LCLS Linac Coherent Light Source — Stanford Synchrotron Radiation Laboratory, Stanford Linear Accelerator Center

Quality Assurance Traveler

ATTACH THIS FORM TO LCLS SYSTEMS AND COMPONENTS TO CONTROL THE SEQUENCE OF QUALITY ASSURANCE TASKS. RETURN THE COMPLETED TRAVELER TO THE LCLS QUALITY ASSURANCE COORDINATOR UPON COMPLETION.

System or Component Name: *LCLS Undulator Main Assembly*		
Part/Drawing Number: *L143-112000*	Revision: 04	Serial Number: 37
Manufacturer: Hi-Tech MANF, INC		Purchase Order Number:

Special Instructions:

This form is to be completed prior to the acceptance of LCLS Undulator Main Assemblies

Quality Assurance Tasks (attach continuation sheets if additional steps are required)

Seq No.	Task Description *Inform the LCLS Technical Lead if a task cannot be competed or a requirement met	Completed by/Date*	Requirement Met	Requirement Not Met*
1	*Perform visual inspection of the completed assembly for workmanship and correctness.*	[illegible]	☒	☐
2	*Perform visual inspection of the completed assembly for correct the following markings on the Strongback:* L143-112000-04 SA-381-001-35 serial No *(The serial numbers of the assembly and Strongback should be identical)*	TMz 11/16/06	☑	☐
3	*Perform visual inspection of the completed assembly for correct the following markings on the Magnet Structure Assemblies:* • *Upper Left Magnet Structure Assemblies: L-143-110800-assembly no.* 37 • *Upper Right Magnet Structure Assemblies: L143-111200-assembly no.* 37 • *Upper Middle Magnet Structure Assemblies: L143-111000-1,2,3-assembly no.* 37 • *Lower Left Magnet Structure Assemblies: 143-110900-assembly serial no.* • *Lower Right Magnet Structure Assemblies: L143-111300-assembly serial no.* 37 • *Lower Middle Magnet Structure Assemblies: L143-111100-1,2-3-assembly no.*	TMz 11/16/06	☑	☐
4	*Verify correct gap size along the entire undulator length using contactor's go/no-go gages.*	[illegible]	☑	☐
5	*Verify correct gap size along the entire undulator length using calibrated gage blocks.*	[illegible]	☑	☐
6	*Check the peak field at each magnet location using a portable Hall probe.*	[illegible]	☑	☐
7	*Verify that the following quality assurance documentation has been completed by the contractor:* • *ANL Acceptance Criteria Listings E5-026046, E5-020020, E5-069069* • *LCLS Inspection/Acceptance Report for LCLS Magnets* • *LCLS Inspection/Acceptance Report for Supplier Inspection ~~form for~~ of LCLS Magnet Assemblies* • *Magnet Sort List* Lot 19 • *Photographs showing correct magnet serial numbers and orientation* • *ANL Supplier Disposition Reports documenting any noncomformance to specifications drawings or other contract requirements* SDR 37-10-6	TMz 11/16/06 ~~N/A~~	☑	☐
8	*Verify that the magnet photographs of the magnet sub assemblies are in agreement with the magnet sort list.*	TMz 11/16/06	☑	☐
9	*Review shipping container and that the contractor has Shockwatch monitoring devices available* Shipping Container not Assembled. Shockwatch Available	TMz 11/16/06	☐	☑
10	*Obtain a copy of the supplier quality assurance records*	TMz 11/16/06	☑	☐

10	*Forward supplier quality assurance records and the completed traveler form to LCLS QA Coordinator Tom Barsz. B401, C4219*		☐	☐

LCLS Task Leader Pre-Approval: _____ **Date:** _____

LCLS QA Coordinator Pre-Approval: _____ **Date:** _____

Optional Approver Comments:

Distribute completed traveler to: **Responsible Engineer, Task Leader, LCLS Quality Assurance Coordinator, Chief Engineer**

Other: _____

Enter Quality Improvements Lessons-Learned resulting from this activity below.

1) Assy drawing Revision on traveler should be changed to 04. G. Lawrence did not issue rev 05, because it only involved SLAC #.
2) ACL for Strong back is missing from LCLS QA Package
3) Check SHOCKWATCH Calibration date reqm

Not Required Fields

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

1. DISTRIBUTION:

INSPECTION REQUIRED: ☑

4. ORIGINATOR'S NAME & DIVISION: Glen Lawrence/XFD 5. PHONE: 2-9298 6. DATE: 06/13/2005

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

10. AFTER INSPECTION, DELIVER TO BLDG. NO.: SLAC DIVISION: LCLS ATTN.:

11. REFERENCES AND/OR REMARKS:

Item may be inspected by LCLS QA at Contractor site prior to shipment with follow-up inspection at receiving site. First Articles from each of the two contractors are to be shipped to ANL/APS to be magnetically shimmed and characterized in the APS Magnet Measurement room. The 38 remaining units shall be shipped directly to SLAC to be magnetically shimmed and characterized in the LCLS Magnet Measurement room.

15. ORIGINATOR OF PLAN: Glen Lawrence DATE: 06/13/2005

16. PLAN REVIEWED/APPROVED BY: DATE: 00/00/0000

17. QAR CONCURRENCE WITH PLAN: DATE: 00/00/0000

3. ACL NO.: E5-164018 LINE NBR: 1

7. PART NO. & NAME: L143-112000 LCLS Undulator Main Assy. 8. QUANTITY: 2

12. STEP NO.	13. INSPECTION/TEST REQUIREMENT	14. INSPECTION TEST LOCATION	18. ACCEPTED BY OR NONCONFORMANCE REPORT NO.	19. DATE
1	Inspect shipping container for evidence of damage or rough handling	eceiving / Inspectic SLAC		
2	Inspect shipping sensors for record of temperature variations and shock/g loads in x,y and z during shipping	eceiving / Inspectic SLAC		
3	Review all required certifications for compliance and completeness	actor Fac. or Rec. ANL	TPB	11-16-06
4	Visual inspection of Undulator Assy for shipping damage	eceiving / Inspectic SLAC		
5	Visual inspection of Undulator Assy for completeness to print, including all loose parts	actor Fac. or Rec. ANL	TPB	11-16-06

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

12. STEP NO.	13. INSPECTION/TEST REQUIREMENT	14. INSPECTION TEST LOCATION	18. ACCEPTED BY OR NONCONFORMANCE REPORT NO.	19. DATE
6	Verify Undulator gap using Go-NoGo gauge	Contractor Facility ANL	[illegible]	11/17/06

Not Required Fields

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

1. DISTRIBUTION:

INSPECTION REQUIRED: ☑

4. ORIGINATOR'S NAME & DIVISION: Glen Lawrence/XFD 5. PHONE: 2-9298 6. DATE: 01/25/2005

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

10. AFTER INSPECTION, DELIVER TO BLDG. NO.: NA DIVISION: ATTN.:

11. REFERENCES AND/OR REMARKS:

The Magnet Poles are to be delivered to the Undulator Assembly 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.

15. ORIGINATOR OF PLAN: Glen Lawrence DATE: 01/27/2005

16. PLAN REVIEWED/APPROVED BY: DATE: 00/00/0000

17. QAR CONCURRENCE WITH PLAN: DATE: 00/00/0000

3. ACL NO.: E5-026046 LINE NBR: 1

7. PART NO. & NAME: L143-110105 Upper Magnet Structure Pole 8. QUANTITY: 192

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	ulator Assy Contra	see Hi Tech QA records	11-16-05
2	Check that parts were "bagged and tagged" with serial no.'s and part no.'s (ANL & SLAC) per SOW L143-00031, Section 4.1.3	ulator Assy Contra		
3	Check that parts were marked with serial numbers per SOW section 4.1.3.	ulator Assy Contra		
4	Check that accompanying certifications have correct part serial numbers	ulator Assy Contra		
5	Check the material certification for compliance with ASTM A801, Type 1	tor Assy Contracto		

Not Required Fields

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

1. DISTRIBUTION:

INSPECTION REQUIRED: ☑

4. ORIGINATOR'S NAME & DIVISION: Glen Lawrence/XFD 5. PHONE: 2-9298 6. DATE: 03/10/2005

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 will 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.

15. ORIGINATOR OF PLAN: Glen Lawrence DATE: 02/07/2005

16. PLAN REVIEWED/APPROVED BY: DATE: 00/00/0000

17. QAR CONCURRENCE WITH PLAN: DATE: 00/00/0000

3. ACL NO.: E5-069069 LINE NBR: 1

7. PART NO. & NAME: L143-110106 Upper Left Magnet Structure 8. QUANTITY: 192

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	ulator Ass'y Contra	H. Tech QA records	11-16-06
2	Visual inspection of parts for surface chips and pits	ulator Ass'y Contra		
3	Dimensional check of part for conformance to the drawing	ulator Ass'y Contra		
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	Stephen Sasaki 11/16/06.	

