO STEEL/METAL
RT04483400

REJECTIONS WILL BE HONORED ONLY IF RETURNED IN ORIGINAL FORM SOLD.

A Service Charge of 1½% per month (18% per year) will be added to all invoices that are 30 days past the Date of Invoice. Title to merchandise does not pass until goods are fully paid for.
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CHECK BOX IF COLLECT ☐
Load Approved: CPT
Load must be secured and weather protected
Driver: [signature]

RECEIVED BY: X

DATE RECEIVED: 3-30-05

MSF 10.4.1.1 Rev.1

CUSTOMER COPY

CRAFTS TECHNOLOGY
Precision Fabrication of Ultra-Hard Materials

Crafts Technology
91 Joey Drive
Elk Grove Village, IL 60007
UPS ACCT# 4E3-E38

Ph: 847-758-3100
Fax: 847-758-0162

Pack List

Number: 8536 Date: 28-Aug-06

To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Ship To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Terms	Ship Via
Net 21 days	UPS

Quantity	Description
300 each	Part: L143-110702 Rev: 01 TAPER SHIM Job: 2717 PO: 64975-BL Line:
	Thank you for your order This is to certify that the materials, parts and/or processes furnished against the above referenced purchase order were manufactured in accordance with the customer drawing and revision level shown Crafts Technology/Quality Control Department Manufactured in the USA

906115725
5681

METALEX
QA. DEPT. MTX OC 18
ACCEPTED
DATE 9/11/06
BY KEB

8-28-06

ANCHOR METAL FINISHING, INC.

BLACK OXIDE ON STEEL

"Specialists in the Field"

4065 BERNICE · SCHILLER PARK, ILLINOIS 60176 · PHONE: (708) 678-4304 · FAX: (708) 678-7321

METALLOMTX
QA. DEPT. QC 18
ACCEPTED
DATE 9/11/06
BY KKB

P.O.# 64975
P/L# 8534

Gentlemen:

This is to certify that parts listed below have been black-oxided in accordance with AMS 2485J (Aerospace) specifications.

Very truly yours,

ANCHOR METAL FINISHING, INC.

Shipping Ticket No. 269453

Your P.O. NO. 7633

Date 08/25/06

Part NO. L143-110702

Quantity 300

Crafts Technology, Inc.

FINAL INSPECTION REPORT

DATE 08-25-06

INSPECTOR [illegible]

JOB NUMBER 2717

PART NUMBER 6143-110702

DESCRIPTION TAPER SHIM

CUSTOMER METALEX

DATE	SEQ	OPN		INSP CLK#	DRAWING DIM./TOLERANCE	ACTUAL MEASUREMENT NO 1	NO 2	NO 3	NO 4
					.394	.396	.396	.3955	.3932
					5.118 ±.007	5.125	5.126	5.124	5.125
					RAD .079 ±.008 2PL	.076	.074	.080	.082
					.500 ±.008	.501	.4999	.4996	.5015
					.008	.0102	.0108	.0107	.0106
					.004	.0053	.0045	.00057	.0050
					.075 ±.0008	.0755	.0755	.0752	.0755
					.087 ±.0008	.0872	.0873	.0872	.0875
					⏥ .003	.0025	.003	.004	.0025
						5	6		
					.394	.3955	.3955		
					5.118 ±.007	5.125	5.126		
					RAD .079 ±.008 2PL	.075	.073		
					.500 ±.008	.5011	.5022		
					.008	.0092	.011		
					.004	.0039	.004		
					.075 ±.0008	.0756	.0755		
					.087 ±.0008	.0876	.087		
					⏥ .003	.005	.003		

Stripco Inc.

• STEEL SLITTING AND EDGE CONDITIONING
• PRECISION COLD ROLLING

5698 Magnolia Drive • Mishawaka, IN 46545
Phone: (574) 258-7800 • Fax: (574) 258-7813

PACKING LIST

PACKING SLIP NUMBER
GLED
D** 187483

**EH-440-3997

DUE DATE 3/24/05 TT

SOLD TO:
Alro Steel Jackson
3100 East High Street
P.O. Box 927
Jackson, MI 49203

SHIP TO:
Alro Steel Pottersville
5059 Alro Park Drive
Pottersville, MI 48876

DATE OF ORDER	DATE SHIPPED	CUSTOMER ORDER NO.	SHIPPED VIA	DEPT.	TERMS
3/08/05	3/30/05	PV PO 5027044	HILLTOP FARMS	90	1/2-10 NET 30

QTY. ORD.	JOB NUMBER	DESCRIPTION	QTY. SHIPPED	QTY. B.O.
	BILL-OF-LADING**	TRK DRIVER** HILLTOP	PREPAID/S	
2,000	6352301	1/8 X .437" X 144.00" CR 1018		
	ORS WGT	2,197		
	TAG#	337369A	2,197	
	LOCATION	CKG		
	PCS/COIL	990		CNT TOTAL 990

CERTIFIED RECORD OF METALLURGICAL PROPERTIES

STRIP#	Carb	Mang	Phos	Sulf	Sil	Alum	Chrm	Moly	Heat#
147229	.150	.61	.006	.007	.030	.029	.08	.027	H3689
Yld=	66,899 Ten=		72,437 Elg%=22.45 Dia= 0						

RECEIVED MAR 30 2005 BY

ALRO STEEL/METAL
RT04483400

REJECTIONS WILL BE HONORED ONLY IF RETURNED IN ORIGINAL FORM SOLD.

A Service Charge of 1½% per month (18% per year) will be added to all invoices that are 30 days past the Date of Invoice. Title to merchandise does not pass until goods are fully paid for.
Claims for errors, deficiencies, or imperfections must be made within 10 days after receipt of goods. The Seller's responsibility for material in transit ceases when it passes into the hands of the transportation company. "We hereby certify that we have complied with all requirements of the Fair Labor Standards Act of 1938, as amended."

CHECK BOX IF COLLECT ☐
Load Approved: Cat
Load must be secured and weather protected
Driver:

RECEIVED BY: X
DATE RECEIVED: 3-30-05

CUSTOMER COPY

CRAFTS

CRAFTS TECHNOLOGY
Precision Fabrication of Ultra-Hard Materials

Crafts Technology
91 Joey Drive
Elk Grove Village, IL 60007
UPS ACCT# 4E3-E38

Ph: 847-758-3100
Fax: 847-758-0162

Pack List

Number: 8579 Date: 01-Sep-06

To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Ship To

Metalex Manufacturing, Inc.
5750 Cornell Road
Cincinnati, OH 45242
USA

Ph: 513-489-0507 Fax: 513-489-1020

Terms	Ship Via
Net 21 days	UPS

Quantity	Description
420 each	Part: L143-110702 Rev: 01 TAPER SHIM Job: 2717 PO: 64975-BL Line:
	Thank you for your order This is to certify that the materials, parts and/or processes furnished against the above referenced purchase order were manufactured in accordance with the customer drawing and revision level shown Crafts Technology/Quality Control Department Manufactured in the USA

9-5-06
Job# 5081/5725

METALEX
QA. DEPT.
ACCEPTED
DATE 10/12/06
BY KKB

ANCHOR METAL FINISHING, INC.

BLACK OXIDE ON STEEL

"Specialists in the Field"

9355 BERNICE · SCHILLER PARK, ILLINOIS 60176 · PHONE: (708) 678-4334 · FAX: (708) 678-7341

Gentlemen:

This is to certify that parts listed below have been black-finished in accordance with AMS 2485J (Aerospace) specifications.

Very truly yours,

Alex

ANCHOR METAL FINISHING, INC.

Shipping Ticket No. 269295

Your P.O. NO. 7654

Date 8/31/06

Part NO. L143-110 704

Quantity 421

Stripco Inc.

- STEEL SLITTING AND EDGE CONDITIONING
- PRECISION COLD ROLLING

5859 Magnolia Drive • Mishawaka, IN 46545
Phone: (574) 258-7800 • Fax: (574) 258-7812

PACKING LIST

PACKING SLIP NUMBER
SLED D** 187483

DUE DATE 3/24/05 TT

SOLD TO:
Alro Steel Jackson
3100 East High Street
P.O. Box 927
Jackson, MI 49203

SHIP TO:
Alro Steel Potterville
5859 Alro Park Drive
Potterville, MI 48876

S OF ORDER	DATE SHIPPED	CUSTOMER ORDER NO.	SHIPPED VIA	DEPT.	TERMS
1/08/05	3/30/05	PV PV 5077044	HILLTOP FARMS	90	1/2-10 NET 30

QTY. ORD.	JOB NUMBER	DESCRIPTION	QTY. SHIPPED	QTY. B.O.
	BILL-OF-LADING=>	TRK DRIVER=> HILLTOP	PREPAID/S	
2,000	6355301	1/8 X .437" X 144.00" CR 1018		
	OKS WGT	2,199	2,199	
	TAG#	337369		
	LOCATION	DKA		CNT TOTAL
	PCS/COIL	990		990

CERTIFIED RECORD OF METALLURGICAL PROPERTIES

STRIDE	Carb	Mang	Phos	Sulf	Sil	Alum	Chrm	Moly	Heat#
147270	.150	.61	.006	.007	.030	.029	.08	.027	H3689
Yld=	66,099 Ten=		77,427 Elg%=22.45 Dis=		0				

RECEIVED MAR 30 2005 By

ALRO STEEL/METAL RT04483400

REJECTIONS WILL BE HONORED ONLY IF RETURNED IN ORIGINAL FORM SOLD.

A Service Charge of 1½% per month (18% per year) will be added to all invoices that are 30 days past the Date of Invoice. This to merchandise does not pass until goods are fully paid for.
Claims for errors, deficiencies, or imperfections must be made within 10 days after receipt of goods. The Seller's responsibility for material in transit ceases when it passes into the hands of the transportation company. "We hereby certify that we have complied with all requirements of the Fair Labor Standards Act of 1938, as amended."

CHECK BOX IF COLLECT ☐
Load Approved: CAT
Load must be secured and weather protected
Driver: [signature]

RECEIVED BY: X

DATE RECEIVED: 3-30-05

CUSTOMER COPY

Crafts Technology, Inc.