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

12. STEP NO.	13. INSPECTION/TEST REQUIREMENT	14. INSPECTION TEST LOCATION	18. ACCEPTED BY OR NONCONFORMANCE REPORT NO.	19. DATE
6	On random sampling, inspect magnetic field with magnetic visualization film for magnetic defects.	APS Magnet Group	Stephen Sasaki	11/16/06
7	On random sampling, confirm Magnetic Moment magnitude and vector components agree with vendor reports	APS Magnet Group		
8	On radom sampling, verify the magnet s demagnetization and thermal stability.	APS Magnet Group		

Not Required Fields

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

1. DISTRIBUTION:

INSPECTION REQUIRED: ☑

4. ORIGINATOR'S NAME & DIVISION: Glen Lawrence/XFD 5. PHONE: 2-9298 6. DATE: 01/20/2005

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

10. AFTER INSPECTION, DELIVER TO BLDG. NO.: NA 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 measurements and optionally on-site inspections

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

16. PLAN REVIEWED/APPROVED BY: DATE: 00/00/0000

17. QAR CONCURRENCE WITH PLAN: DATE: 00/00/0000

3. ACL NO.: E5-020020 LINE NBR: 1

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

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?	lulator Ass'y Contra		
2	Check Strongback is marked with serial number & part no.'s (ANL and SLAC) per SOW Section 4.1.3	lulator Ass'y Contra		
3	Check all accompanying Certifications have correct part serial number.	lulator Ass'y Contra		
4	Check Material Certiication for compliance with ASTM B381-03, Grade F	ıtor Ass'y Contractc		
5	Check Forging Annealing Certification for annealing conformance to AMS-H-81200A, Table V, commercial Pure, Bars & Forgings, including Note 8	ıtor Ass'y Contractc		

Not Required Fields

ARGONNE NATIONAL LABORATORY

ACCEPTANCE CRITERIA LISTING

12. STEP NO.	13. INSPECTION/TEST REQUIREMENT	14. INSPECTION TEST LOCATION	18. ACCEPTED BY OR NONCONFORMANCE REPORT NO.	19. DATE
6	Check Rough Machining Anneal Certification for annealing conformance to AMS 2801B section 3.2.9	ıtor Ass'y Contractc		
7	Check the strongback contractor's reported dimensional measurements against the part drawing.	ırgonne National La	T. Gurry	2/16/07 TB
8	Verify the strongback critical dimensions as listed in the SOW section 4.5.2 are in compliance with the print.	lulator Ass'y Contra		

Subject: Trip to "Hi-Tech" tomorrow
From: Emil Trakhtenberg <emil@aps.anl.gov>
Date: Wed, 15 Nov 2006 14:33:21 -0600
To: "Marion M. White" <mwhite@aps.anl.gov>, Glen Lawrence <gsl@aps.anl.gov>, Shigemi <sasaki@aps.anl.gov>, tbarsz@aps.anl.gov

We will go tomorrow morning ~9:30 to "Hi-Tech" for acceptance of the LCLS undulator.
Is it right?
P.S. Isaac asked to leave him home this time.
Thanks,
Emil

Lot 19

Hi Tech Air 70°

air 21.8

Date 16 Nov 06 Device# #37 Start Time 10:35 Start Temperature 21.8

Slot	Value	Slot	Value	Slot	Value	Slot	Value	Slot	Value
1		51	-.27	101	-0.27	151	-27	201	-27
2	0.734	52	+.28	102	+.28	152	+28	202	+27
3	-1.21	53	-.28	103	-.27	153	-28	203	-27
4	+.29	54	+.27	104	+.27	154	+27	204	+27
5	-.27	55	-.27	105	-.27	155	-27	205	-27
6	+.27	56	+.27	106	+.27	156	+27	206	+28
7	-.27	57	-.27	107	-.27	157	-27	207	-27
8	+.28	58	+.27	108	+.28	158	+28	208	+27
9	-.27	59	-.28	109	-.27	159	-27	209	-27
10	+.27	60	+.27	110	+.28	160	+28	210	+28
11	-.28	61	-.27	111	-.27	161	-28	211	-27
12	+.27	62	+.27	112	+.27	162	+27	212	+27
13	-.27	63	-.27	113	-.27	163	-28	213	-27
14	+.26	64	+.27	114	+.27	164	+28	214	+27
15	-.27	65	-.27	115	-.27	165	-28	215	-26
16	+.27	66	+.27	116	+.28	166	+27	216	+27
17	-.28	67	-.27	117	-.27	167	-27	217	-27
18	+.27	68	+.27	118	+.27	168	+27	218	+27
19	-.27	69	-.27	119	-27	169	-27	219	-27
20	+.27	70	+.27	120	+28	170	+27	220	+27
21	-.27	71	-.27	121	-27	171	-28	221	-28
22	+.27	72	+.27	122	+27	172	+27	222	+26
23	-.27	73	-.27	123	-.27	173	-27	223	-29
24	+.27	74	+.27	124	+27	174	+27	224	+1.22
25	-.27	75	-.27	125	-28	175	-28	225	-0.73
26	+.27	76	+.27	126	+27	176	+27		
27	-.27	77	-.27	127	-27	177	-28		
28	+.28	78	+.27	128	+28	178	+28		
29	-.27	79	-.26	129	-27	179	-28		
30	+.27	80	+.27	130	+27	180	+27		
31	-.28	81	-.27	131	-27	181	-27		
32	+.27	82	+.28	132	+27	182	+27		
33	-.28	83	-.27	133	-28	183	-28		
34	+.27	84	+.28	134	+27	184	+28		
35	-.27	85	-.27	135	-27	185	-28		
36	+.28	86	+.28	136	+27	186	+28		
37	-.27	87	-.28	137	-27	187	-27		
38	+.27	88	+.28	138	+27	188	+27		
39	-.27	89	-.27	139	-.27	189	-27		
40	+.27	90	+.28	140	+.27	190	+27		
41	-.28	91	-.27	141	-.28	191	-28		
42	+.27	92	+.27	142	+.28	192	+27		
43	-.28	93	-.28	143	-1.28	193	-28		
44	+.27	94	+.28	144	+1.27	194	+27		
45	-.27	95	-.28	145	-.27	195	-27		
46	+.27	96	+.28	146	+27	196	+27		
47	-.27	97	-.27	147	-27	197	-27		
48	+.27	98	+.27	148	+26	198	+27		
49	-.27	99	-.27	149	-28	199	-28		
50	+.27	100	+.27	150	+27	200	+28		

End Temperature 21.9 Device / 21.9 air

Hi Tech air 70°F

End Time 11:00

Hall Probe S/N 01340076

Signatures:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: **Dial Machine, Inc.**

PART NAME: **LCLS Strongback**

DRAWING #: **L143-110700**

SERIAL #: 37

P.O.#: **5A-13624**

DATE: 11-07-06

#	Inspection/Test Requirement	Inspection Test Location	Accepted by or Nonconformance Report No.	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?	H.T.	SIMON	11/08/06
2	Check Strongback is marked with serial number & part no.'s (ANL & SLAC) per SOW Section 4.1.3?	H.T.	SIMON	11/08/06
3	Check all accompanying Certifications have correct part serial number	H.T.	SIMON	11/08/06
4	Check Material Certification for compliance with ASTM B381-03, Grade F2	H.T.	SIMON	11/08/06
5	Check Forging Annealing Certification for annealing conformance to AMS-H-81200A, Table V, commercial Pure, Bars & Forgings, including Note 8	H.T.	SIMON	11/08/06
6	Check Rough Machining Anneal Certification for annealing conformance to AMS-2801B section 3.2.9	H.T.	SIMON	11/08/06
7	Check the Strongback contractor's reported dimensional measurements against the part drawing	H.T.	SIMON	11/08/06
8	Verify the Strongback critical dimensions as listed in the SOW section 4.5.2 are in compliance with the print	H.T.	SIMON	11/08/06

INSPECTOR: SIMON

QA Supervisor: Mustafa

TEST EQUIPMENT USED: VISUAL

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR:

PART NAME: LCLS Strongback

DRAWING #: L143-110700

SERIAL #: 37

P.O. #: 5A-13624

DATE: 11-08-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Overall length	3400.00	+0 / -.04	3399.98	Accept/Reject
Gap height	167.00	+0.05 / -.0	167.01	Accept/Reject
Gap flatness (top and bottom)	<= .05	N/A	<= 1.03	Accept/Reject
Gap depth	130.00	+/- .08	130.07	Accept/Reject
Flatness of front face	<= .05	N/A	<= .03	Accept/Reject
Perpendicularity of front face to A	<= .1	N/A	<= .03	Accept/Reject
End face perpendicularity to A and B	<= .05	N/A	<= 1.03 <= 1.03	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mulloy

TEST EQUIPMENT USED: SQUAR PRECISION DIAL CALIPER DROP INDICATOR

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: Dial Machine, Inc.

PART NAME: LCLS Strongback

DRAWING #: L143-110700

SERIAL #: 37

P.O.#: 5A-13624

DATE: 11-07-06

FEATURE: Gap Flatness

#	Distance (mm)	Measured A	Measured B	Comments
1	50	.0004	.0004	OK
2	350	.0001	-.0004	OK
3	650	.0002	-.0005	OK
4	950	.0007	-.0005	OK
5	1250	.0006	-.0004	OK
6	1550	.0003	-.0006	OK
7	1850	.0005	-.0002	OK
8	2150	.0005	-.0004	OK
9	2450	.0006	-.0002	OK
10	2750	.0004	-.0004	OK
11	3050	.0004	-.0005	OK
12	3350	.0005	-.0007	OK

INSPECTOR: Simow

QA Supervisor: [illegible]

TEST EQUIPMENT USED: CUBIC PRECISION MODEL: 711010 S/N: 231067

COMMENTS:

LOT19 magnets Serial # 8641-9120

Bottom Jaw

Slot Number	Serial No.	Main filed Orientation	x-axis orientation
1	8755	Upstream	Right
2	8751	Downstream	Left
3	8695	Upstream	Right
4	9060	Downstream	Right
5	8671	Upstream	Right
6	9038	Downstream	Right
7	9092	Upstream	Right
8	9050	Downstream	Left
9	8701	Upstream	Right
10	8729	Downstream	Left
11	8720	Upstream	Left
12	8865	Downstream	Right
13	8802	Upstream	Right
14	9040	Downstream	Left
15	9102	Upstream	Left
16	8962	Downstream	Left
17	8706	Upstream	Right
18	8901	Downstream	Right
19	9006	Upstream	Left
20	9034	Downstream	Left
21	8872	Upstream	Left
22	8926	Downstream	Left
23	8857	Upstream	Right
24	9062	Downstream	Right
25	8875	Upstream	Right
26	8658	Downstream	Left
27	9004	Upstream	Left
28	8975	Downstream	Right
29	8708	Upstream	Right
30	8952	Downstream	Right
31	8669	Upstream	Left
32	8967	Downstream	Left
33	9082	Upstream	Left
34	9117	Downstream	Left
35	9021	Upstream	Left
36	8668	Downstream	Left
37	8842	Upstream	Right
38	8933	Downstream	Left
39	8965	Upstream	Left
40	8858	Downstream	Left
41	8714	Upstream	Left
42	9035	Downstream	Left
43	8951	Upstream	Left
44	8759	Downstream	Left
45	9110	Upstream	Left
46	8963	Downstream	Left
47	8816	Upstream	Right

Top Jaw

Slot Number	Serial No.	Main filed Orientation	x-axis orientation
1	8863	Downstream	Left
2	8750	Upstream	Right
3	8864	Downstream	Left
4	8644	Upstream	Left
5	9054	Downstream	Left
6	8653	Upstream	Left
7	8852	Downstream	Right
8	8702	Upstream	Right
9	9028	Downstream	Right
10	8899	Upstream	Left
11	8819	Downstream	Left
12	8887	Upstream	Right
13	8988	Downstream	Left
14	8740	Upstream	Left
15	8688	Downstream	Left
16	8833	Upstream	Right
17	8752	Downstream	Right
18	8733	Upstream	Right
19	9053	Downstream	Right
20	8869	Upstream	Left
21	8679	Downstream	Left
22	8718	Upstream	Right
23	9080	Downstream	Left
24	8670	Upstream	Left
25	9051	Downstream	Right
26	8834	Upstream	Left
27	8684	Downstream	Left
28	8905	Upstream	Left
29	8741	Downstream	Right
30	9088	Upstream	Right
31	8645	Downstream	Left
32	9005	Upstream	Left
33	8732	Downstream	Left
34	8894	Upstream	Left
35	8977	Downstream	Left
36	8911	Upstream	Left
37	9037	Downstream	Right
38	8697	Upstream	Left
39	8703	Downstream	Left
40	8736	Upstream	Right
41	8657	Downstream	Right
42	8743	Upstream	Left
43	8791	Downstream	Left
44	8766	Upstream	Left
45	8957	Downstream	Right
46	8803	Upstream	Left
47	8813	Downstream	Right

48	9101	Downstream	Left
49	8943	Upstream	Left
50	8692	Downstream	Right
51	8993	Upstream	Right
52	8667	Downstream	Right
53	9091	Upstream	Left
54	8862	Downstream	Left
55	8866	Upstream	Right
56	9098	Downstream	Left
57	8881	Upstream	Right
58	8998	Downstream	Right
59	9001	Upstream	Right
60	9018	Downstream	Left
61	8760	Upstream	Right
62	8990	Downstream	Right
63	9073	Upstream	Right
64	8956	Downstream	Right
65	8837	Upstream	Left
66	9077	Downstream	Right
67	8776	Upstream	Left
68	8654	Downstream	Right
69	8761	Upstream	Right
70	8782	Downstream	Right
71	8879	Upstream	Right
72	8735	Downstream	Right
73	9097	Upstream	Left
74	8978	Downstream	Right
75	8700	Upstream	Left
76	8810	Downstream	Left
77	8775	Upstream	Right
78	8778	Downstream	Right
79	9106	Upstream	Left
80	9096	Downstream	Right
81	8806	Upstream	Right
82	9103	Downstream	Right
83	9067	Upstream	Left
84	8825	Downstream	Right
85	8878	Upstream	Left
86	8690	Downstream	Left
87	8920	Upstream	Left
88	8832	Downstream	Right
89	8945	Upstream	Right
90	8808	Downstream	Left
91	8971	Upstream	Right
92	9048	Downstream	Left
93	8923	Upstream	Right
94	8859	Downstream	Right
95	8927	Upstream	Right
96	8734	Downstream	Right
97	8897	Upstream	Left
98	8764	Downstream	Left
99	9016	Upstream	Left

48	8767	Upstream	Right
49	9014	Downstream	Left
50	8783	Upstream	Left
51	8820	Downstream	Left
52	8892	Upstream	Right
53	9072	Downstream	Left
54	8969	Upstream	Right
55	8724	Downstream	Right
56	8838	Upstream	Left
57	8854	Downstream	Right
58	8855	Upstream	Right
59	8982	Downstream	Left
60	8721	Upstream	Right
61	8686	Downstream	Right
62	8886	Upstream	Right
63	9047	Downstream	Right
64	8713	Upstream	Right
65	8840	Downstream	Right
66	8774	Upstream	Right
67	8835	Downstream	Right
68	8979	Upstream	Right
69	8950	Downstream	Right
70	8896	Upstream	Left
71	8698	Downstream	Right
72	9099	Upstream	Left
73	8960	Downstream	Right
74	8959	Upstream	Left
75	9024	Downstream	Left
76	8860	Upstream	Right
77	8843	Downstream	Right
78	8856	Upstream	Right
79	8674	Downstream	Left
80	8805	Upstream	Left
81	9058	Downstream	Left
82	9087	Upstream	Left
83	8822	Downstream	Right
84	8936	Upstream	Right
85	8948	Downstream	Left
86	8826	Upstream	Right
87	8676	Downstream	Left
88	8664	Upstream	Right
89	8655	Downstream	Right
90	9019	Upstream	Right
91	8903	Downstream	Left
92	8877	Upstream	Left
93	8643	Downstream	Right
94	8918	Upstream	Right
95	8830	Downstream	Left
96	9065	Upstream	Right
97	9094	Downstream	Right
98	8762	Upstream	Right
99	8955	Downstream	Left

100	8924	Downstream	Left
101	9083	Upstream	Left
102	9009	Downstream	Right
103	8996	Upstream	Left
104	8682	Downstream	Right
105	8745	Upstream	Left
106	8980	Downstream	Right
107	8895	Upstream	Left
108	9105	Downstream	Left
109	9118	Upstream	Right
110	8913	Downstream	Left
111	8966	Upstream	Right
112	8932	Downstream	Left
113	9085	Upstream	Right
114	8884	Downstream	Right
115	8868	Upstream	Right
116	8922	Downstream	Left
117	9120	Upstream	Right
118	9116	Downstream	Right
119	8763	Upstream	Right
120	9059	Downstream	Right
121	8882	Upstream	Right
122	8972	Downstream	Left
123	8666	Upstream	Left
124	8912	Downstream	Right
125	8652	Upstream	Right
126	8989	Downstream	Left
127	8797	Upstream	Right
128	8889	Downstream	Left
129	8853	Upstream	Right
130	9112	Downstream	Right
131	8777	Upstream	Left
132	8874	Downstream	Left
133	8906	Upstream	Left
134	9042	Downstream	Right
135	9007	Upstream	Right
136	8916	Downstream	Left
137	9039	Upstream	Left
138	8705	Downstream	Right
139	8823	Upstream	Left
140	8873	Downstream	Left
141	8850	Upstream	Left
142	8921	Downstream	Right
143	8827	Upstream	Left
144	8656	Downstream	Left
145	9013	Upstream	Right
146	8890	Downstream	Right
147	9107	Upstream	Right
148	9000	Downstream	Right
149	8779	Upstream	Left
150	8934	Downstream	Left
151	8939	Upstream	Right

100	8798	Upstream	Right
101	8937	Downstream	Left
102	9089	Upstream	Left
103	8707	Downstream	Right
104	9041	Upstream	Right
105	9010	Downstream	Left
106	8907	Upstream	Left
107	8946	Downstream	Right
108	8804	Upstream	Left
109	8769	Downstream	Right
110	8672	Upstream	Right
111	8885	Downstream	Left
112	8976	Upstream	Left
113	8788	Downstream	Left
114	9068	Upstream	Right
115	8909	Downstream	Left
116	8801	Upstream	Right
117	8915	Downstream	Right
118	9108	Upstream	Left
119	8770	Downstream	Right
120	8883	Upstream	Left
121	9061	Downstream	Left
122	8689	Upstream	Right
123	8792	Downstream	Left
124	9090	Upstream	Left
125	8931	Downstream	Right
126	8799	Upstream	Left
127	9036	Downstream	Right
128	8796	Upstream	Left
129	9095	Downstream	Right
130	9081	Upstream	Left
131	8793	Downstream	Right
132	8928	Upstream	Left
133	8848	Downstream	Left
134	8930	Upstream	Left
135	8693	Downstream	Left
136	8942	Upstream	Right
137	8876	Downstream	Left
138	9049	Upstream	Right
139	9069	Downstream	Left
140	8910	Upstream	Right
141	8790	Downstream	Left
142	8964	Upstream	Left
143	8914	Downstream	Left
144	8981	Upstream	Right
145	8817	Downstream	Left
146	9025	Upstream	Left
147	8828	Downstream	Right
148	8994	Upstream	Right
149	8929	Downstream	Right
150	8871	Upstream	Right
151	9043	Downstream	Left

152	8696	Downstream	Left
153	8725	Upstream	Left
154	8726	Downstream	Right
155	9063	Upstream	Left
156	8938	Downstream	Left
157	8851	Upstream	Left
158	9119	Downstream	Left
159	8891	Upstream	Right
160	8995	Downstream	Right
161	8925	Upstream	Left
162	8829	Downstream	Right
163	8680	Upstream	Left
164	8663	Downstream	Right
165	8949	Upstream	Right
166	9031	Downstream	Right
167	8794	Upstream	Right
168	8784	Downstream	Right
169	9012	Upstream	Left
170	9113	Downstream	Right
171	8997	Upstream	Right
172	8712	Downstream	Right
173	8812	Upstream	Left
174	8647	Downstream	Left
175	8888	Upstream	Right
176	9026	Downstream	Right
177	8941	Upstream	Left
178	8992	Downstream	Left
179	8821	Upstream	Left
180	8970	Downstream	Left
181	9115	Upstream	Left
182	8958	Downstream	Left
183	8893	Upstream	Left
184	8758	Downstream	Left
185	8677	Upstream	Right
186	8787	Downstream	Left
187	8742	Upstream	Right
188	9017	Downstream	Right
189	8917	Upstream	Left
190	8641	Downstream	Left
191	8944	Upstream	Right
192	8953	Downstream	Left
193	8809	Upstream	Right
194	8699	Downstream	Left
195	9100	Upstream	Right
196	8747	Downstream	Right
197	8935	Upstream	Right
198	8807	Downstream	Left
199	9071	Upstream	Right
200	8660	Downstream	Left
201	9066	Upstream	Right
202	9022	Downstream	Left
203	8665	Upstream	Left