FINAL INSPECTION REPORT

DATE 08-25-06

INSPECTOR [illegible]

JOB NUMBER 2717

PART NUMBER L143-110702

DESCRIPTION TAPER SHIM

CUSTOMER METALEX

DATE	SEQ	OPN		INSP CLK	DRAWING DIM./TOLERANCE	ACTUAL MEASUREMENT NO 1	NO 2	NO 3	NO 4
					.394	.396	.396	.3955	.3952
					5.118 ±.007	5.125	5.126	5.124	5.125
					RAD .079 ±.008 2PL	.076	.074	.080	.082
					.500 ±.008	.501	.4999	.4996	.5015
					.008	.0102	.0108	.0109	.0106
					.004	.0053	.005	.0057	.0056
					.075 ±.0008	.0755	.0755	.0752	.0755
					.087 ±.0008	.0872	.0873	.0872	.0875
					⏥ .003	.0025	.003	.001	.0025
						5	6		
					.394	.3955	.3955		
					5.118 ±.007	5.125	5.126		
					RAD .079 ±.008 2PL	.075	.073		
					.500 ±.008	.5011	.5022		
					.008	.0092	.011		
					.004	.0039	.004		
					.075 ±.0008	.0756	.0755		
					.087 ±.0008	.0876	.087		
					⏥ .003	.003	.003		

Reid Supply Company
A Division of Reid Entities
2265 Black Creek Road • Muskegon, MI 49444-2684
www.reidsupply.com mail@reidsupply.com
Phone: 800-253-0421
231-777-3951
Fax: 800-438-1145
231-773-4485

Job#5725

METALEX
QA. DEPT.
ACCEPTED
DATE 7/26/06
BY KKB

3597287

P.O. #: 64697-RB

Shipper No 03597287-0

Bill To: METALEX MFG INC
5750 CORNELL RD
CINCINNATI, OH 45242-2083

Ship To: METALEX MFG INC
5750 CORNELL RD
CINCINNATI, OH 45242-2083

Phone

Attn:

Customer No	Your P.O. No	Sched Date	Ship Via	Ship Date	Shipper No
29204	64697-RB	06/19/06	U.P.S.	07/10/06	03597287-0

Line	Order Qty	Item	Description	Qty Shipped	Back Order
1	1,056	KLI-66353	INSERT M8X1.25 X M12X1.25 THINWALL - SS	1,056	0
		4718		HS Tariff Code:	820510
				Country of Origin:	United States
		JOB#5725			

Total Number of Items: 1

Estimated Weight 11 lb 3.60 oz 5.096 kg

Opr: JAI Branch: 11 SLSM: 801

Picker:

All sales of products by Reid Supply Company are made on the terms contained in Reid Supply Company's standard Terms of Sale, which are incorporated by reference. If buyer has not otherwise agreed to those terms, then buyer's Acceptance of Delivery of, or Payment For, the goods will constitute buyer's agreement to the standard Terms of Sale. Reid Supply Company's standard Terms of Sale are available at www.reidsupply.com or by calling 800-253-0421 and requesting a copy.

UPS 6-0

RECEIVED
JUL 12 2006
METALEX MFG.
BY CD

CERTIFICATION OF COMPLIANCE
Reid Supply Company and it's divisions being ISO-9002 compliant does certify that according to our records the above material purchased was supplied in accordance with the description as illustrated in our catalog.

ALL ITEMS MANUFACTURED IN THE U.S.A UNLESS OTHERWISE NOTED.
THANK YOU VERY MUCH FOR YOUR ORDER

Cathy Reid, Document Control Supervisor

Packing List

Packing List

1 METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

(CALLER) RAY

YOUR PURCHASE ORDER NUMBER
65186-RB
Today's Date: 7/07/06

MCMASTER-CARR
200 AURORA INDUSTRIAL PKWY
AURORA OH 44202
IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

MCM NUMBER
1497054-01

Warehouse Location	McMaster Carr Part Number	Fill Quantity	Item Description	Your Line	Your Order	This Shipment
1-112-05 21-40	94613 A194	1 PK	NYLON HEX HEAD MACHINE SCREW 8-32 THREAD,1/2" LENGTH PKG= 100 EA/PK JOB # 5368	1	1 PK	1
1-295	91290 A330	1 PK	METRIC CLASS 12.9 ALLOY SOCKET HEAD CAP SCREW M6 THREAD,25 MM LENGTH,1 MM PITCH PKG= 100 EA/PK JOB # 5725 2 CERTIFICATE OF COMPLIANCE -This is to certify the above item(s) on your purchase order was supplied in accordance with the description and as illustrated in the catalog. Compliance Manager- Alberto Valedon	2	1 PK	1

METALEX MTX QC 18
QA. DEPT.
ACCEPTED
DATE 7/13/06
BY KKB

P/N L143-110+11
upsgnd

RECEIVED
JUL 10 2006
METALEX MFG.
BY CD

441

7 METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

(CALLER) GREG

YOUR PURCHASE ORDER NUMBER
64698-RB-5725
Today's Date: 6/19/06

MCMASTER-CARR
200 AURORA INDUSTRIAL PKWY
AURORA OH 44202
IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

MCM NUMBER
8854707-02

Warehouse Location	McMaster Carr Part Number	Fill Quantity	Item Description	Your Line	Your Order	This Shipment
1-289-04 06-45	91292 A147	3 PK	METRIC 18-8 SS SOCKET HEAD CAP SCREW M8 THREAD,20MM LENGTH,1.25MM PITCH PKG= 50 EA/PK 4	5	3 PK	3
1-290-07 25-86	91292 A156	50 PK	METRIC 18-8 SS SOCKET HEAD CAP SCREW M8 THREAD,55MM LENGTH,1.25MM PITCH PKG= 10 EA/PK 29	6	106 PK	50
			Balance of 56 PK shipped today from another McMaster-Carr warehouse			
1-290-05 23-19	91292 A136	5 PK	METRIC 18-8 SS SOCKET HEAD CAP SCREW M6 THREAD,18MM LENGTH,1MM PITCH PKG= 50 EA/PK 4	3	5 PK	5+
1-290-04 04-23	91292 A139	2 PK	METRIC 18-8 SS SOCKET HEAD CAP SCREW M6 THREAD,30MM LENGTH,1MM PITCH PKG= 50 EA/PK 2	4	2 PK	2
1-290-01 05-14	91292 A135	2 PK	METRIC 18-8 SS SOCKET HEAD CAP SCREW M6 THREAD,16MM LENGTH,1MM PITCH PKG= 100 EA/PK 2	2	2 PK	2
1-290-01 06-02	91292 A122	2 PK	METRIC 18-8 SS SOCKET HEAD CAP SCREW M4 THREAD,25MM LENGTH,.7MM PITCH PKG= 100 EA/PK 1	1	2 PK	2

533

7 METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

(CALLER) GREG

ORDER NUMBER
64698-RB-5725
Today's Date: 6/19/06

200 AURORA INDUSTRIAL PKWY
AURORA OH 44202
IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

MCM NUMBER
8854707-02

Warehouse Location	McMaster Carr Part Number	Fill Quantity	Item Description	Your Line	Your Order	This Shipment
1-295-01 05-82	91290 A330	3 PK	METRIC CLASS 12.9 ALLOY SOCKET HEAD CAP SCREW M6 THREAD,25 MM LENGTH,1 MM PITCH PKG= 100 EA/PK 5 P/N 4143-110111	7	3 PK	3
		*****	Information about the rest of your order		*****	
	92185 A151		316 STAINLESS STEEL SOCKET HEAD CAP SCREW Shipped 20 PK today from this McMaster-Carr warehouse Balance of 269 PK expected to ship by 7/5/2006	8	289 PK	
	92146 A545		18-8 STAINLESS STEEL SPRING LOCK WASHER Shipped 36 PK today from this McMaster-Carr warehouse	9	36 PK	
	92196 A197		18-8 STAINLESS STEEL SOCKET HEAD CAP SCREW Shipped 36 PK today from this McMaster-Carr warehouse	10	36 PK	
	98437 A104		18-8 SS SPRING WASHER FOR SCKT-HEAD CAP SCREW Shipped 73 PK today from another McMaster-Carr warehouse	11	73 PK	
	98017 A690		18-8 STAINLESS STEEL AN 960 FLAT WASHER Shipped 11 PK today from this McMaster-Carr warehouse	12	11 PK	
	92196 A146		18-8 STAINLESS STEEL SOCKET HEAD CAP SCREW Shipped 1 PK today from this McMaster-Carr warehouse	13	1 PK	

(PS GND)

RECEIVED
JUN 20 2006
METALEX MFG.
BY _____

6/21

WEIGHT 47

7 8854707-02 6
METALEX MANUFACTURING INC

MCMASTER-CARR
WAREHOUSE INSTRUCTIONS
LNS

PURCHASE ORDER
64698-RB-5725

CYCLE
044

PRT523

6/19/06 13:08 533 00006

14 METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

(CALLER) GREG

YOUR PURCHASE ORDER NUMBER
64698-RB-5725
Today's Date: 6/19/06

MCMASTER-CARR
200 AURORA INDUSTRIAL PKWY
AURORA OH 44202
IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

MCM NUMBER
8854707-01

Warehouse Location	McMaster Carr Part Number	Fill Quantity	Item Description	Your Line	Your Order	This Shipment
1-570-07 24-82	98437 A104	73 PK	18-8 SS SPRING WASHER FOR SCKT-HEAD CAP SCREW #6 SCREW SIZE,.148" ID,.216" OD,.03" MIN THICK PKG= 100 EA/PK 1 PAK	11	73 PK	73
1-701	91292 A156	56 PK	METRIC 18-8 SS SOCKET HEAD CAP SCREW M8 THREAD,55MM LENGTH,1.25MM PITCH PKG= 10 EA/PK 33 PAK Balance of 50 PK shipped today from another McMaster-Carr warehouse	6	106 PK	56
		*****	Information about the rest of your order		*****	
	91292 A122		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 2 PK today from another McMaster-Carr warehouse	1	2 PK	
	91292 A135		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 2 PK today from another McMaster-Carr warehouse	2	2 PK	
	91292 A136		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 5 PK today from another McMaster-Carr warehouse	3	5 PK	