152	8728	Upstream	Left
153	9003	Downstream	Left
154	9114	Upstream	Right
155	8723	Downstream	Right
156	9002	Upstream	Left
157	8818	Downstream	Right
158	9008	Upstream	Left
159	8974	Downstream	Left
160	8646	Upstream	Right
161	8954	Downstream	Left
162	8845	Upstream	Right
163	8757	Downstream	Left
164	8771	Upstream	Left
165	8773	Downstream	Left
166	8991	Upstream	Left
167	8704	Downstream	Left
168	8908	Upstream	Left
169	8768	Downstream	Right
170	8815	Upstream	Left
171	8727	Downstream	Right
172	8940	Upstream	Left
173	8870	Downstream	Right
174	8711	Upstream	Right
175	8648	Downstream	Right
176	8986	Upstream	Right
177	9029	Downstream	Left
178	8811	Upstream	Left
179	9057	Downstream	Right
180	8781	Upstream	Right
181	9084	Downstream	Left
182	9111	Upstream	Left
183	8846	Downstream	Right
184	8744	Upstream	Right
185	8824	Downstream	Left
186	9093	Upstream	Left
187	8675	Downstream	Left
188	9064	Upstream	Right
189	8919	Downstream	Right
190	8836	Upstream	Left
191	9030	Downstream	Left
192	8662	Upstream	Left
193	8710	Downstream	Right
194	9076	Upstream	Right
195	8841	Downstream	Left
196	8649	Upstream	Right
197	8902	Downstream	Right
198	8795	Upstream	Right
199	9032	Downstream	Right
200	9074	Upstream	Right
201	9052	Downstream	Right
202	8687	Upstream	Right
203	8786	Downstream	Left

204	8709	Downstream	Left
205	8683	Upstream	Left
206	8685	Downstream	Right
207	8650	Upstream	Left
208	8691	Downstream	Right
209	8898	Upstream	Left
210	9056	Downstream	Left
211	9086	Upstream	Left
212	9020	Downstream	Right
213	8739	Upstream	Right
214	8800	Downstream	Left
215	8659	Upstream	Right
216	9044	Downstream	Left
217	8737	Upstream	Left
218	8694	Downstream	Left
219	8715	Upstream	Left
220	8780	Downstream	Left
221	8731	Upstream	Left
222	8847	Downstream	Left
223	8722	Upstream	Right
224	8754	Downstream	Left
225	8839	Upstream	Right

204	9078	Upstream	Right
205	8984	Downstream	Left
206	8831	Upstream	Right
207	8973	Downstream	Left
208	8651	Upstream	Right
209	8985	Downstream	Right
210	9079	Upstream	Left
211	8844	Downstream	Right
212	8861	Upstream	Right
213	8961	Downstream	Right
214	9011	Upstream	Left
215	8849	Downstream	Left
216	9109	Upstream	Left
217	8968	Downstream	Right
218	8947	Upstream	Left
219	9046	Downstream	Right
220	8681	Upstream	Right
221	8642	Downstream	Right
222	8730	Upstream	Left
223	9033	Downstream	Right
224	8748	Upstream	Right
225	8661	Downstream	Right

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
8863	33%
8749	80%
8678	
8719	
8999	
8738	
9023	
8983	
9027	
8716	
9045	
9070	

8863 went to T

Sample magnets

serial No.	
8673	
8717	
8900	
8987	
9104	

9055
8789
8746
8814
8785
8765
9015
8772
8880
9075
8753
8904
8867

org.8756

Argonne National Lab
Strongback -L143-110700
Inspection and Test Results

Serial Number	#	37	Inspector	Floyd
Date		10/6/06		

CMM Critical Feature Results	*Req*	*Tolr*	*Actual*	
flatness - plane -A-		.050	.029	
side opposite -A- flatness		.050	.030	
surface finish -A-	1.6		0.6	
surface finish side opposite -A-	1.6		0.8	
-B- surface flatness		.050	.056	
-B- surface perp to -A-		.100	.060	
Pads				
RH Mounting Pad parallel to -A-		.050	.004	
LH Mounting Pad parallel to -A-		.050	.034	
Overall Length	3400.00	+.000/-.200	-.024	
LH end to 1700 mm holes right	1700.00	+.000/-.100	.000	
LH end to 1700 mm holes left	1700.00	+.000/-.100	-.024	
side opposite -A- 167.00 dim	167.00	+.050/-.000	.028	plane to plane
Individual Gaps	167.00		.001 - .040	direct gaps
side -A- to Centerline 83.5	83.50	+/- .080	.014	
Other Dimensions		*Date*	*Reviewer*	
		10-6	skl	SDR written

Material and Certifications		*Date*	*Reviewer*	
Material Certs		10-6	skl	
Heat Treat Certs		10-6	skl	
Visual inspection of Material		10-6	skl	

Approvals	

Temps	
21.5	Start
22.5	Finish

SUPPLIER DISPOSITION REQUEST (SDR)

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

Page ___ of ___

(CHECK ONE)

☑ 1A. **Deviation Request**

☐ 1B. **Nonconformance Action Request**

2. SDR No. 37-106

3. SDR Date 10/06/2006

4. Supplier Name, Address, Telephone, Fax

Dial Machine, Inc
2902 Eastrock Dr.
Rockford, IL 61125

5. Purchase Order No. 51-0488

6. Related Documents

6.1 _____ Date _____

	7. Qty.	8. Describe Nonconforming Condition	9. Identify Requirement	10. Cause & Corrective Action
Can accept	1	Surface -B- Flatness Tolerance is .050mm, actual is .056mm		Evaluate feature function and determine if corrective action is necessary.
Can accept		Mounting Pad Bolt Hole Location 45.0mm +/-.200 is at 45.259mm		Correct if necessary. Bolt location deviation uses 25% of bolt hole clearance.

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:

Accept deviation for this S/N only.