888

14 METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

(CALLER) GREG

YOUR PURCHASE ORDER NUMBER
64698-RB-5725
Today's Date: 6/19/06

MCMASTER-CARR
200 AURORA INDUSTRIAL PKWY
AURORA OH 44202
IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

MCM NUMBER
8854707-01

Warehouse Location	McMaster Carr Part Number	Fill Quantity	Item Description	Your Line	Your Order	This Shipment
	91292 A139		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 2 PK today from another McMaster-Carr warehouse	4	2 PK	
	91292 A147		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 3 PK today from another McMaster-Carr warehouse	5	3 PK	
	91290 A330		METRIC CLASS 12.9 ALLOY SOCKET HEAD CAP SCREW Shipped 3 PK today from another McMaster-Carr warehouse	7	3 PK	
	92185 A151		316 STAINLESS STEEL SOCKET HEAD CAP SCREW Shipped 20 PK today from this McMaster-Carr warehouse Balance of 269 PK expected to ship by 7/5/2006	8	289 PK	
	92146 A545		18-8 STAINLESS STEEL SPRING LOCK WASHER Shipped 36 PK today from another McMaster-Carr warehouse	9	36 PK	
	92196 A197		18-8 STAINLESS STEEL SOCKET HEAD CAP SCREW Shipped 36 PK today from another McMaster-Carr warehouse	10	36 PK	
	98017 A690		18-8 STAINLESS STEEL AN 960 FLAT WASHER Shipped 11 PK today from another McMaster-Carr warehouse	12	11 PK	
	92196 A146		18-8 STAINLESS STEEL SOCKET HEAD CAP SCREW Shipped 1 PK today from another McMaster-Carr warehouse	13	1 PK	

UPS GND

RECEIVED
JUN 20 2006
METALEX MFG.
BY CD

6/21

WEIGHT 34

2 8854707-01 8
METALEX MANUFACTURING INC
02
02

MCMASTER-CARR
WAREHOUSE INSTRUCTIONS
LNS

PURCHASE ORDER
64698-RB-5725

CYCLE 040

SPUR 4

SHELF 404

PRTAL

6/19/06 13:06 888 00014

5 | METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

(CALLER) GREG

YOUR PURCHASE ORDER NUMBER
64698-RB-5725
Today's Date: 6/19/06

MCMASTER-CARR
200 AURORA INDUSTRIAL PKWY
AURORA OH 44202

IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

MCM NUMBER
8854707-03

Warehouse Location	McMaster Carr Part Number	Fill Quantity	Item Description	Your Line	Your Order	This Shipment
1- 98-06 24-08	92185 A151	20 PK	316 STAINLESS STEEL SOCKET HEAD CAP SCREW 6-32 THREAD,3/4" LENGTH PKG= 25 EA/PK 2 Balance of 269 PK expected to ship by 7/5/2006	8	289 PK	20 PKS
1- 99-01 06-41	92196 A146	1 PK	18-8 STAINLESS STEEL SOCKET HEAD CAP SCREW 6-32 THREAD,3/8" LENGTH PKG= 100 EA/PK	13	1 PK	1
1- 99-01 09-73	92196 A197	36 PK	18-8 STAINLESS STEEL SOCKET HEAD CAP SCREW 8-32 THREAD,3/4" LENGTH PKG= 100 EA/PK 20	10	36 PK	36
1-104-01 06-81	98017 A690	11 PK	18-8 STAINLESS STEEL AN 960 FLAT WASHER 5/16"SZ,NO. C516,.328"ID,.562"OD, .059"-.067"THK PKG= 3	12	11 PK	11
1-108-06 26-63	92146 A545	36 PK	18-8 STAINLESS STEEL SPRING LOCK WASHER #8 SCREW SIZE,.174" ID,.293" OD,.040" MIN THK PKG= 100 EA/PK 2	9	36 PK	36
		*****	Information about the rest of your order		*****	
	91292 A122		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 2 PK today from this McMaster-Carr warehouse	1	2 PK	

179

5 METALEX MANUFACTURING INC
5750 CORNELL RD
CINCINNATI OH 45242

(CALLER) GREG

ORDER NUMBER
64698-RB-5725
Today's Date: 6/19/06

200 AURORA INDUSTRIAL PKWY
AURORA OH 44202
IF THERE ARE ANY QUESTIONS ABOUT THIS SHIPMENT CONTACT OUR SALES DEPARTMENT
(330)995-5500

MCM NUMBER
8854707-03

Warehouse Location	McMaster Carr Part Number	Fill Quantity	Item Description	Your Line	Your Order	This Shipment
	91292 A135		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 2 PK today from this McMaster-Carr warehouse	2	2 PK	
	91292 A136		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 5 PK today from this McMaster-Carr warehouse	3	5 PK	
	91292 A139		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 2 PK today from this McMaster-Carr warehouse	4	2 PK	
	91292 A147		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 3 PK today from this McMaster-Carr warehouse	5	3 PK	
	91292 A156		METRIC 18-8 SS SOCKET HEAD CAP SCREW Shipped 50 PK today from this McMaster-Carr warehouse Shipped 56 PK today from another McMaster-Carr warehouse	6	106 PK	
	91290 A330		METRIC CLASS 12.9 ALLOY SOCKET HEAD CAP SCREW Shipped 3 PK today from this McMaster-Carr warehouse	7	3 PK	
	98437 A104		18-8 SS SPRING WASHER FOR SCKT-HEAD CAP SCREW Shipped 73 PK today from another McMaster-Carr warehouse	11	73 PK	

RECEIVED
JUN 20 2006
METALEX MFG.
BY CD

WEIGHT 27

5 8854707-03 4
METALEX MANUFACTURING INC

MCMASTER-CARR
WAREHOUSE INSTRUCTIONS
LNS

PURCHASE ORDER
64698-RB-5725

CYCLE
044

PRT114

6/19/06 13:08 179 00011

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111301	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER RIGHT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111300 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		CONFORMS	MTX QC 16	
NOTE: CLEAR ANODIZE	A1				
128 0 / -0.1	A5		127.927 - 127.965	MTX QC 16	
60	B2		59.95 - 60.03	MTX QC 16	
⌀4.1 THRU ⌀6.35 ↧ 17 24 PLACES	B4		4.058 - 4.133 6.33 - 6.36 x 16.97 - 16.99	MTX QC 16	
⊥ 0.04 A	A4		W/IN .04	MTX QC 16	
189 0 / -0.1	A3		188.926 - 188.95	MTX QC 16	
154.6 ±0.1	A3		154.57 - 154.62	MTX QC 16	
77.3 ±0.1	A4		77.275 - 77.322	MTX QC 16	
12.7 ±0.1	A4		12.68 - 12.73	MTX QC 16	
10.8 DRILL ↧ 20.5 M12x1.25 ISO – H TAP ↧ 13.5 6 PLACES	A4		10.8 x 20.5 CONFORMS	MTX QC 16	
26 ±0.1	A4		25.97 - 26.025	MTX QC 16	
56 ±0.1	A4		55.85 - 56.2	MTX QC 16	
32 ±0.1	B4		31.98 - 32.04	MTX QC 16	
47 ±0.1	B4		46.97 - 47.4	MTX QC 16	
50.35 ±0.1	B3		50.32 - 50.38	MTX QC 16	
20 ±0.1	B3		19.98 - 20.037	MTX QC 16	
5	B4		5	MTX QC 16	
5	B4		5	MTX QC 16	
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	B4		CONFORMS	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 3	QTY ACC	QTY REJ
MTX QC 16	[signature]	9/12/06		8	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111301	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER RIGHT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111300 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
5 DRILL ↓ 15 M6x1 ISO – H TAP ↓ 12.7 8 PLACES	C4		CONFORMS	MTX QC 16	
2X 60 ±0.1	C3		59.97-60.03	MTX QC 16	
3X 15 ± 0.1	C3		14.972-15.015	MTX QC 16	
27 ± 0.1	C3		26.963-27.07	MTX QC 16	
10	B4		9.96-10.03	MTX QC 16	
15	B3		14.955-15.05	MTX QC 16	
4.5 ± 0.1	D4		4.475-4.57	MTX QC 16	
15 ± 0.1	D4		14.982-15.032	MTX QC 16	
12X 9.5	D3		9.46-9.55	MTX QC 16	
10X 15 ± 0.1= 150 ± 0.1	D3		14.99-15.036 = 149.96-150.038	MTX QC 16	
22X 45° X .2 FOUR SIDES	D3		45° X .2 FOUR SIDES	MTX QC 16	
29 DRILL ↓ THRU 8-32 UNC-2B TAP ↓ 10 12 PLACES	D4		CONFORMS	MTX QC 16	
2X 45° X .2 THREE SIDES	D2		45° X .2 THREE SIDES	MTX QC 16	
17	C4		17	MTX QC 16	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	C4		CONFORMS	MTX QC 16	
10 X 15 ± 0.05 = 150 ± 0.05	C3		14.99-15.04 = 149.96-150.04	MTX QC 16	
15 ± 0.05	C4		14.986-15.04	MTX QC 16	
12 ± 0.05	C4		11.981-12.019	MTX QC 16	
4.2 0 / -0.1	D5		4.185-4.135	MTX QC 16	
45°	D6		45°	MTX QC 16	
(63.5)	D6		REFERENCE	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 3	QTY ACC	QTY REJ
MTX QC 16	[signature]	9/12/06		8	0