15. SUPPLIER REPRESENTATIVE – TITLE – DATE: 10/6/06

16. ANL REPRESENTATIVE – DATE: 10/10/06

17. ANL Disposition and Remarks: Accept nonconformance for this S/N only.

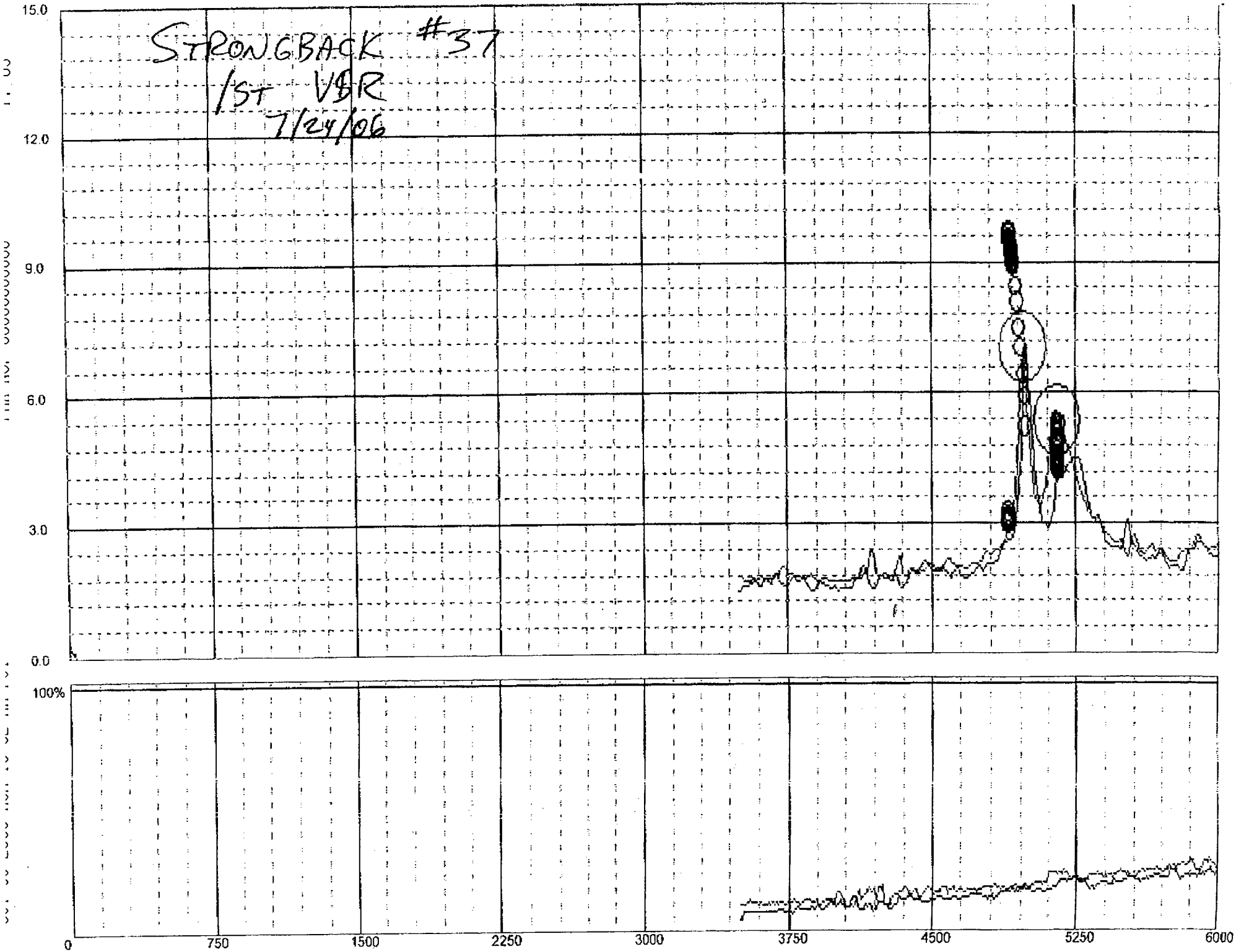
18. Approved

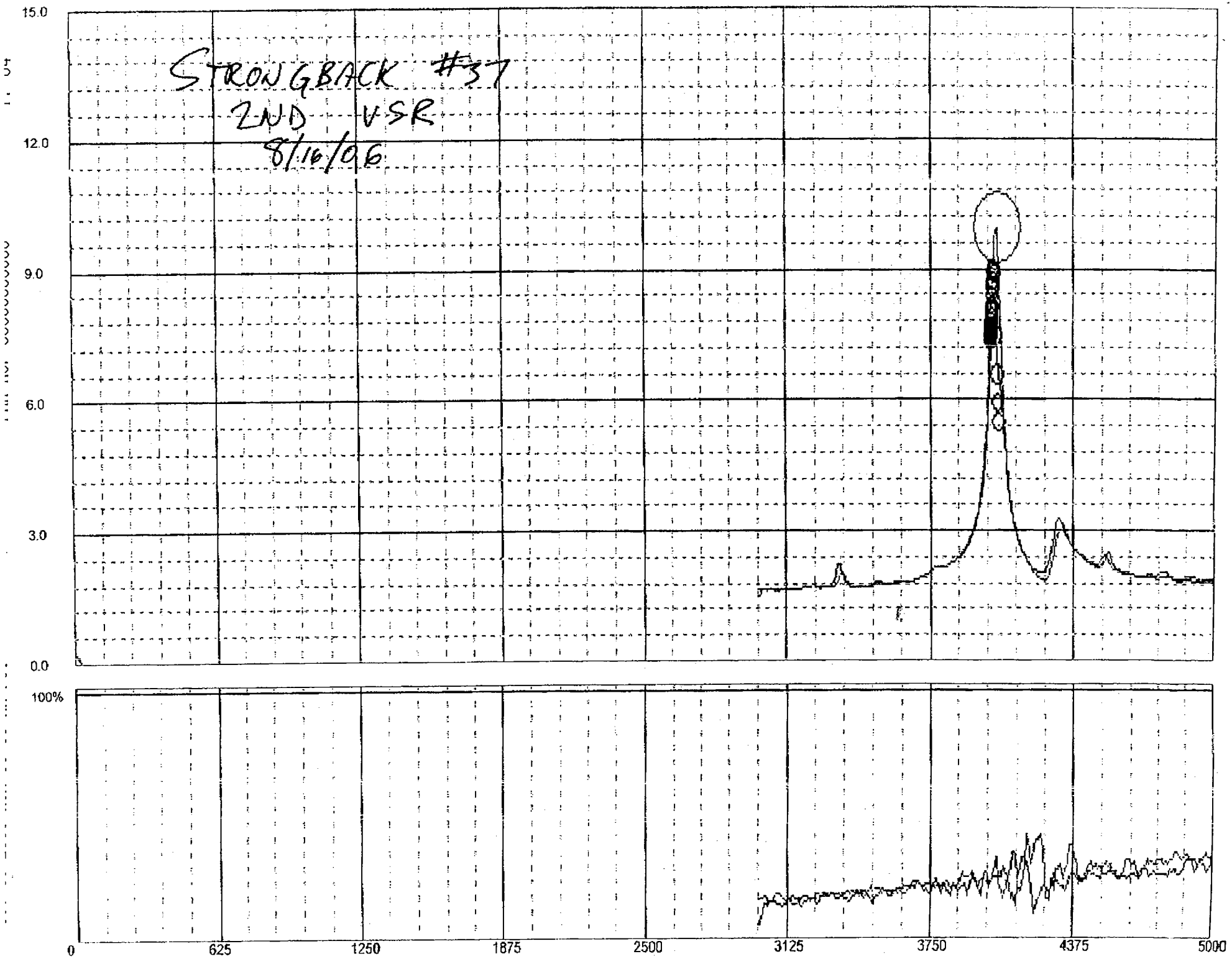
TECHNICAL REPRESENTATIVE – DATE: 10/10/06

QUALITY ASSURANCE REPRESENTATIVE – DATE: 10/13/06

PROCUREMENT REPRESENTATIVE – DATE: 10/13/06

ANL-311 (4-04)


STRONGBACK #37
1ST VBR
7/24/06
15.0
12.0
9.0
6.0
3.0
0.0
100%
0
750
1500
2250
3000
3750
4500
5250
6000


STRONGBACK #37
2ND VSR
8/16/06
15.0
12.0
9.0
6.0
3.0
0.0
100%
0
625
1250
1875
2500
3125
3750
4375
5000

33,35,37,39

CORROSION MATERIALS TEST REPORT

2262 Groom Rd.
Baker, LA 70714
(225) 775 - 3675 (Main Office)
(225) 778 - 6436 (Quality Control)
(225) 778 - 6489 (Fax)

Date: 3/9/2006

Customer: Dial Machine

C89385

PO No: 102437 & 102669

CMI No: C83758

Alloy: TI GR2 Heat No: 087-1

Quantity: 4 PCS

Item Description: 12" DIA RND BAR X 137"

Specifications DIN 50049 3.1B ASTM B348, ASME SB348
EN 10204 3.1B

Chemical Components

C	CO	CR	CU	FE	MN	MO	NI	P	S
0.01	—	—	—	0.06	—	—	—	—	—
SI	**TI**	**V**	**W**	**CB+TA**	**SN**	**AL**	**ZN**	**PB**	**N**
—	—	—	—	—	—	—	—	—	0.013

Mechanical Properties

Tensile Strength: Elongation in 2":

Yield Strength: Reduction in Area:

Hardness:

Remarks: O=0.06, H=0.002, TI=BAL
CHEMISTRY ONLY
MATERIAL HAS BEEN ANNEALED PER AMS-H-81200 AND WAS ANNEALLED AT 1200 DEG FOR 4 HOURS.

The information stated in this document is true and accurate based upon information acquired by and maintained on file at Corrosion Materials.

Certified by: Tom Holstein

Title: Quality Control Coordinator

According to records provided by mill sources, all material has been manufactured free from mercury.
Corrosion Materials is an ISO 9001-2000 certified company, registered with RWTUV USA.

International Company «ANTARES»

CERTIFICATE OF QUALITY № 283

Kind of product								titanium cast cylindrical billet						Tu U 27.4-20056770-001-2003	
Customer	"M-Solutions LLC"												CONTRACT № 29/10	dated 29.10.2003	
Material	Grade 2												ASTM B 348	Date of issue: 12.07.2005	
Size, mm Diameter length	Weight 1 kg	№ of melting	Place of test	Chemical specification, %										Ultrasonic test	Condition of surface
				Ti	Fe	O	N	H	C	Residuals (each) max	Residuals (total) max				
807 X 3785	8726	987-1	Top	Base	0.06	0.05	0.013	0.002	0.01	≤ 0,1	≤ 0,4			acceptable	machined
			Bottom		0.06	0.05	0.013	0.002	0.01	≤ 0,1	≤ 0,4				

Chief of technological department — Derecha A.Y.

Chief of quality control department — Krivoshlykov U.M.

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08863

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murtaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09074

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: [illegible]

QA Supervisor: [illegible]

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08819

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simow

QA Supervisor: Mullaz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08679

P.O. #: **5A13624**

DATE: 09-28-06

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	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelle

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08645

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muller

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08657

P.O. #: **5A13624**

DATE: 09-28-06

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	8.98	Accept/Reject

INSPECTOR: Smow

QA Supervisor: Mulaz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08820

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelas

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source · Stanford Synchrotron Radiation Laboratory · Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08686

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.98	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory
Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08698

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murlaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09058

P.O. #: **5A13624**

DATE: 09-28-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	56.99	Accept/Reject
Magnet Width	66.00	+/- .25	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08903

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mulaze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08885

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09061

P.O. #: **5A13624**

DATE: 09-28-06

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	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory
Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08793

P.O. #: **5A13624**

DATE: 09-28-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	56.99	Accept/Reject
Magnet Width	66.00	+/- .25	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Smow

QA Supervisor: Muetze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08790

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mulatge

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09043

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08954

P.O. #: **5A13624**

DATE: 09-28-06

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	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

[redacted]

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08727

P.O. #: **5A13624**

DATE: 09-28-06

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	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Smow

QA Supervisor: Mustage

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09084

P.O. #: **5A13624**

DATE: 09-28-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	56.99	Accept/Reject
Magnet Width	66.00	+/- .25	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muñoz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09030

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murtaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09052

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: [illegible]

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08844

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08642

P.O. #: **5A13624**

DATE: 09-28-06

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	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mullaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08731

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.98	Accept/Reject

INSPECTOR: Simad

QA Supervisor: Mullaz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09086

P.O. #: **5A13624**

DATE: 09-28-06

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	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.98	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09066

P.O. #: **5A13624**

DATE: 09-28-06

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: Simow

QA Supervisor: Murlaze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory
Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08944

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murtaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09115

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source — Stanford Synchrotron Radiation Laboratory, Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08997

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simow

QA Supervisor: Mulaze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08925

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelage

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory
Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08939

P.O. #: **5A13624**

DATE: 09-28-06

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: Simon

QA Supervisor: Muelaze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08850

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muelaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

LCLS Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

Procedure Number: L143-00076
Revision: 0
Issue Date: April 14, 2005

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08777

P.O. #: **5A13624**

DATE: 09-28-06

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	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mustafa

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08882

P.O. #: **5A13624**

DATE: 09-28-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	56.99	Accept/Reject
Magnet Width	66.00	+/- .25	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muala

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08966

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mulaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 09083

P.O. #: **5A13624**

DATE: 09-28-06

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	65.99	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mulaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08971

P.O. #: **5A13624**

DATE: 09-28-06

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: Simon

QA Supervisor: Murlaga

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08806

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.96	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mustafa

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08879

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mulazz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08760

P.O. #: **5A13624**

DATE: 09-28-06

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	8.97	Accept/Reject

INSPECTOR: Smow

QA Supervisor: Muelaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08993

P.O. #: **5A13624**

DATE: 09-28-06

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	66.02	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mulleg

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08714

P.O. #: **5A13624**

DATE: 09-28-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	(Accept)/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	55.01	(Accept)/Reject
Magnet Width	66.00	+/- .25	66.03	(Accept)/Reject
Magnet thickness	9.00	+0 / -.10	8.98	(Accept)/Reject

INSPECTOR: Simon

QA Supervisor: Murlaze

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08669

P.O. #: **5A13624**

DATE: 09-28-06

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	66.01	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murlaz

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08872

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.98	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murtaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08720

P.O. #: **5A13624**

DATE: 09-28-06

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	66.03	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.98	Accept/Reject

INSPECTOR: Simod

QA Supervisor: Murtaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

DRAWING #: **L143-110106-04**

SERIAL #: 08755

P.O. #: **5A13624**

DATE: 09-28-06

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	66.07	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.98	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murlaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