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111301	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER RIGHT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111300 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
45° X 10	D6		45° x 10	MTX QC 16	
0.5	D6		.47 - .50	MTX QC 16	
2X 7.94	D6		7.904 - 7.996	MTX QC 16	
48 ± 0.1	C6		47.968-48.065	MTX QC 16	
5/16 DRILL ⇓ 21 3/8 -16 UNC-2B TAP ⇓ 17 2 PLACES	C6		CONFORMS	MTX QC 16	
-A-	C6		DATUM	MTX QC 16	
/ / 0.04	C6		within .04	MTX QC 16	
29 ±0.1	C6		28.95 - 29.06	MTX QC 16	
10 ± 0.1	C5		9.94 - 10.03	MTX QC 16	
3X 29	C5		28.98 - 29.052	MTX QC 16	
30 0 / -0.03	C6		30 - 29.972	MTX QC 16	
49 0 / -0.1	C6		48.96 - 48.987	MTX QC 16	
10 ± 0.1	C5		9.96 - 10.05	MTX QC 16	
27 0 / -0.1	C5		26.967-26.985	MTX QC 16	
67 +0.1 / 0	D5		67.005 - 67.02	MTX QC 16	
32	D5		31.928 - 32.05	MTX QC 16	
8 0 / -0.1	D5		7.93 - 8	MTX QC 16	
SECTION A-A					
24X 9.5 +0.05 / 0	D1		9.5 - 9.545	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 3 OF 3	QTY ACC	QTY REJ
MTX QC 16	[signature]	9/12/06		8	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111201	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER RIGHT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111200 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		Conforms	8	
NOTE: CLEAR ANODIZE	A1				
128 0 / -0.1	A3		127.920 - 127.955	8	
60	B3		59.975 - 60.025	8	
⌀4.1 THRU ⌀6.35 ↧ 17 24 PLACES	A3		4.056 - 4.140 6.304 - 6.355 x 16.954 - 16.9978	8	
⌖ 0.04 A	A3		Min. .04	8	
189 0 / -0.1	A4		188.923 - 188.954	8	
154.6 ±0.1	A4		154.58 - 154.64	8	
77.3 ±0.1	A4		77.27 - 77.35	8	
12.7 ±0.1	A3		12.667 - 12.723	8	
10.8 DRILL ↧ 20.500 M12x1.25 ISO – H TAP ↧ 13.5 6 PLACES	A5		Conforms	8	
26 ±0.1	A5		25.952 - 26.03	8	
56 ±0.1	A6		55.947 - 56.025	8	
32 ±0.1	B6		31.97 - 32.042	8	
47 ±0.1	B5		46.945 - 47.054	8	
50.35 ±0.1	B5		50.32 - 50.38	8	
20 ±0.1	B4		19.982 - 20.025	8	
5	B3		5	8	
5	B3		5	8	
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	B3		Conforms	8	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 3	QTY ACC	QTY REJ
MTX 06 '6	[signature]	9/20/06		8	0

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111201	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER RIGHT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111200 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
5 DRILL ↓ 15 M6x1 ISO – H TAP ↓ 12.7 8 PLACES	C3		CONFORMS	8	
2X 60 ±0.1	C4		59.97-60.04	8	
3X 15 ± 0.1	C5		14.96-15.042	8	
27 ± 0.1	C5		26.98-27.05	8	
10	B5		9.96-10.045	8	
15	B5		14.952-15.045	8	
4.5 ± 0.1	D3		4.462-4.530	8	
15 ± 0.1	D3		14.972-15.04	8	
12X 9.5	D5		9.43-9.572	8	
10X 15 ± 0.1= 150 ± 0.1	D4		14.94-15.07 = 149.952-150.07	8	
22X 45° X .2 FOUR SIDES	D4		45° X .2 FOUR SIDES	8	
29 DRILL ↓ THRU 8-32 UNC-2B TAP ↓ 10 12 PLACES	D3		CONFORMS	8	
2X 45° X .2 THREE SIDES	D5		45° X .2 THREE SIDES	8	
10	C3		10	8	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	C3		CONFORMS	8	
10 X 15 ± 0.05 = 150 ± 0.05	C4		14.97-15.03 = 149.975-150.035	8	
15 ± 0.05	C3		14.972-15.022	8	
12 ± 0.05	C3		11.98-12.03	8	
4.2 0 / -0.1	D2		4.12 - 4.185	8	
45°	D2		45°	8	
(63.5)	D1		REFERENCE	8	

STAMP	INSPECTED BY	DATE	PAGE	QTY ACC	QTY REJ
MTX QC 16	Bruce Hubbard	9/20/06	2 OF 3	8	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111201	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER RIGHT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111200 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
45° X 10	D1		45° X 10	8	
0.5	D1		.469 - .55	8	
2X 7.94	D1		7.90 - 7.98	8	
48 ± 0.1	D1		47.97 - 48.04	8	
5/16 DRILL ⇓ 21 3/8 -16 UNC-2B TAP ⇓ 17 2 PLACES	C1		Conforms	8	
-A-	C1		DATUM	8	
/ / 0.04	C1		w/in .04	8	
29 ±0.1	C1		28.955 - 29.042	8	
10 ± 0.1	C2		9.95 - 10.04	8	
3X 29	C2		28.962 - 29.05	8	
30 0 / -0.03	C1		29.97 - 30.0	8	
49 0 / -0.1	C1		48.967 - 49.0	8	
10 ± 0.1	C2		9.972 - 10.035	8	
27 0 / -0.1	C2		26.965 - 27.0	8	
67 +0.1 / 0	D2		67.02 - 67.07	8	
32	D2		31.94 - 32.05	8	
8 0 / -0.1	D2		7.92 - 7.985	8	
SECTION A-A					
24X 9.5 +0.05 / 0	D6		9.5 - 9.53	8	

STAMP	INSPECTED BY	DATE	PAGE	QTY ACC	QTY REJ
MTX QC 16	[signature]	9/20/06	3 OF 3	8	0

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5725	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111101	REV	P.O. Number 5410359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 226-228-230-232-318 320-322-324-326-328-330-332		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		CONFORMS	MTX QC 16	
NOTE: 1. CLEAR ANODIZE	A1		CONFORMS	MTX QC 16	
NOTE 2. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 13 TO 79. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 80 TO 146. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 147 TO 213.	A2		CONFORMS ↓	MTX QC 16	
128 0 / -0.1	B1		127.92 - 128.00	MTX QC 16	
60	C2		59.97 - 60.03	MTX QC 16	
⌀4.1 THRU ⌀6.35 ↧ 17 132 PLACES	B2		4.1 THRU 6.35 X17 132 PLACES	MTX QC 16	
⊥ |0.04|A	B6		W/IN .04	MTX QC 16	
1005 0 / -0.1	B4		1004.93 - 1004.99	MTX QC 16	
979.6 ±0.1	B4		979.55 - 979.65	MTX QC 16	
132.55 ±0.1	B3		132.50 - 132.60	MTX QC 16	
6X 120 ±0.1	B4		119.96 - 120.04	MTX QC 16	
12.7 ±0.1	B2		12.66 - 12.76	MTX QC 16	
10.8 DRILL ↧ 20.5 M12x1.25 ISO – H TAP ↧ 13.5 18 PLACES	B6		10.8 X 20.5 18 PLC. CONFORMS	MTX QC 16	
26 ±0.1	B7		25.93 - 26.07	MTX QC 16	
56 ±0.1	B7		55.95 - 56.02	MTX QC 16	
32 ±0.1	C7		32.00 - 32.06	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 4	QTY ACC	QTY REJ
MTX QC 16	JAMES M GIFFEN / 6.4.	11/9/06		12	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5725	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name: N/A		Part No.: L143-111101	REV	P.O. Number: 5A10359
	Date Rec'd: N/A	P.O. No.: N/A	Part Name: LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 226-228-230-232-318 320-322-324-326-328-330-332		Customer Name: ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
47 ±0.1	C7		46.92 - 47.05	MTX QC 16	
2X 6.35	C2		6.36 - 6.40	MTX QC 16	
75.5 ±0.1	C3		75.47 - 75.56	MTX QC 16	
20 ±0.1	C3		19.97 - 20.06	MTX QC 16	
909.5 ± 0.1	C4		909.46 - 909.59	MTX QC 16	
20 ±0.1	C6		19.92 - 20.05	MTX QC 16	
5	C6		5	MTX QC 16	
5	C6		5	MTX QC 16	
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	C6		CONFORMS	MTX QC 16	
5 DRILL ↓ 15 M6x1 ISO – H TAP ↓ 12.7 38 PLACES	D4		5 X 15 DP CONFORMS	MTX QC 16	
16X 60 ±0.1	D2		59.94 - 60.05	MTX QC 16	
17X 15 ± 0.1	D2		14.91 - 15.01	MTX QC 16	
18 ± 0.1	D2		17.97 - 18.06	MTX QC 16	
10	D6		10	MTX QC 16	
15	C7		15	MTX QC 16	
10.5 ± 0.1	E2		10.45 - 10.55	MTX QC 16	
15 ± 0.1	E2		14.95 - 15.03	MTX QC 16	
66X 9.5	E2		9.45 - 9.55	MTX QC 16	
65X 15 ± 0.1 = 975 ± 0.1	E4		14.93 - 15.08 = 974.92 - 975.06	MTX QC 16	
132X 45° X .2 FOUR SIDES	E2		45 X .2	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 4	QTY ACC	QTY REJ
MTX QC 16	JAMES M. GAFFEN / GA	11/9/06		12	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 20060-5725	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111101	REV	P.O. Number 5A10 359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 226-228-230-232-318-320 322-324-326-328-330-332		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
29 DRILL ↓ THRU 8-32 UNC-2B TAP ↓ 10 67 PLACES	E5		CONFORMS	MTX QC 16	
2X 45° X .2 THREE SIDES	E2		45 x .2	MTX QC 16	
15.5	E3		15.5	MTX QC 16	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	D6		CONFORMS	MTX QC 16	
65 X 15 ± 0.05 = 975 ± 0.05	D5		14.973 - 15.031 = 974.97 - 97.503	MTX QC 16	
15 ± 0.05	D2		14.97 - 15.03	MTX QC 16	
9.25	E6		9.25	MTX QC 16	
3 ± 0.05	D2		2.99 - 3.02	MTX QC 16	
4.2 0 / -0.1	E7		4.17 - 4.2	MTX QC 16	
45°	E8		45°	MTX QC 16	
(63.5)	E8		REFERENCE	MTX QC 16	
45° X 10	E8		45° x 10	MTX QC 16	
0.5	E8		.5	MTX QC 16	
2X 7.94	E8		7.94 2X	MTX QC 16	
48 ± 0.1	E8		47.984 - 48.059	MTX QC 16	
5/16 DRILL ↓ 21 3/8 -16 UNC-2B TAP ↓ 17 2 PLACES	D7		CONFORMS	MTX QC 16	
-A-	D8		DATUM	MTX QC 16	
/ / 0.04	D8		W/IN .04	MTX QC 16	
29 ±0.1	D8		28.96 - 29.03	MTX QC 16	
10 ± 0.1	D7		9.99 - 10.05	MTX QC 16	
3X 29	D7		29 3X	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 3 OF 4	QTY ACC	QTY REJ
MTX QC 16	JAMES M GIFFEN/GM	11/9/06		12	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5725	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111101	REV	P.O. Number 5410359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 226-228-230-232-318-320 322-324-326-328-330-332		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
30 0 / -0.03	D8		29.98 - 30.0	MTX QC 16	
49 0 / -0.1	D8		48.93 - 49.0	MTX QC 16	
10 ± 0.1	E8		9.95 - 10.07	MTX QC 16	
27 0 / -0.1	E7		26.95 - 26.99	MTX QC 16	
67 +0.1 / 0	E7		67.01 - 67.06	MTX QC 16	
32	E7		32	MTX QC 16	
8 0 / -0.1	E7		7.93 - 7.99	MTX QC 16	
SECTION A-A					
134X 9.5 +0.05 / 0	E1		9.50 - 9.54	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE4 OF4	QTY ACC	QTY REJ
MTX QC 16	JAMES M. GIFFEN / G.H.	11/9/06		12	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5725	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111101	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 118/120/122/124/126/128 130/132/218/220/222/224		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		CONFORMS	MTX QC 16	
NOTE: 1. CLEAR ANODIZE	A1		CONFORMS	MTX QC 16	
NOTE 2. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 13 TO 79. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 80 TO 146. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 147 TO 213.	A2		CONFORMS ↓	MTX QC 16	
128 0 / -0.1	B1		127.92 - 128.00	MTX QC 16	
60	C2		59.97 - 60.03	MTX QC 16	
⌀4.1 THRU ⌀6.35 ↧ 17 132 PLACES	B2		4.1 THRU 6.35 X17 132 PLACES	MTX QC 16	
⌖ 0.04 A	B6		W/IN .04	MTX QC 16	
1005 0 / -0.1	B4		1004.93 - 1004.99	MTX QC 16	
979.6 ±0.1	B4		979.55 - 979.65	MTX QC 16	
132.55 ±0.1	B3		132.50 - 132.60	MTX QC 16	
6X 120 ±0.1	B4		119.96 - 120.04	MTX QC 16	
12.7 ±0.1	B2		12.66 - 12.76	MTX QC 16	
10.8 DRILL ↧ 20.5 M12x1.25 ISO – H TAP ↧ 13.5 18 PLACES	B6		10.8 X 20.5 18 PLC. CONFORMS	MTX QC 16	
26 ±0.1	B7		25.93 - 26.07	MTX QC 16	
56 ±0.1	B7		55.95 - 56.02	MTX QC 16	
32 ±0.1	C7		32.00 - 32.06	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 4	QTY ACC	QTY REJ
MTX QC 16	JAMES M. GIFFEN / GM	11/9/06		12	0

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 20006-5925	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111101	REV	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 118-120-122-124-126-128 130-132-134-220-224		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
47 ±0.1	C7		46.92 - 47.05	MTX QC 16	
2X 6.35	C2		6.36 - 6.40	MTX QC 16	
75.5 ±0.1	C3		75.47 - 75.56	MTX QC 16	
20 ±0.1	C3		19.97 - 20.06	MTX QC 16	
909.5 ± 0.1	C4		909.46 - 909.59	MTX QC 16	
20 ±0.1	C6		19.92 - 20.05	MTX QC 16	
5	C6		5	MTX QC 16	
5	C6		5	MTX QC 16	
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	C6		CONFORMS	MTX QC 16	
5 DRILL ↧ 15 M6x1 ISO – H TAP ↧ 12.7 38 PLACES	D4		5 X 15 DP CONFORMS	MTX QC 16	
16X 60 ±0.1	D2		59.94 - 60.05	MTX QC 16	
17X 15 ± 0.1	D2		14.91 - 15.01	MTX QC 16	
18 ± 0.1	D2		17.97 - 18.06	MTX QC 16	
10	D6		10	MTX QC 16	
15	C7		15	MTX QC 16	
10.5 ± 0.1	E2		10.45 - 10.55	MTX QC 16	
15 ± 0.1	E2		14.95 - 15.03	MTX QC 16	
66X 9.5	E2		9.45 - 9.55	MTX QC 16	
65X 15 ± 0.1 = 975 ± 0.1	E4		14.93 - 15.08 = 974.92 - 975.06	MTX QC 16	
132X 45° X .2 FOUR SIDES	E2		45 X .2	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 4	QTY ACC	QTY REJ
MTX QC 16	JAMES M. GIFFEN / GH.	11/9/06		12	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 20060-51125	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111101	REV	P.O. Number SA10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 118-120-122-124-126-128 130-132-218-220-222-224		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
29 DRILL ⇓ THRU 8-32 UNC-2B TAP ⇓ 10 67 PLACES	E5		CONFORMS	MTX QC 16	
2X 45° X .2 THREE SIDES	E2		45 x .2	MTX QC 16	
15.5	E3		15.5	MTX QC 16	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	D6		CONFORMS	MTX QC 16	
65 X 15 ± 0.05 = 975 ± 0.05	D5		14.973 - 15.031 = 974.97-97.503	MTX QC 16	
15 ± 0.05	D2		14.97 - 15.03	MTX QC 16	
9.25	E6		9.25	MTX QC 16	
3 ± 0.05	D2		2.99 - 3.02	MTX QC 16	
4.2 0 / -0.1	E7		4.17 - 4.2	MTX QC 16	
45°	E8		45°	MTX QC 16	
(63.5)	E8		REFERENCE	MTX QC 16	
45° X 10	E8		45° x 10	MTX QC 16	
0.5	E8		.5	MTX QC 16	
2X 7.94	E8		7.94 2X	MTX QC 16	
48 ± 0.1	E8		47.984 - 48.059	MTX QC 16	
5/16 DRILL ⇓ 21 3/8 -16 UNC-2B TAP ⇓ 17 2 PLACES	D7		CONFORMS	MTX QC 16	
-A-	D8		DATUM	MTX QC 16	
/ / 0.04	D8		w/IN .04	MTX QC 16	
29 ±0.1	D8		28.96 - 29.03	MTX QC 16	
10 ± 0.1	D7		9.99 - 10.05	MTX QC 16	
3X 29	D7		29 3X	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 3 OF 4	QTY ACC	QTY REJ
MTX QC 16	JAMES M GIFFEN/GG	11/9/06		12	Ø

MX!010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5925	Qty 12

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111101	REV	P.O. Number
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER MIDDLE MAGNET STRUCTURE BASE		
At Oper.	Serial Numbers: 118-120-122-124-126-128 130-132-218-220-222-224		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
30 0 / -0.03	D8		29.98 - 30.0	MTX QC 16	
49 0 / -0.1	D8		48.93 - 49.0	MTX QC 16	
10 ± 0.1	E8		9.95 - 10.07	MTX QC 16	
27 0 / -0.1	E7		26.95 - 26.99	MTX QC 16	
67 +0.1 / 0	E7		67.01 - 67.06	MTX QC 16	
32	E7		32	MTX QC 16	
8 0 / -0.1	E7		7.93 - 7.99	MTX QC 16	
SECTION A-A					
134X 9.5 +0.05 / 0	E1		9.50 - 9.54	MTX QC 16	

STAMP	INSPECTED BY	DATE	PAGE 4 OF 4	QTY ACC	QTY REJ
MTX QC 16	JAMES M. GUFFEY	11/9/06		12	0

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd 1 Cincinnati, OH 45242 1 (513) 489-0567	Job No. 2006 – 5725	Qty 9

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
AI Oper. N/A	Serial Numbers: L143-111000 / -128 /-228/-328/-130/--230/-330/-132/-232/-332		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		ACCEPT	9	
NOTE: 1. CLEAR ANODIZE	A1			9	
NOTE 2. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 13 TO 79. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 80 TO 146. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 147 TO 213.	A2		ACCEPT ↓	9	
128 0 / -0.1	B2		127.94-128	9	
60	C3		59.95-60.03	9	
Ø4.1 THRU ⌴Ø6.35 ↧ 17 132 PLACES	B3		4.015-4.1 6.310-6.38 X 16.94-17 DP.	9	
⊥ 0.04 A	B3		W/in .04	9	
1005 0 / -0.1	A3		1004.9 - 1005	9	
979.6 ±0.1	B5		979.54-979.63	9	
132.55 ±0.1	B6		132.50-132.62	9	
6X 120 ±0.1	B6		119.938-120.03	9	
12.7 ±0.1	B7		12.64-12.752	9	
10.8 DRILL ↧ 20.5 M12x1.25 ISO – H TAP ↧ 13.5 18 PLACES	A4		Conforms	9	
26 ±0.1	B7		25.94-26.02	9	
56 ±0.1	B8		55.97-56.052	9	
32 ±0.1	C8		31.955-32.048	9	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/18/06		9	Ø

MX1010 (7/98)

Metalex Custom Made Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 6725	Qty 9

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -128 /-228/-328/-130/--230/-330/-132/-232/-332		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
47 ±0.1	C7		46.94- 47.04	9	
2X 6.35	C7		6.33 -6.39	9	
75.5 ±0.1	C6		75.45 - 75.54	9	
20 ±0.1	C6		19.93- 20.04	9	
909.5 ± 0.1	C5		909.43-909.57	9	
20 ±0.1	C3		19.952 - 20.04	9	
5	C3		5	9	
5	C3		5	9	
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	C3		Conforms	9	
5 DRILL ↧ 15 M6x1 ISO – M TAP ↧ 12.7 38 PLACES	D3		Conforms	9	
16X 60 ±0.1	D7		59.94 - 60.06	9	
17X 15 ± 0.1	D7		14.955 - 15.04	9	
18 ± 0.1	D7		17.96 - 18.025	9	
10	D7		9.94 - 10.06	9	
15	C7		14.948 - 15.04	9	
10.5 ± 0.1	E7		10.462 - 10.53	9	
15 ± 0.1	E7		14.98 - 15.045	9	
66X 9.5	E7		9.44 - 9.538	9	
65X 15 ± 0.1 = 975 ± 0.1	E5		14.96 - 15.048 = 974.97 - 975.05	9	
132X 45° X .2 FOUR SIDES	E7		45° X .2 FOUR SIDES	9	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/18/06		9	0