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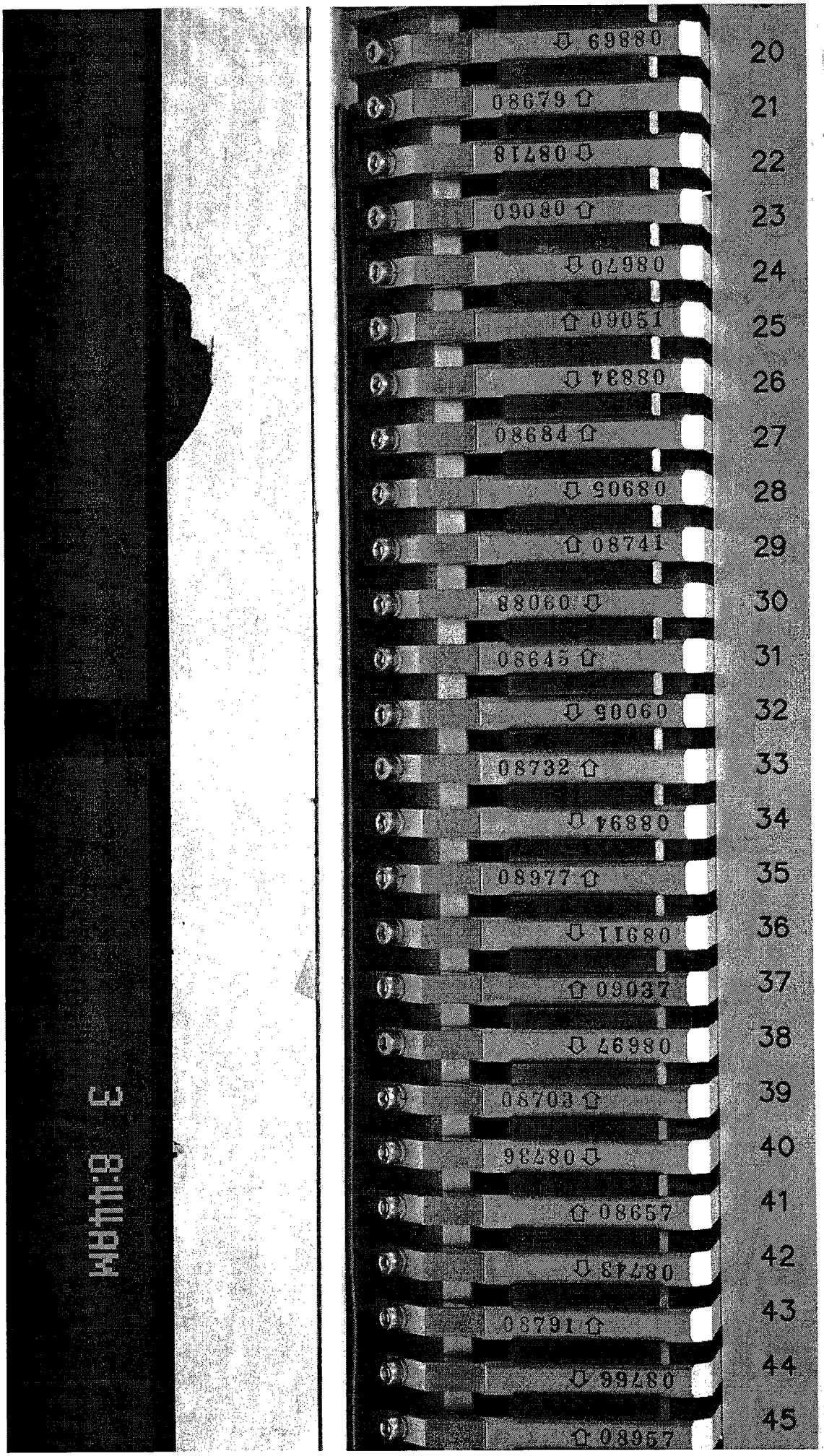
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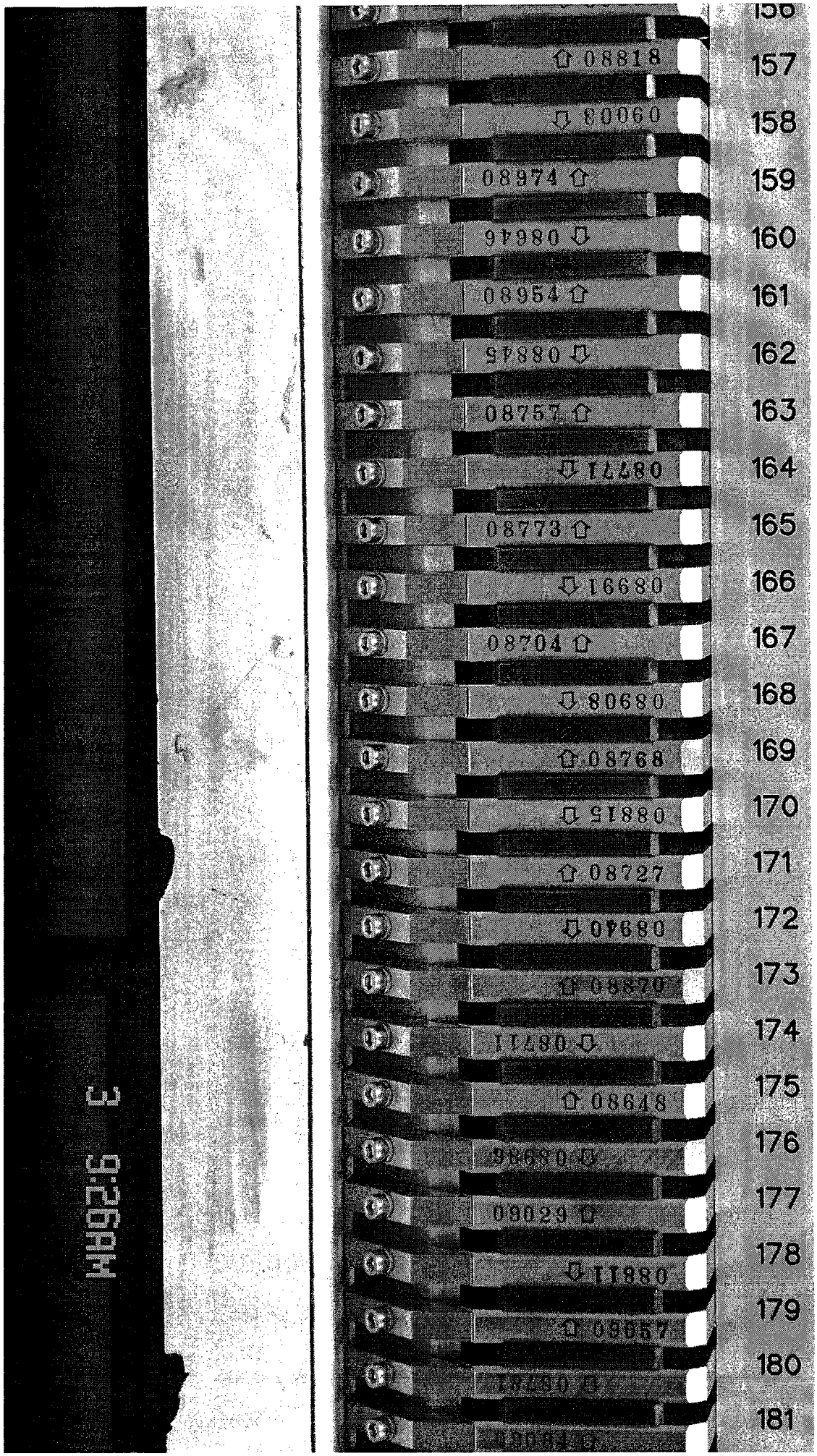
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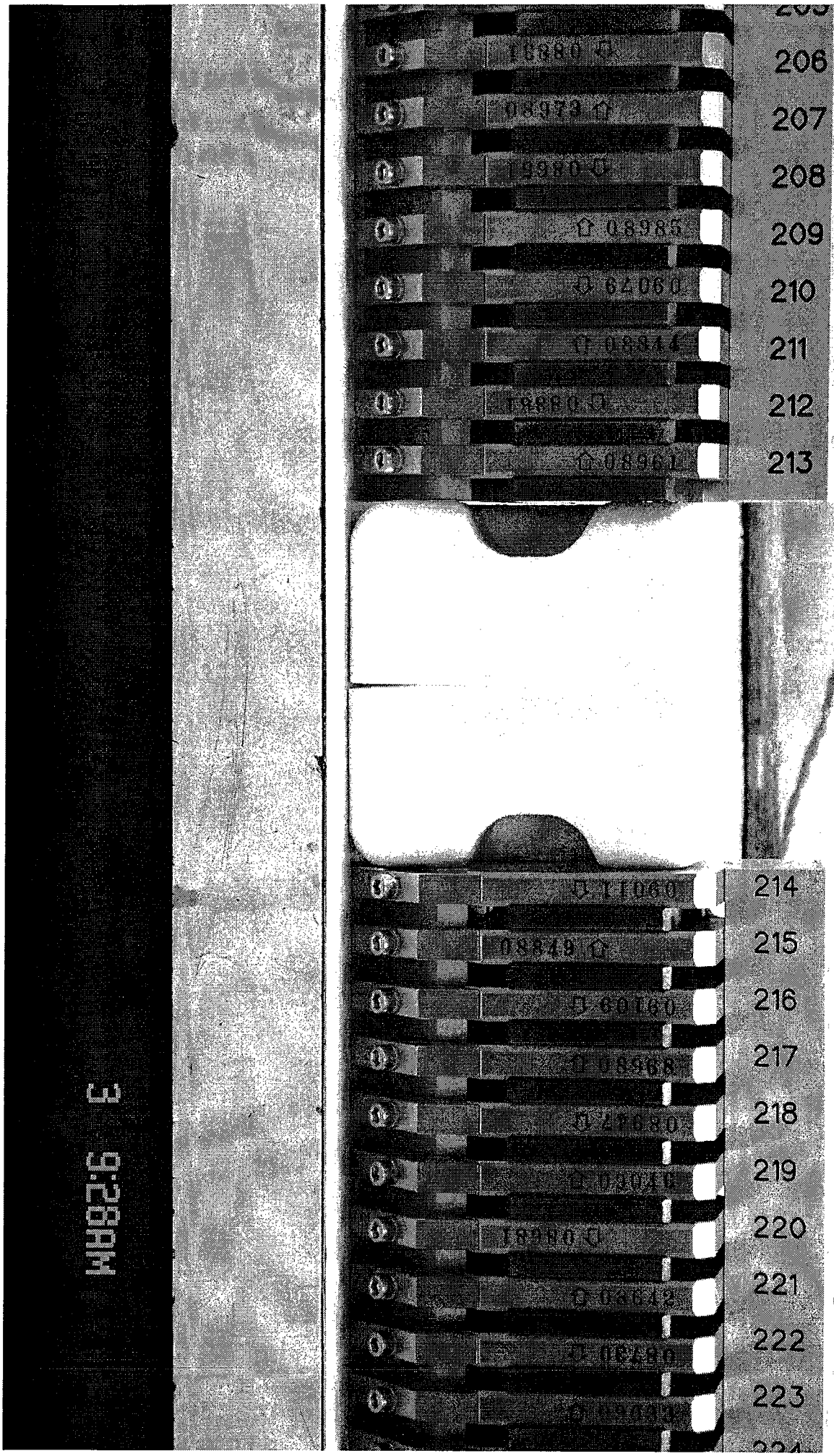
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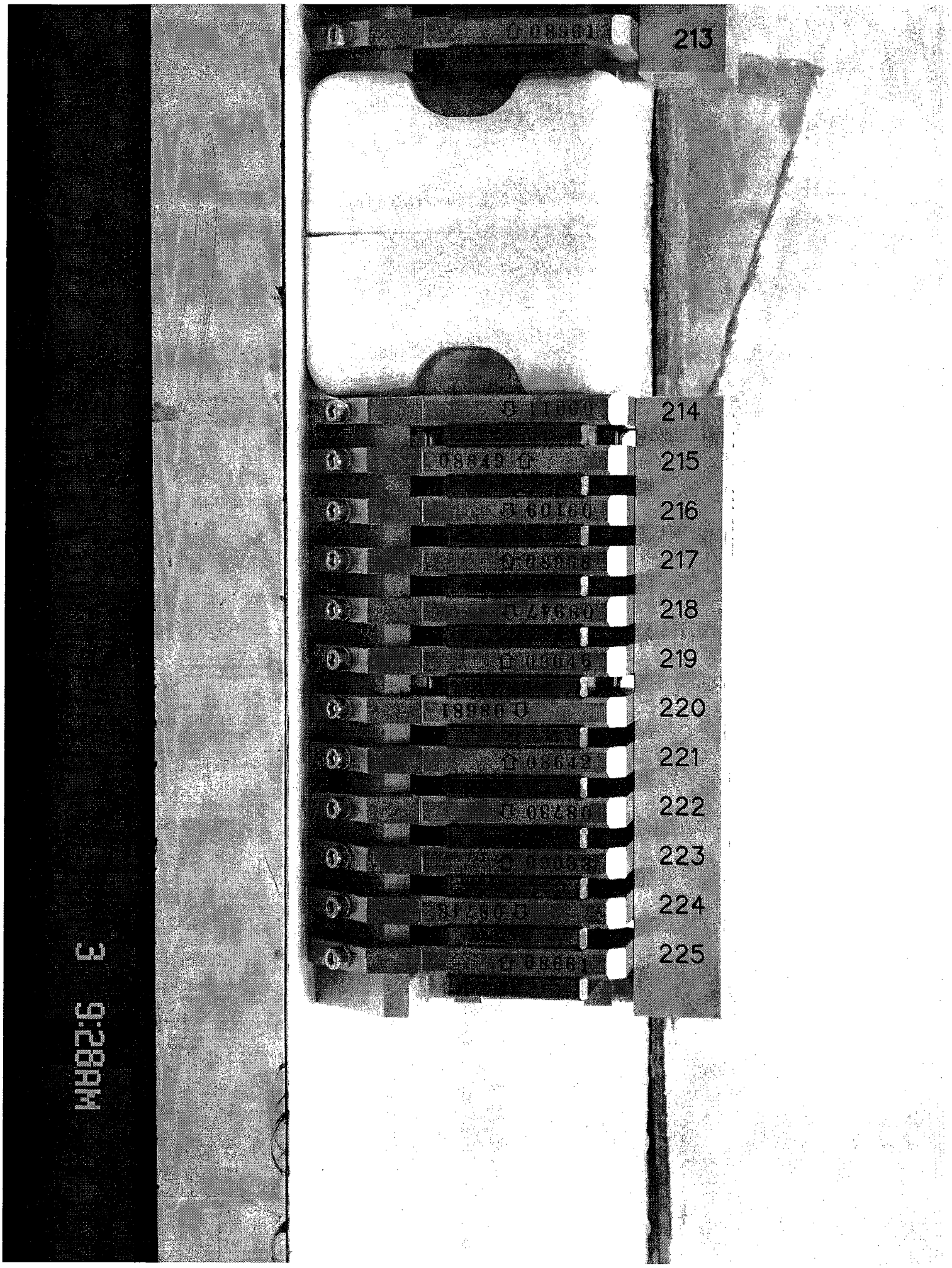
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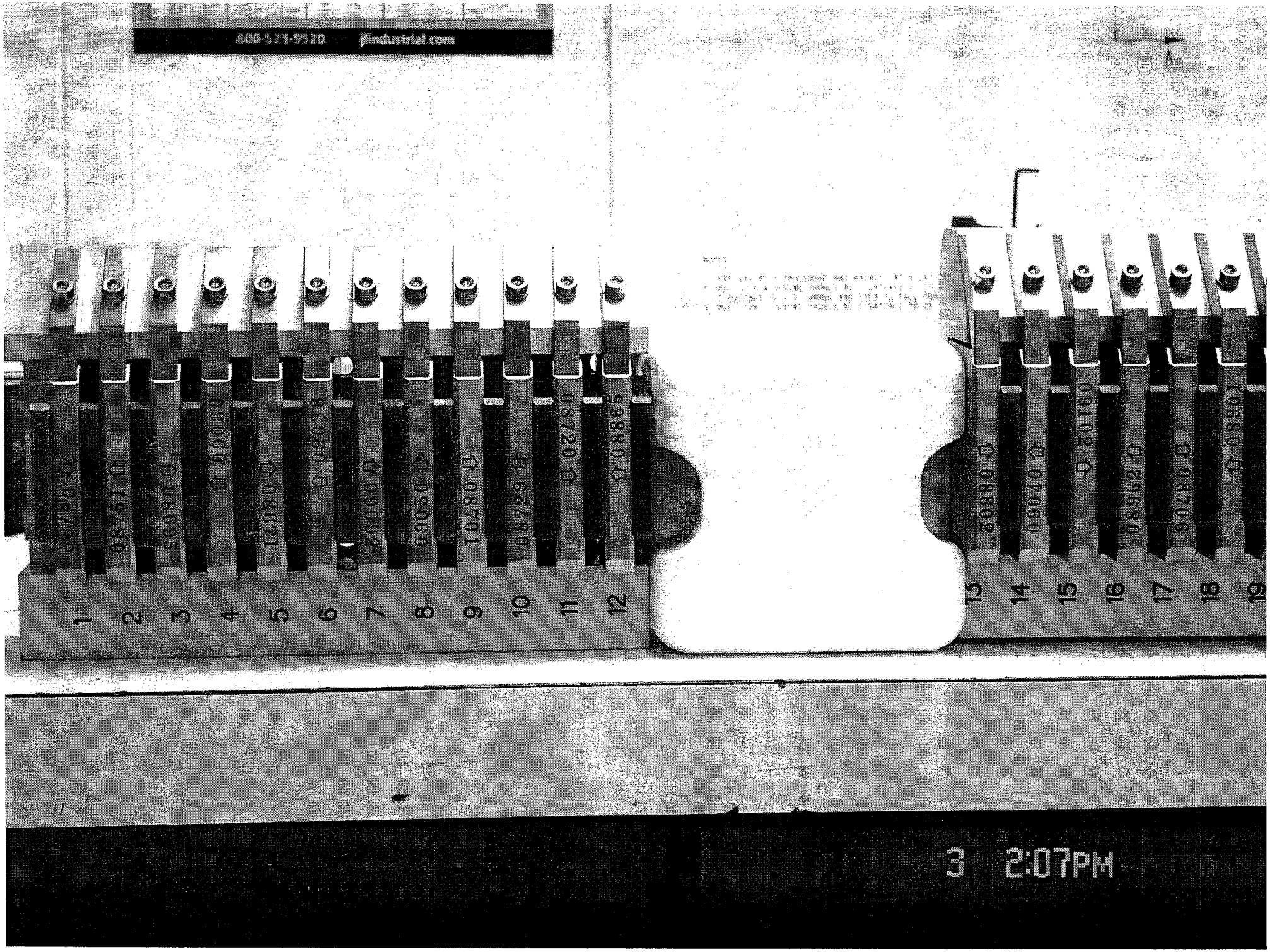
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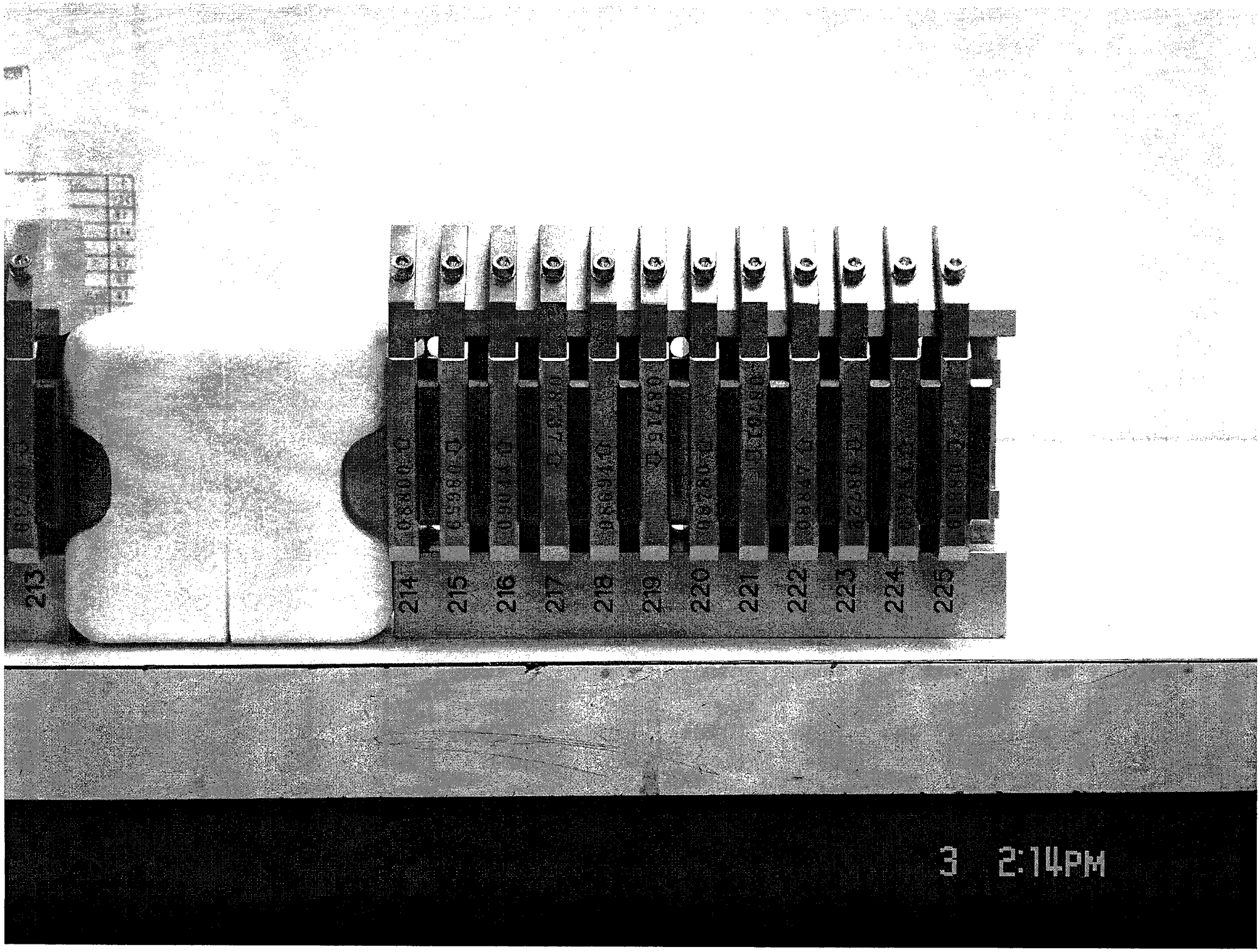
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LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory
Stanford Linear Accelerator Center