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 9

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -128 /-228/-328/-130/--230/-330/-132/-232/-332		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
29 DRILL ↧ THRU 8-32 UNC-2B TAP ↧ 10 67 PLACES	E5		CONFORMS	9	
2X 45° X .2 THREE SIDES	E7		45° X .2 THREE SIDES	9	
12	E3		12	9	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	D3		CONFORMS	9	
65 X 15 ± 0.05 = 975 ± 0.05	D5		14.965 15.028 = 974.955-975.025	9	
15 ± 0.05	D7		14.972 - 15.04	9	
3 ± 0.05	D7		2.98 - 3.032	9	
4.2 0 / -0.1	E2		4.1 - 4.2	9	
45°	E1		45°	9	
(63.5)	E1		REFERENCE	9	
45° X 10	E1		45° X 10	9	
0.5	E1		.47 - .51	9	
2X 7.94	E1		7.92 - 7.975	9	
48 ± 0.1	E1		47.93 - 48.06	9	
5/16 DRILL ↧ 21 3/8 -16 UNC-2B TAP ↧ 17 2 PLACES	D1		CONFORMS	9	
-A-	D1		DATUM	9	
▱ 0.04	D1		W/IN .04	9	
29 ±0.1	D1		28.94 - 29.06	9	
10 ± 0.1	D2		9.95 - 10.055	9	
3X 29	D2		28.952 - 29.055	9	
30 0 / -0.03	D1		29.977 - 30	9	

STAMP	INSPECTED BY	DATE	PAGE	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/18/06	3 OF 4	9	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513)489-0507	Job No. 2006 – 5725	Qty 9

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -128 /-228/-328/-130/--230/-330/-132/-232/-332		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
49 0 / -0.1	D1		48.93 - 49	9	
10 ± 0.1	D2		9.94 - 10.052	9	
27 0 / -0.1	E2		26.92 - 26.98	9	
67 +0.1 / 0	E2		67.02 - 67.08	9	
32	E2		31.945 - 32.06	9	
8 0 / -0.1	E2		7.93 - 8.0	9	
SECTION A-A					
134X 9.5 +0.05 / 0	E8		9.5 - 9.55	9	

STAMP	INSPECTED BY	DATE	PAGE 4 OF 4	QTY ACC	QTY REJ
MTX OC 16	[signature]	10/18/06		9	Ø

METALEX Custom Machinery and Parts	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 -- 5725	Qty 5

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111000	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Open N/A	Serial Numbers: L143-111000 / -122 /-222/-322/-124/--224/-324/-126/-226/-326		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		Conforms	9	
NOTE: 1. CLEAR ANODIZE	A1				
NOTE 2. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 13 TO 79. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 80 TO 146. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 147 TO 213.	A2		Conforms ↓	9	
128 0 / -0.1	B2		127.945 - 128	9	
60	C3		59.96 - 60.01	9	
Ø4.1 THRU ↓ Ø6.35 ↧ 17 132 PLACES	B3		4.013 - 4.1 6.319 - 6.37 x 16.941 - 17 DP.	9	
⊥ 0.04 A	B3		w/in .04	9	
1005 0 / -0.1	A3		1004.9 - 1005	9	
979.6 ±0.1	B5		979.54 - 979.63	9	
132.55 ±0.1	B6		132.51 - 132.61	9	
60 120 ±0.1	B6		119.93 - 120.06	9	
12.7 ±0.1	B7		12.63 - 12.77	9	
10.8 DRILL ↧ 20.5 M12x1.25 ISO – H TAP ↧ 13.5 8 PLACES	A4		Conforms	9	
26 ±0.1	B7		25.96 - 26.03	9	
56 ±0.1	B8		55.94 - 56.06	9	
32 ±0.1	C8		31.94 - 32.03	9	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/18/06		9	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd. ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2008 – 5725	Qty 9

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -122 /-222/-322/-124/--224/-324/-126/-226/-326		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
47 ±0.1	C7		46.93-47.07	9	
2X 6.35	C7		6.337-6.37	9	
75.5 ±0.1	C6		75.47-75.58	9	
20 ±0.1	C6		19.94-20.06	9	
909.5 ± 0.1	C5		909.46-909.53	9	
20 ±0.1	C3		19.96-20.07	9	
5	C3		5	9	
5	C3		5	9	
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	C3		CONFORMS	9	
5 DRILL ↧ 15 M6x1 ISO – H TAP ↧ 12.7 38 PLACES	D3		CONFORMS	9	
16X 60 ±0.1	D7		59.93-60.072	9	
17X 15 ± 0.1	D7		14.935-15.057	9	
18 ± 0.1	D7		17.97-18.03	9	
10	D7		9.93-10.04	9	
15	C7		14.96-15.03	9	
10.5 ± 0.1	E7		10.47-10.58	9	
15 ± 0.1	E7		14.96-15.04	9	
66X 9.5	E7		9.43-9.57	9	
65X 15 ± 0.1 = 975 ± 0.1	E5		14.94-15.03 = 974.95-975.04	9	
132X 45° X .2 FOUR SIDES	E7		45° X .2 FOUR SIDES	9	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/18/06		9	0

MX1010 (7/98)

METALEX Custom Steel Machinery and Parts	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 9

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -122 /-222/-322/-124/--224/-324/-126/-226/-326		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
29 DRILL ↧ THRU 8-32 UNC-2B TAP ↧ 10 67 PLACES	E5		CONFORMS	9	
2X 45° X .2 THREE SIDES	E7		45° X .2 THREE SIDES	9	
12	E3		12	9	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	D3		CONFORMS	9	
65 X 15 ± 0.05 = 975 ± 0.05	D5		14.972-15.03 = 974.96-975.05	9	
15 ± 0.05	D7		14.98-15.012	9	
3 ± 0.05	D7		2.982-3.035	9	
4.2 0 / -0.1	E2		4.2-4.1	9	
45°	E1		45°	9	
(63.5)	E1		REFERENCE	9	
45° X 10	E1		45° X 10	9	
0.5	E1		.47-.54	9	
2X 7.94	E1		7.912-7.98	9	
48 ± 0.1	E1		47.93-48.07	9	
5/16 DRILL ↧ 21 3/8 -16 UNC-2B TAP ↧ 17 2 PLACES	D1		CONFORMS	9	
-A-	D1		DATUM	9	
▱ 0.04	D1		w/in .04 (RESTRAINED)	9	
29 ±0.1	D1		28.93-29.075	9	
10 ± 0.1	D2		9.94-10.08	9	
3X 29	D2		28.93-29.06	9	
30 0 / -0.03	D1		29.97-30	9	

STAMP	INSPECTED BY	DATE	PAGE 3 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/18/06		9	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd	Cincinnati, OH 45242	(513) 489-0507	Job No. 2006 – 5725	Qty 9

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -122 /-222/-322/-124/--224/-324/-126/-226/-326		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
49 0 / -0.1	D1		48.95-49.0	9	
10 ± 0.1	D2		9.93-10.06	9	
27 0 / -0.1	E2		26.935-26.99	9	
67 +0.1 / 0	E2		67 - 67.07	9	
32	E2		31.94-32.04	9	
8 0 / -0.1	E2		7.9-8.0	9	
SECTION A-A					
134X 9.5 +0.05 / 0	E8		9.5-9.55	9	

STAMP	INSPECTED BY	DATE	PAGE 4 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/18/06		9	Ø

MX1010 (7/98)

Metalex Quality Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd. ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5725	Qty 6

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -118 / -218 / -318 / -120 / -220 / -320		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		CONFORMS	6	
NOTE: 1. CLEAR ANODIZE	A1				
NOTE 2. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 13 TO 79. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 80 TO 146. ONE THIRD OF THE PARTS SHOULD HAVE NUMBERS FROM 147 TO 213.	A2		CONFORMS ↓	6	
128 0 / -0.1	B2		127.92-127.98	6	
60	C3		59.97-60.02	6	
Ø4.1 THRU ⌴ Ø6.35 ↧ 17 132 PLACES	B3		4.051 - 4.107 6.317 - 6.393 X 16.94 -17	6	
⊥ 0.04 A	B3		W/in .04	6	
1005 0 / -0.1	A3		1004.93- 1004.99	6	
979.6 ±0.1	B5		979.57-979.63	6	
132.55 ±0.1	B6		132.49 - 132.572	6	
6X 120 ±0.1	B6		119.93- 120.047	6	
12.7 ±0.1	B7		12.638-12.75	6	
10.8 DRILL ↧ 20.5 M12x1.25 ISO - H TAP ↧ 13.5 18 PLACES	A4		CONFORMS	6	
26 ±0.1	B7		25.94-26.03	6	
56 ±0.1	B8		55.97 - 56.042	6	
32 ±0.1	C8		31.948- 32.032	6	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/19/06		6	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2008-5725	Qty 6

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -118 / -218 / -318 / -120 / -220 / -320		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
47 ±0.1	C7		46.92 - 47.02	6	
2X 6.35	C7		6.337 - 6.368	6	
75.5 ±0.1	C6		75.47 - 75.53	6	
20 ±0.1	C6		19.956 - 20.032	6	
909.5 ± 0.1	C5		909.48 - 909.55	6	
20 ±0.1	C3		19.96 - 20.04	6	
5	C3		5	6	
5	C3		5	6	
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	C3		ACCEPT	6	
5 DRILL ↧ 15 M6x1 ISO – H TAP ↧ 12.7 33 PLACES	D3		ACCEPT	6	
16X 60 ±0.1	D7		59.96 - 60.03	6	
17X 15 ± 0.1	D7		14.94 - 15.04	6	
18 ± 0.1	D7		17.94 - 18.06	6	
10	D7		9.94 - 10.03	6	
15	C7		14.97 - 15.04	6	
10.5 ± 0.1	E7		10.48 - 10.53	6	
15 ± 0.1	E7		14.96 - 15.04	6	
66X 9.5	E7		9.47 - 9.58	6	
65X 15 ± 0.1= 975 ± 0.1	E5		14.96 - 15.04 = 974.97 - 975.04	6	
132X 45° X .2 FOUR SIDES	E7		45°X .2 FOUR SIDES	6	

STAMP	INSPECTED BY	DATE	PAGE 2 OF 4	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/19/06		6	Ø

MX1010 (7/98)

Metalex Precision Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd. ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5725	Qty 6

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111001	REV 02	P.O. Number 6A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -118 / -218 / -318 / -120 / -220 / -320		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
29 DRILL ↧ THRU 8-32 UNC-2B TAP ↧ 10 67 PLACES	E5		CONFORMS	6	
2X 45° X .2 THREE SIDES	E7		45° X .2 THREE SIDES	6	
12	E3		12	6	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	D3		CONFORMS	6	
65 X 15 ± 0.05 = 975 ± 0.05	D5		14.955-15.04 = 944.95-975.03	6	
15 ± 0.05	D7		14.96-15.03	6	
3 ± 0.05	D7		2.97-3.04	6	
4.2 0 / -0.1	E2		4.12-4.2	6	
45°	E1		45°	6	
(63.5)	E1		REFERENCE	6	
45° X 10	E1		45°X10	6	
0.5	E1		.47-.53	6	
2X 7.94	E1		7.92-7.98	6	
48 ± 0.1	E1		47.97-48.04	6	
5/16 DRILL ↧ 21 3/8 -16 UNC-2B TAP ↧ 17 2 PLACES	D1		CONFORMS	6	
-A-	D1		DATUM	6	
▱ 0.04	D1		N/A .04	6	
29 ±0.1	D1		28.93-29.04	6	
10 ± 0.1	D2		9.95-10.04	6	
3X 29	D2		28.97-29.02	6	
30 0 / -0.03	D1		29.97-30.0	6	

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MTX QC 16	[signature]	10/19/06	3 OF 4	6	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd. ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006-5725	Qty 6

Inspection Origin	Vendor (Sub-Tier Source) identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-111000	REV 02	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER MIDDLE MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-111000 / -118 / -218 / -318 / -120 / -220 / -320		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
49 0 / -0.1	D1		48.95-49	6	
10 ± 0.1	D2		9.97 - 10.04	6	
27 0 / -0.1	E2		26.93-27	6	
67 +0.1 / 0	E2		67 - 67.04	6	
32	E2		31.94-32.05	6	
8 0 / -0.1	E2		7.92-8	6	
SECTION A-A					
134X 9.5 +0.05 / 0	E8		9.52 - 9.55	6	

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MTX QC 16	[signature]	10/19/06		6	0

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110901	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER LEFT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-110900 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		CONFORMS	8	
NOTE: CLEAR ANODIZE	A1				
128 0 / -0.1	A5		127.915 - 127.945	8	
60	B2		59.96 - 60.03	8	
⌀4.1 THRU ⌀6.35 ↧ 17 26 PLACES	A4		4.043 - 4.135 6.317 - 6.37 X 16.942 - 16.993	8	
0.04 A	A4		w/in .04	8	
195 0 / -0.1	A3		194.92 - 194.94	8	
165.6 ±0.1	A3		165.57 - 165.64	8	
82.8 ±0.1	A3		82.79 - 82.84	8	
12.7 ±0.1	A3		12.655 - 12.74	8	
10.8 DRILL ↧ 20.500 M12x1.25 ISO – H TAP ↧ 13.5 6 PLACES	A4		CONFORMS	8	
26 ±0.1	A4		25.94 - 26.035	8	
56 ±0.1	A5		55.97 - 56.04	8	
32 ±0.1	B5		31.96 - 32.04	8	
47 ±0.1	B4		46.97 - 47.06	8	
2X 6.35	B3		6.32 - 6.38	8	
126.9 ±0.1	B3		126.87 - 126.94	8	
20 ±0.1	B3		19.965 - 20.025	8	
5	B4		5	8	
5	B4		5	8	

STAMP	INSPECTED BY	DATE	PAGE 1 OF 3	QTY ACC	QTY REJ
MIX QC 16	[signature]	9/22/06		8	0

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110901	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER LEFT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-110900 / -18,-20,-22,-24,-26,-26,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	B4		CONFORMS	8	
5 DRILL ⇓ 15 M6x1 ISO – H TAP ⇓ 12.7 8 PLACES	C4		CONFORMS	8	
2X 60 ±0.1	C4		59.94-60.02	8	
3X 15 ± 0.1	C2		14.97-15.04	8	
33 ± 0.1	C2		32.935-33.052	8	
10	C4		9.955-10.042	8	
15	B4		14.948-15.050	8	
10.5 ± 0.1	D2		10.462-10.535	8	
15 ± 0.1	D2		14.938-15.035	8	
12X 9.5	D2		9.462-9.538	8	
10X 15 ± 0.1= 150 ± 0.1	D3		14.948-15.045 = 149.95-150.03	8	
22X 45° X .2 FOUR SIDES	D3		45° X .2 FOUR SIDES	8	
29 DRILL ⇓ THRU 8-32 UNC-2B TAP ⇓ 10 12 PLACES	D4		CONFORMS	8	
4X 45° X .2 THREE SIDES	D4		45° X .2 THREE SIDES	8	
15.5	C4		15.5	8	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	C4		CONFORMS	8	
11 X 15 ± 0.05 = 165 ± 0.05	C3		14.96-15.03 = 164.97-165.03	8	
15 ± 0.05	C3		14.965-15.032	8	
3 ± 0.05	C3		2.97-3.04	8	
4.2 0 / -0.1	D5		4.12-4.26	8	

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MTX QC 16	[signature]	9/22/06		8	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ■ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110901	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name LOWER LEFT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-110900 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
45°	D6		45°	8	
(63.5)	D6		REFERENCE	8	
45° X 10	D6		45° X 10	8	
0.5	D6		.46 - .53	8	
2X 7.94	D6		7.90 - 7.972	8	
48 ± 0.1	D6		47.94 - 48.05	8	
5/16 DRILL ↧ 21 3/8 -16 UNC-2B TAP ↧ 17 2 PLACES	C6		CONFORMS	8	
-A-	C6		DATUM	8	
/ / 0.04	C6		W/in .04	8	
29 ±0.1	C6		28.97 - 29.06	8	
10 ± 0.1	C5		9.94 - 10.05	8	
3X 29	C5		28.94 - 29.05	8	
30 0 / -0.03	C6		29.97 - 30.0	8	
49 0 / -0.1	B6		48.92 - 49.0	8	
10 ± 0.1	C5		9.93 - 10.07	8	
27 0 / -0.1	C5		26.94 - 27.0	8	
67 +0.1 / 0	D5		67 - 67.07	8	
32	D5		31.96 - 32.04	8	
8 0 / -0.1	D5		7.94 - 8.0	8	
SECTION A-A					
24X 9.5 +0.05 / 0	D1		9.5 - 9.53	8	

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MVP QC 16	[signature]	9/22/06		8	∅

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110801	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER LEFT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-110800 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
AL CAST TOOL & JIG PLATE 2.5" PLATE	A2		CONFORMS	8	
NOTE: CLEAR ANODIZE	A1			.	
128 0 / -0.1	A3		127.927-127.945	8	
60	B3		59.957-60.025	8	
⌀4.1 THRU ⌀6.35 ↧ 17 26 PLACES	A3		4.05 – 4.122 6.29 -6.396 x16.942-16.998 DP	8	
⌖ 0.04 A	A3		w/in .04	8	
195 0 / -0.1	A4		194.93-194.99	8	
165.6 ±0.1	A4		165.59-165.67	8	
82.8 ±0.1	A4		82.77-82.83	8	
12.7 ±0.1	A5		12.682-12.735	8	
10.8 DRILL ↧ 20.500 M12x1.25 ISO – H TAP ↧ 13.5 6 PLACES	A5		CONFORMS	8	
26 ±0.1	A5		25.955-26.042	8	
56 ±0.1	A6		55.972-56.025	8	
32 ±0.1	B6		31.948-32.052	8	
47 ±0.1	B5		46.985-47.032	8	
2X 6.35	B5		6.33-6.37	8	
126.9 ±0.1	B4		126.87-126.93	8	
20 ±0.08	B3		19.98-20.045	8	
5	B3		5	8	
5	B3		5	8	

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MTX QC 16	[signature]	10/2/06		8	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts — CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd ! Cincinnati, OH 45242 ! (513) 489-0507	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110801	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER LEFT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-110800 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
5 HIGH CHARACTER ENGRAVE ASSEMBLY NO. AND SERIAL NO.	B3		CONFORMS	8	
5 DRILL ↓ 15 M6x1 ISO – H TAP ↓ 12.7 8 PLACES	C3		CONFORMS	8	
2X 60 ±0.1	C4		59.975-60.042	8	
3X 15 ± 0.1	C5		14.96 - 15.05	8	
33 ± 0.1	C5		32.955-33.04	8	
10	B5		9.954- 10.032	8	
15	B5		14.97 - 15.028	8	
10.5 ± 0.1	D5		10.478-10.535	8	
15 ± 0.1	D5		14.98-15.03	8	
12X 9.5	D5		9.47-9.53	8	
10X 15 ± 0.1= 150 ± 0.1	D4		14.93-15.07 = 149.94-150.04	8	
22X 45° X .2 FOUR SIDES	D4		45° X .2 FOUR SIDES	8	
29 DRILL ↓ THRU 8-32 UNC-2B TAP ↓ 10 12 PLACES	D3		CONFORMS	8	
4X 45° X .2 THREE SIDES	D3		45° X .2 THREE SIDES	8	
12	C3		12	8	
5 HIGH CHARACTER ENGRAVE MAGNET NO.	C3		CONFORMS	8	
11 X 15 ± 0.05 = 165 ± 0.05	C4		14.97-15.03 = 164.965-165.032	8	
15 ± 0.05	C5		14.98- 15.025	8	
3 ± 0.05	C5		2.98-3.03	8	
4.2 0 / -0.1	D2		4.13-4.2	8	

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MTX QC 16	[signature]	10/2/06		8	Ø

MX1010 (7/98)

Metalex Customized Machinery and Parts CERTIFIED ISO 9001 QUALITY MANAGEMENT	INSPECTION PLANNING & REPORT FORM Metalex Mfg. 5750 Cornell Rd	Job No. 2006 – 5725	Qty 8

Inspection Origin	Vendor (Sub-Tier Source) Identification		Customer Identification		
☐ Receiving ☐ In-Process ☒ Final ☐ Rework/Repair ☐ First Article	Vendor Name N/A		Part No. L143-110801	REV **	P.O. Number 5A10359
	Date Rec'd N/A	P.O. No. N/A	Part Name UPPER LEFT MAGNET STRUCTURE BASE		
At Oper. N/A	Serial Numbers: L143-110800 / -18,-20,-22,-24,-26,-28,-30,-32		Customer Name ARGONNE		

SPECIFICATION	B/P ZONE	INSPECTION METHOD / GAGE NO.	ACTUAL DIMENSION / GAGE VERIFICATION (Range of Readings or Accept Status)	QTY ACC	QTY REJ
45°	D2		45°	8	
(63.5)	D1		REFERENCE	8	
45° X 10	D1		45° X 10	8	
0.5	D1		.477 - .528	8	
2X 7.94	D1		7.92 - 7.98	8	
48 ± 0.1	D1		47.94 - 48.06	8	
5/16 DRILL ⇩ 21 3/8 -16 UNC-2B TAP ⇩ 17 2 PLACES	C1		CONFORMS	8	
-A-	C1		DATUM	8	
/ / 0.04	C1		w/in .04	8	
29 ±0.1	C1		28.96 - 29.07	8	
10 ± 0.1	C2		9.94 - 10.06	8	
3X 29	C2		28.955 - 29.048	8	
30 0 / -0.03	C1		29.977 - 30.0	8	
49 0 / -0.1	C1		48.93 - 49.0	8	
10 ± 0.1	C2		9.94 - 10.07	8	
27 0 / -0.1	C2		26.94 - 27.0	8	
67 +0.1 / 0	D2		67.0 - 67.07	8	
32	D2		31.95 - 32.04	8	
8 0 / -0.1	D2		7.93 - 8.0	8	
SECTION A-A					
24X 9.5 +0.05 / 0	D6		9.5 - 9.55	8	

STAMP	INSPECTED BY	DATE	PAGE	QTY ACC	QTY REJ
MTX QC 16	[signature]	10/2/06	3 OF 3	8	Ø

MX1010 (7/98)

Job# 2006- 5725 Customer Argonne Nat'l Laboratory

Drawing/part# L143-110114 Dwg.rev.# 01
Serial# _____ Rtg.rev 0by: _____

Router No.	Job No	Drawing/Part No
3036588	2006 5725	L143-110114

Operator

Qty to Run Comp/Date Initials

********** ROUTING OPERATIONS **********

20 FINISH MACHINE (Continued)

2) Finish machine 8mm slot and 45° angles

3) Finish machine (7) 7mm diameter holes holding .006" position.

Date & Initial ==> 11/5/06 JK

Accepted 16 Rejected —

Comments: 67645

DEBURR AS FOLLOWS: 16 To Run

30 2400 DEBURR DEPT.

1) Deburr with a maximum break edge of .010".

2) Mach. peen part number in area furthest away from 8mm slot.

Date & Initial ==> 11-26-06 JB

Accepted 16 Rejected ____

Comments: _____

FINAL DIMENSIONAL INSPECTION 16 To Run

40 8006 QUALITY CONTROL

1) Visually verify all drawing features/requirements have been met and operators have complied with all requirements of MX1035b form. Inspector shall sign-off MX1035b form as evidence of verification.

Date & Initial ==> 12-4-06 S.D.

Accepted 16 Rejected —

Metalex PO# 676645

Certificate of Conformance

Customer: Metalex Mfg. Inc.
Address: 5750 Cornell Rd.
Cincinnati, Oh. 45242
Attention: Quality Engineering Dept.

METALEX
Q.A. DEPT.
ACCEPTED
DATE 11/15/06
BY KKB

Item	Qty.	Part Number	Rev.	Part Name	Job #
1	24	L143-110114	01	SCREEN	6396 5725

Moonlight Machining (Supplier Name) certifies that all materials, processes, etc. furnished to Metalex, for the purchase order number stated above, comply with all conditions stated in the P.O. for the items shown.

Signed/Dated: [signature] 11-15-06
Supplier Quality Rep.

cc: Hardcopy P.O. Books
MX4012 (5/95)

Job# 2006- 5725 Customer Argonne Nat'l Laboratory

Drawing/part# L143-110110 Dwg. rev.# 02V

Serial# Rtg. rev.# 3by:ROB SCHUERMANN 6/16/06

Router No. 3036584 Job No 2006 5725 Drawing/Part No L143-110110

********** ROUTING OPERATIONS **********

		Qty To Run	Comp/Date	Operator Initials
50 8006	FINAL DIMENSIONAL INSPECTION QUALITY CONTROL	80 To Run		

1) Visually verify all drawing features/requirements have been met and operators have complied with all requirements of MX1035b form. Inspector shall sign-off MX1035b form as evidence of verification.

2) Bag parts and tag bag to identify.

Date & Initial ==> 12/4/06 S.D

Accepted 80 Rejected —

Comments:

60 9095	CLEAR ANODIZE PER AMS 2471 ANOTEX (ANODIZE) & (HARD ANODIZE)	80 To Run		

1) Material is 6061-T651 Aluminum

2) Clear Anodize Finish per AMS 2471, Rev.___

3) Wrap to protect and keep clean.

4) Add standard CAT.2 quality notes to purchase order.

5) Upon return, "SUBCONTRACTING" to send original cert's to QA for acceptance. (THIS NOTE DOES NOT APPLY TO SUPPLIER'S P.O.)

Date & Initial ==> _____ _____

Accepted _____ Rejected _____

Comments:

Drawing/part# L143-110109 Dwg. rev.# 02V
Serial# Rtg. Rev.# 4 by:DAVE SMITH 7/10/06

Router No.	Job No	Drawing/Part No
3069142	20066396	L143-110109

********** Routing Operations	Qty To Run	Comp/Date	Operator Initials **********

1) FINISH MACHINE .630" WDITH HOLDING FINISH POSITION OF HOLES.

2) FINISH ARBOR MILL .06" SLOT.
   ** MINIMIZE BURR BY USING THE FOLLOWING INSTRUCTIONS **
   3.000"DIA. X .062 WIDE CUTTER
   SPEED: 770 RPM
   FEED: 9 IN. PER MIN.
   ALL IN ONE CUT. CLIMB MILL SAW FOR MIN. BURR

Date & Initial ==> 12-6 06 DP

Accepted 40 Rejected 0

Comments: 8 [illegible]

00040 DEBURR AS FOLLOWS: 40 To Run

2400 DEBURR AND HANDWORK

1) Deburr with a maximum break edge of .010".

2) Mach. peen part number on side of part. Stone flush.

3) Bag parts and tag bag to identify.

Date & Initial ==> 12-8-06 [illegible]

Accepted 40 Rejected 0

Comments:

00050 FINAL DIMENSIONAL INSPECTION 40 To Run

8006 QUALITY CONTROL

1) Visually verify all drawing features/requirements have been met and operators have complied with all requirements of MX1035b form. Inspector shall sign-off MX1035b form as evidence of verification.

2) Bag parts and tag bag to identify.

50 FINAL DIMENSIONAL INSPECTION (Continued)

Drawing/part# L143-110109 Dwg. rev.# 02V
Serial# Rtg. Rev.# 4 by:DAVE SMITH 7/10/06

Router No. **Job No** **Drawing/Part No**

3069142 20066396 L143-110109

Operator

Qty To Run Comp/Date Initials

********** Routing Operations **********

Date & Initial ==> 12-14-06

Accepted 40 Rejected —

+8

Comments:

00060 CLEAR ANODIZE PER AMS 2471 40 To Run

9095 ANOTEX (ANODIZE) & (HARD ANODIZE)

1) Material is 6061-T651 Aluminum

2) Clear Anodize Finish per AMS 2471, Rev.___

3) Wrap to protect and keep clean.

4) Add standard CAT.2 quality notes to purchase order.

5) Upon return, "SUBCONTRACTING" to send original cert's to QA for acceptance. (THIS NOTE DOES NOT APPLY TO SUPPLIER'S P.O.)

Date & Initial ==> _____ _____

Accepted _____ Rejected _____

Comments:

00070 STAGE FOR ASSEMBLY 40 To Run

8035 MOVING

Date & Initial ==> _____ _____

Accepted _____ Rejected _____

Comments:

MX5009 (09/01)

Job# 2006- 5725 Customer Argonne Nat'l Laboratory

Drawing/part# L143-110104 Dwg.rev.# **
Serial# _____ Rtg.rev Oby: _____
Router No. Job No Drawing/Part No

3036581 2006 5725 L143-110104

Operator
Qty to Run Comp/Date Initials

********** ROUTING OPERATIONS **********

FINAL DIMENSIONAL INSPECTION 3600 To Run

50 8006 QUALITY CONTROL

1) Visually verify all drawing features/requirements have been met and operators have complied with all requirements of MX1035b form. Inspector shall sign-off MX1035b form as evidence of verification.

2) Carefully bag and tag parts in manageable size lots/bags.

Date & Initial ==> 12-14-06 TB

Accepted 3600 Rejected _____

Comments: _____

STAGE FOR ASSEMBLY 3600 To Run

60 8035 MOVING

Date & Initial ==> _____ _____

Accepted _____ Rejected _____

Comments: _____