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc.

PART NAME: Upper Left Magnet Structure Base

DRAWING #: L143-110801

SERIAL #: L143-110800-37

P.O. #: 5A13624

DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.990/29.977	Accept/Reject
Bottom surface flatness	<= .04	N/A	0.012	Accept/Reject
Overall length	195	+0 / -.1	194.96	Accept/Reject
Overall width	128	+0 / -.1	127.96	Accept/Reject

INSPECTOR: Muelage

QA Supervisor: Muelage

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Lower Left Magnet Structure Base

DRAWING #: L143-110901 SERIAL #: L143-110900-37

P.O. #: 5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.998/29.975	Accept/Reject
Bottom surface flatness	</= .04	N/A	.015	Accept/Reject
Overall length	195	+0 / -.1	194.97	Accept/Reject
Overall width	128	+0 / -.1	127.97	Accept/Reject

INSPECTOR: Muelaze QA Supervisor: Muelaze

TEST EQUIPMENT USED: CMM & Micrometer .

COMMENTS: .

LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory
Stanford Linear Accelerator Center

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Lower Right Magnet Structure Base

DRAWING #: L143-111301 SERIAL #: L143-111300-37

P.O. #: 5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.998/29.987	Accept/Reject
Bottom surface flatness	</= .04	N/A	0.015	Accept/Reject
Overall length	189	+0 / -.1	188.96	Accept/Reject
Overall width	128	+0 / -.1	127.96	Accept/Reject

INSPECTOR: Muelage QA Supervisor: Muelage

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

LCLS
Linac Coherent Light Source Stanford Synchrotron Radiation Laboratory Stanford Linear Accelerator Center

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Upper Right Magnet Structure Base

DRAWING #: L143-111201 SERIAL #: Ll43-111200-37

P.O. #: 5A13624 DATE:10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.995/29.985	Accept/Reject
Bottom surface flatness	</= .04	N/A	0.02	Accept/Reject
Overall length	189	+0 / -.1	188.96	Accept/Reject
Overall width	128	+0 / -.1	127.96	Accept/Reject

INSPECTOR: Muelage QA Supervisor: Muelage

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Upper Middle Magnet Structure Base

DRAWING #: L143-111001-01 SERIAL #: L143-111000-1-37

P.O. #: 5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.998/29.980	Accept/Reject
Bottom surface flatness	<= .04	N/A	.04	Accept/Reject
Overall length	1005.0	+0 / -.1	1004.91	Accept/Reject
Overall width	128	+0 / -.1	127.95	Accept/Reject

INSPECTOR: Muelaze QA Supervisor: Muelaze

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Upper Middle Magnet Structure Base

DRAWING #: L143-111001-01 SERIAL #: L143-111000-2-37

P.O. #: 5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.990/29.980	Accept/Reject
Bottom surface flatness	</= .04	N/A	.035	Accept/Reject
Overall length	1005.0	+0 / -.1	1004.93	Accept/Reject
Overall width	128	+0 / -.1	127.92	Accept/Reject

INSPECTOR: Mulaze QA Supervisor: Mulaze

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Upper Middle Magnet Structure Base

DRAWING #: L143-111001-01 SERIAL #: L143-111000-3-37

P.O. #: 5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.995/29.985	Accept/Reject
Bottom surface flatness	</= .04	N/A	.035	Accept/Reject
Overall length	1005.0	+0 / -.1	1004.95	Accept/Reject
Overall width	128	+0 / -.1	127.98	Accept/Reject

INSPECTOR: Mulage QA Supervisor: Mulage

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Lower Middle Magnet Structure Base

DRAWING #: L143-111101-01 SERIAL #: L143-111100-1-37

P.O. #:5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.980/29.970	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005	+0 / -.1	1004.93	Accept/Reject
Overall width	128	+0 / -.1	127.92	Accept/Reject

INSPECTOR: Muzlaze QA Supervisor: Muzlaze

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Lower Middle Magnet Structure Base

DRAWING #: L143-111101-01 SERIAL #: L143-111100-2-37

P.O. #:5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.985/29.970	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005	+0 / -.1	1004.96	Accept/Reject
Overall width	128	+0 / -.1	127.95	Accept/Reject

INSPECTOR: Mwlaze QA Supervisor: Mwlaze

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: Hi-Tech Manufacturing, Inc. PART NAME: Lower Middle Magnet Structure Base

DRAWING #: L143-111101-01 SERIAL #: L143-111100-3-37

P.O. #:5A13624 DATE: 10-09-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE(S)	
Bottom surface to pole base surface (all surfaces)	30	+0 / -.03	Max / Min 29.980/29.970	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005	+0 / -.1	1004.91	Accept/Reject
Overall width	128	+0 / -.1	127.92	Accept/Reject

INSPECTOR: Mwlaze QA Supervisor: Mwlaze

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS: