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: *05*	Serial Number: *11*
Manufacturer: *Hi-Tech MFG*		Purchase Order Number: *SA-13604*

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.*	TM 7/13/06	☑	☐
2	*Perform visual inspection of the completed assembly for correct the following markings on the Strongback:* L143-11200-05 SA-381-001-35 Serial number same as the Strongback	TM 7/13/06	☑	☐
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. • Upper Right Magnet Structure Assemblies: L143-111200-assembly no. • Upper Middle Magnet Structure Assemblies: L143-111000-1,2,3-assembly no. • Lower Left Magnet Structure Assemblies: 143-110900-assembly serial no. • Lower Right Magnet Structure Assemblies: L143-111300-assembly serial no. • Lower Middle Magnet Structure Assemblies: L143-111100-1,2-3-assembly no.	TM 7/13/06	☑	☐
4	*Verify correct gap size along the entire undulator length using contactor's go/no-go gages.*	TM 7/13/06	☑	☐
5	*Verify correct gap size along the entire undulator length using calibrated gage blocks.*	TM 7/13/06	☑	☐
6	*Check the peak field at each magnet location using a portable Hall probe.*	TM 7/13/06	☑	☐
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 LCLS Magnet Assemblies • Magnet Sort List • Photographs showing correct magnet serial numbers and orientation • ANL Supplier Disposition Reports documenting any noncomformance to specifications drawings or other contract requirements	TM 7/13/06	☑	☐
8	*Verify that the magnet photographs of the magnet sub assemblies are in agreement with the magnet sort list.*	TM 7/13/06	☑	☐
9	*Review shipping container and that the contractor has Shockwatch monitoring devices available*	TM 7/13/06	☑	☐
10	*Forward completed traveler form to LCLS QA Coordinator Tom Barsz. B401, C4243.*		☐	☐

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.

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.	tm	7/13/06
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.	tm	7/13/06

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		7/13/06

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	~~Hi. tech~~ N/A	
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	N/A	
3	Check that parts were marked with serial numbers per SOW section 4.1.3.	ulator Assy Contra	Hi. tech	7/13/06
4	Check that accompanying certifications have correct part serial numbers	ulator Assy Contra	Hi. tech	7/13/06
5	Check the material certification for compliance with ASTM A801, Type 1	tor Assy Contracto	Hi. tech	7/13/06

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	Check the anneal certification for compliance with AMS-A801, or a specified material supplier's annealing schedule.	tor Assy Contracto	Hi Tech	7/13/06
7	Check that the machining Contractor's certified dimensional measurements are in compliance with the drawing	ANL	TMz	11/6/06
8	Verify the critical dimensions as listed in the SOW, Section 4.5.2 are in compliance with the drawing	ulator Assy Contra	Hi Tech	10/6/06

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: 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. Teeh	7/13/04
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	T Mg	7/13/04
5	Review Vendor sort list for agreement with sort procedure.	APS Bldg 401	T Mg	7/13/06

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 Grou	S.S. Sergei Sarkisov	11/6/06
7	On random sampling, confirm Magnetic Moment magnitude and vector components agree with vendor reports	APS Magnet Grou	SS S.S	
8	On radom sampling, verify the magnet s demagnetization and thermal stability.	APS Magnet Grou	SS S.S	

Device # 11

LOT ~~11~~ 7 magnets					
Slot No	12.	Slot No		Slot Number	
1		51	76	100	-75
2		52	-73	101	+72
3	95	53	66	102	-69
4	66	54	-65	103	70
5	78	55	69	104	-66
6	70	56	-67	105	66
7	70	57	72	106	-68
8	76	58	-78	107	69
9	71	59	78	108	-70
10	-76	60	-75	109	71
11	66	61	67	110	-69
12	-69	62	-69	111	71
13	60	63	72	112	-68
14	-72	64	-71	113	68
15	66	65	75	114	-69
16	-73	66	-75	115	67
17	75	67	76	116	-76
18	-70	68	-70	117	76
19	74	69	74	118	-82
20	-65	70	-67	119	72
21	68	71	72	120	-71
22	-73	72	-72	121	71
23	68	73	77	122	-74
24	-75	74	-75	123	70
25	75	75	77	124	-73
26	-80	76	-75	125	74
27	80	77	76	126	-75
28	-77	78	-69	127	71
29	72	79	68	128	-71
30	-67	80	-63	129	71
31	66	81	68	130	-70
32	-66	82	-67	131	65
33	72	83	+75	132	-74
34	-71	84	-74	133	72
35	77	85	72	134	-80
36	-72	86	-67	135	69
37	68	87	73	136	-69
38	-72	88	-67	137	69
39	64	89	64	138	-73
40	-67	90	-63	139	70
41	72	91	66	140	-75
42	-75	92	-77	141	77
43	68	93	71	142	-85
44	-73	94	-77	143	73
45	67	95	74	144	-75
46	-67	96	-73	145	65
47	66	97	71	146	-66
48	-69	98	-72	147	67
49	70	99	72	148	-70
50	-67			149	71

Slot Number		Slot Number
150	-72	200 -71
151	76	201 75
152	-80	202 -61
153	81	203 63
154	-72	204 -66
155	70	205 66
156	-68	206 -69
157	71	207 76
158	-68	208 -70
159	71	209 72
160	-74	210 -70
161	72	211 74
162	-75	212 -65
163	67	213 65
164	-65	214 -59
165	68	215 69
166	-68	216 -69
167	73	217 71
168	-71	218 -76
169	70	219 65
170	-76	220 -77
171	66	221 59
172	-69	222 -89
173	71	223 79
174	-68	224
175	74	225
176	-72	
177	74	
178	-69	
179	71	
180	-63	
181	66	
182	-69	
183	70	
184	-78	
185	74	
186	-70	
187	70	
188	-67	
189	63	
190	-72	
191	68	
192	-76	
193	75	
194	-78	
195	68	
196	-71	
197	67	
198	-71	
199	74	

#11
lot #7

Accepted
8/04/2006
Vass
Shigeri Sasaki

05-26-06
BY GLEN LAWRENCE

LOT7 magnets Serial # 2881-3360

Bottom Jaw

Slot Number	Serial No.	Main filed Orientation	x-axis orientation
1	2999	Upstream	Right
2	2933	Downstream	Right
3	3061	Upstream	Right
4	3067	Downstream	Left
5	3058	Upstream	Left
6	3169	Downstream	Right
7	2929	Upstream	Right
8	3081	Downstream	Right
9	3137	Upstream	Right
10	3301	Downstream	Right
11	3238	Upstream	Left
12	2919	Downstream	Right
13	2938	Upstream	Right
14	3041	Downstream	Right
15	3230	Upstream	Left
16	3280	Downstream	Left
17	3299	Upstream	Left
18	2995	Downstream	Left
19	3203	Upstream	Left
20	3268	Downstream	Right
21	3166	Upstream	Right
22	3320	Downstream	Right
23	3129	Upstream	Right
24	3221	Downstream	Left
25	3197	Upstream	Right
26	2964	Downstream	Left
27	3045	Upstream	Left
28	3329	Downstream	Left
29	3310	Upstream	Right
30	3178	Downstream	Left
31	3307	Upstream	Left
32	3212	Downstream	Left
33	2951	Upstream	Right
34	3152	Downstream	Left
35	3328	Upstream	Right
36	3256	Downstream	Right
37	2946	Upstream	Left
38	3029	Downstream	Right
39	2997	Upstream	Left
40	2899	Downstream	Left
41	2956	Upstream	Left
42	3068	Downstream	Right
43	2885	Upstream	Right
44	3188	Downstream	Left
45	3038	Upstream	Left
46	3149	Downstream	Left
47	3360	Upstream	Right

Top Jaw

Slot Number	Serial No.	Main filed Orientation	x-axis orientation
1	2957	Downstream	Right
2	3065	Upstream	Left
3	3279	Downstream	Right
4	2907	Upstream	Left
5	2891	Downstream	Left
6	2979	Upstream	Left
7	3063	Downstream	Left
8	3270	Upstream	Left
9	3240	Downstream	Left
10	3195	Upstream	Right
11	3298	Downstream	Left
12	3004	Upstream	Right
13	3093	Downstream	Right
14	3231	Upstream	Right
15	3296	Downstream	Right
16	3123	Upstream	Right
17	3239	Downstream	Left
18	3258	Upstream	Right
19	3278	Downstream	Right
20	3277	Upstream	Right
21	2887	Downstream	Left
22	3078	Upstream	Right
23	3305	Downstream	Left
24	3331	Upstream	Right
25	2975	Downstream	Left
26	3084	Upstream	Right
27	2985	Downstream	Left
28	3003	Upstream	Right
29	3050	Downstream	Right
30	3223	Upstream	Left
31	2998	Downstream	Left
32	3125	Upstream	Left
33	3182	Downstream	Right
34	2913	Upstream	Right
35	3337	Downstream	Right
36	3186	Upstream	Right
37	3016	Downstream	Left
38	2936	Upstream	Right
39	3225	Downstream	Right
40	3172	Upstream	Left
41	3134	Downstream	Left
42	3273	Upstream	Right
43	3159	Downstream	Right
44	3315	Upstream	Left
45	2940	Downstream	Right
46	3312	Upstream	Right
47	3263	Downstream	Right

48	2927	Downstream	Right
49	3359	Upstream	Right
50	3357	Downstream	Left
51	3323	Upstream	Right
52	3116	Downstream	Left
53	2893	Upstream	Right
54	3018	Downstream	Left
55	3342	Upstream	Right
56	3010	Downstream	Right
57	3287	Upstream	Right
58	3101	Downstream	Left
59	3090	Upstream	Right
60	2987	Downstream	Left
61	3200	Upstream	Right
62	2884	Downstream	Right
63	3132	Upstream	Right
64	3001	Downstream	Left
65	3185	Upstream	Right
66	3309	Downstream	Left
67	2958	Upstream	Right
68	3107	Downstream	Left
69	3352	Upstream	Left
70	3209	Downstream	Right
71	2969	Upstream	Right
72	3059	Downstream	Left
73	3218	Upstream	Right
74	3032	Downstream	Left
75	2895	Upstream	Right
76	3051	Downstream	Right
77	3117	Upstream	Right
78	2989	Downstream	Right
79	3111	Upstream	Left
80	3319	Downstream	Right
81	3165	Upstream	Left
82	2992	Downstream	Right
83	2972	Upstream	Right
84	3295	Downstream	Left
85	3266	Upstream	Left
86	2917	Downstream	Right
87	2889	Upstream	Right
88	3070	Downstream	Left
89	3085	Upstream	Left
90	3293	Downstream	Right
91	3168	Upstream	Right
92	3131	Downstream	Right
93	3308	Upstream	Left
94	3356	Downstream	Left
95	3248	Upstream	Left
96	2959	Downstream	Right
97	3194	Upstream	Right
98	3056	Downstream	Right
99	3201	Upstream	Right

48	3164	Upstream	Left
49	3095	Downstream	Right
50	2947	Upstream	Left
51	3021	Downstream	Right
52	3206	Upstream	Right
53	3017	Downstream	Left
54	3252	Upstream	Right
55	3265	Downstream	Left
56	3236	Upstream	Left
57	3199	Downstream	Right
58	2980	Upstream	Left
59	2932	Downstream	Left
60	3060	Upstream	Right
61	3348	Downstream	Left
62	3313	Upstream	Right
63	3336	Downstream	Left
64	3322	Upstream	Right
65	2955	Downstream	Right
66	3036	Upstream	Right
67	3154	Downstream	Left
68	2952	Upstream	Left
69	3140	Downstream	Left
70	3007	Upstream	Right
71	3158	Downstream	Right
72	2888	Upstream	Left
73	3055	Downstream	Left
74	3316	Upstream	Left
75	3145	Downstream	Right
76	3274	Upstream	Right
77	3260	Downstream	Left
78	3144	Upstream	Right
79	3228	Downstream	Left
80	3128	Upstream	Left
81	2943	Downstream	Left
82	3086	Upstream	Left
83	3096	Downstream	Left
84	3000	Upstream	Left
85	3283	Downstream	Left
86	3264	Upstream	Right
87	3193	Downstream	Left
88	3037	Upstream	Right
89	2939	Downstream	Left
90	3115	Upstream	Left
91	2918	Downstream	Left
92	3216	Upstream	Right
93	3208	Downstream	Right
94	3327	Upstream	Left
95	3046	Downstream	Right
96	3175	Upstream	Right
97	3289	Downstream	Right
98	3335	Upstream	Left
99	3232	Downstream	Left

100	3192	Downstream	Right
101	3008	Upstream	Left
102	2920	Downstream	Right
103	3261	Upstream	Left
104	3062	Downstream	Left
105	3103	Upstream	Left
106	3012	Downstream	Right
107	3047	Upstream	Left
108	3246	Downstream	Left
109	3097	Upstream	Left
110	3343	Downstream	Right
111	3173	Upstream	Left
112	3092	Downstream	Left
113	3114	Upstream	Left
114	3204	Downstream	Left
115	2904	Upstream	Left
116	3057	Downstream	Right
117	3211	Upstream	Right
118	3353	Downstream	Right
119	3048	Upstream	Right
120	3130	Downstream	Left
121	3026	Upstream	Right
122	3350	Downstream	Left
123	3054	Upstream	Left
124	2994	Downstream	Right
125	3088	Upstream	Left
126	3237	Downstream	Right
127	2923	Upstream	Right
128	3349	Downstream	Right
129	3276	Upstream	Right
130	3098	Downstream	Right
131	3170	Upstream	Left
132	3306	Downstream	Right
133	2968	Upstream	Left
134	3009	Downstream	Left
135	3025	Upstream	Right
136	3072	Downstream	Right
137	3346	Upstream	Left
138	2910	Downstream	Right
139	3006	Upstream	Left
140	3355	Downstream	Right
141	2996	Upstream	Left
142	3064	Downstream	Right
143	3033	Upstream	Right
144	3024	Downstream	Left
145	2934	Upstream	Right
146	3354	Downstream	Right
147	3148	Upstream	Left
148	2945	Downstream	Right
149	2894	Upstream	Right
150	3220	Downstream	Right
151	3089	Upstream	Right

100	3241	Upstream	Left
101	3183	Downstream	Left
102	3108	Upstream	Right
103	3271	Downstream	Right
104	3213	Upstream	Left
105	3314	Downstream	Right
106	3250	Upstream	Left
107	2902	Downstream	Right
108	3177	Upstream	Right
109	3292	Downstream	Right
110	3294	Upstream	Right
111	2897	Downstream	Right
112	2916	Upstream	Right
113	3333	Downstream	Right
114	3138	Upstream	Left
115	3028	Downstream	Left
116	3187	Upstream	Left
117	2960	Downstream	Left
118	2967	Upstream	Left
119	3341	Downstream	Left
120	3311	Upstream	Right
121	2911	Downstream	Right
122	2915	Upstream	Left
123	3020	Downstream	Left
124	3190	Upstream	Left
125	2986	Downstream	Left
126	3330	Upstream	Right
127	3075	Downstream	Left
128	3207	Upstream	Right
129	3034	Downstream	Left
130	3332	Upstream	Right
131	2953	Downstream	Right
132	3150	Upstream	Left
133	3030	Downstream	Left
134	3291	Upstream	Left
135	3275	Downstream	Left
136	2937	Upstream	Left
137	3094	Downstream	Right
138	3133	Upstream	Right
139	2981	Downstream	Right
140	3285	Upstream	Left
141	2926	Downstream	Left
142	2950	Upstream	Right
143	2882	Downstream	Left
144	3053	Upstream	Right
145	3071	Downstream	Left
146	3224	Upstream	Right
147	2977	Downstream	Right
148	3011	Upstream	Right
149	3105	Downstream	Left
150	3019	Upstream	Left
151	2930	Downstream	Left

152	3304	Downstream	Right
153	3300	Upstream	Left
154	2921	Downstream	Right
155	2974	Upstream	Right
156	3334	Downstream	Left
157	2905	Upstream	Right
158	3233	Downstream	Right
159	3155	Upstream	Left
160	3262	Downstream	Left
161	2892	Upstream	Right
162	3210	Downstream	Left
163	3022	Upstream	Right
164	3083	Downstream	Right
165	3202	Upstream	Left
166	2908	Downstream	Left
167	2971	Upstream	Right
168	3002	Downstream	Left
169	2912	Upstream	Right
170	3219	Downstream	Right
171	3247	Upstream	Left
172	3102	Downstream	Left
173	3229	Upstream	Right
3286→ 174	~~3222~~	Downstream	Left
175	2965	Upstream	Right
176	2949	Downstream	Left
177	3340	Upstream	Right
178	2942	Downstream	Right
179	3284	Upstream	Right
180	3143	Downstream	Right
181	2925	Upstream	Right
182	2901	Downstream	Right
183	3013	Upstream	Right
184	3318	Downstream	Right
185	3269	Upstream	Right
186	3121	Downstream	Right
187	3120	Upstream	Left
188	2973	Downstream	Left
189	2984	Upstream	Right
190	3255	Downstream	Right
191	3282	Upstream	Right
192	2983	Downstream	Right
193	3066	Upstream	Right
194	3099	Downstream	Right
195	3005	Upstream	Right
196	3074	Downstream	Left
197	3139	Upstream	Right
198	3249	Downstream	Right
199	3257	Upstream	Right
200	3324	Downstream	Right
201	3044	Upstream	Right
202	3234	Downstream	Right
203	2922	Upstream	Right

152	3109	Upstream	Right
153	3122	Downstream	Right
154	3110	Upstream	Left
155	3160	Downstream	Right
156	3106	Upstream	Left
157	3162	Downstream	Left
158	3141	Upstream	Left
159	2883	Downstream	Left
160	3242	Upstream	Right
161	3171	Downstream	Right
162	3118	Upstream	Left
163	2976	Downstream	Left
164	2890	Upstream	Right
165	2886	Downstream	Left
166	2993	Upstream	Right
167	3253	Downstream	Left
168	3288	Upstream	Right
169	3076	Downstream	Right
170	3174	Upstream	Right
171	2991	Downstream	Right
172	2954	Upstream	Left
173	3126	Downstream	Left
174	3015	Upstream	Left
175	3217	Downstream	Left
176	3135	Upstream	Left
177	3124	Downstream	Right
178	3027	Upstream	Right
179	3180	Downstream	Left
180	2941	Upstream	Left
181	3031	Downstream	Left
182	3079	Upstream	Right
183	3344	Downstream	Left
184	3191	Upstream	Right
185	3119	Downstream	Right
186	2978	Upstream	Left
187	3297	Downstream	Left
188	3167	Upstream	Left
189	3069	Downstream	Right
190	3347	Upstream	Left
191	3345	Downstream	Left
192	3161	Upstream	Left
193	3227	Downstream	Right
194	2909	Upstream	Left
195	2898	Downstream	Left
196	3351	Upstream	Right
197	3226	Downstream	Right
198	3235	Upstream	Right
199	3179	Downstream	Left
200	2982	Upstream	Left
201	3339	Downstream	Left
202	3184	Upstream	Right
203	3077	Downstream	Right

204	3325	Downstream	Right
205	3049	Upstream	Left
206	3146	Downstream	Left
207	3035	Upstream	Right
208	3338	Downstream	Left
209	3147	Upstream	Left
210	3163	Downstream	Left
211	3127	Upstream	Right
212	3290	Downstream	Left
213	3189	Upstream	Left
214	2881	Downstream	Right
215	3082	Upstream	Right
216	3254	Downstream	Left
217	2924	Upstream	Right
218	2963	Downstream	Right
219	2966	Upstream	Left
220	3052	Downstream	Right
221	3272	Upstream	Left
222	2906	Downstream	Left
223	3317	Upstream	Left
224	2944	Downstream	Right
225	3153	Upstream	Right

204	3358	Upstream	Right
205	3043	Downstream	Left
206	2948	Upstream	Left
207	3243	Downstream	Right
208	3244	Upstream	Right
209	2990	Downstream	Left
210	2962	Upstream	Left
211	3136	Downstream	Right
212	3281	Upstream	Right
213	3091	Downstream	Right
214	3196	Upstream	Left
215	2970	Downstream	Right
216	3302	Upstream	Right
217	3142	Downstream	Left
218	3023	Upstream	Right
219	3326	Downstream	Right
220	3205	Upstream	Right
221	3080	Downstream	Right
222	3156	Upstream	Right
223	3073	Downstream	Right
224	3157	Upstream	Right
225	2903	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 Right and Left 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
2931	33%
3100	80%
2900	
3042	
2961	
3104	
2914	
3151	
2896	
3113	
3303	
3181	

Sample magnets

serial No.
2935
2988
3040
3176
3245

2928
3198
3215
3014
3251
3039
3321
3087
3286
3267
3214
3112
3259

Sergey Lagonsky

From: "Shigemi Sasaki" <sasaki@aps.anl.gov>
To: "Sergey Lagonsky" <slagonsky@hi-tech-mfg.com>
Cc: "Emil Trakhtenberg" <emil@aps.anl.gov>; "Isaac Vasserman" <isaac@aps.anl.gov>; "'Marion M. White'" <mwhite@aps.anl.gov>; "Glen Lawrence" <gsl@aps.anl.gov>; "Liz Moog" <moog@aps.anl.gov>
Sent: Wednesday, July 05, 2006 03:02 pm
Attach: Lot 7 Sorting Procedure.xls
Subject: Re: Mag #3222 for LOT7

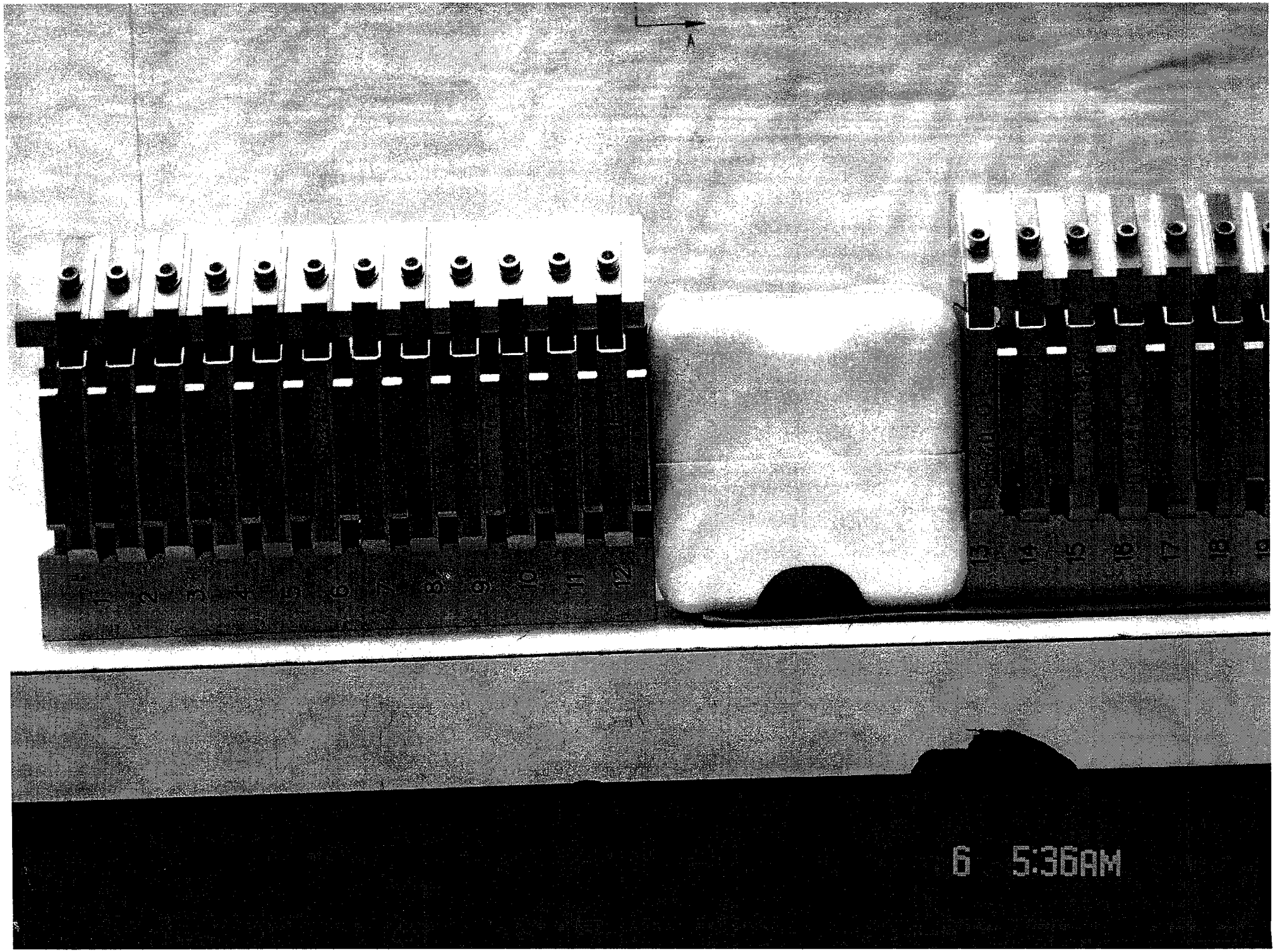
The magnet #3222 in LOT7 should be replaced to #3286 which is in the spare magnets.
The x-axis orientation should be the same.
Attached is a new sorting list.

Regards,

Shigemi

Sergey Lagonsky wrote:

> Here's a damaged magnet serial# 03222 of lot# 7. Nick's size is 3.2mm x 4.2mm x 0.5mm.
> Please respond with substitution magnet serial# on this e-mail address A.S.A.P.
>
> Sincerely,
> Simon Sorsher.


A
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18 02995
19 03203
20 03266
21 03166
22 03320
23 03123
24 03221
25 03197
26 02964
27 03045
28 03329
29 03310
30 03178
31 03307
32 03212
33 02951
34 03152
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36 03256
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39 02997
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MAR 4 5:12PM
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85 03266
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90 03293
91 03168
92 03131
93 03308
94 03356
95 03248
96 02959
97 03194
98 03056
99 03201
100 03192
101 03008
102 02920
103 03261
104 03062
105 03103
106 03012
107 03047
108 03240
109 03097

WED 5:15PM 9

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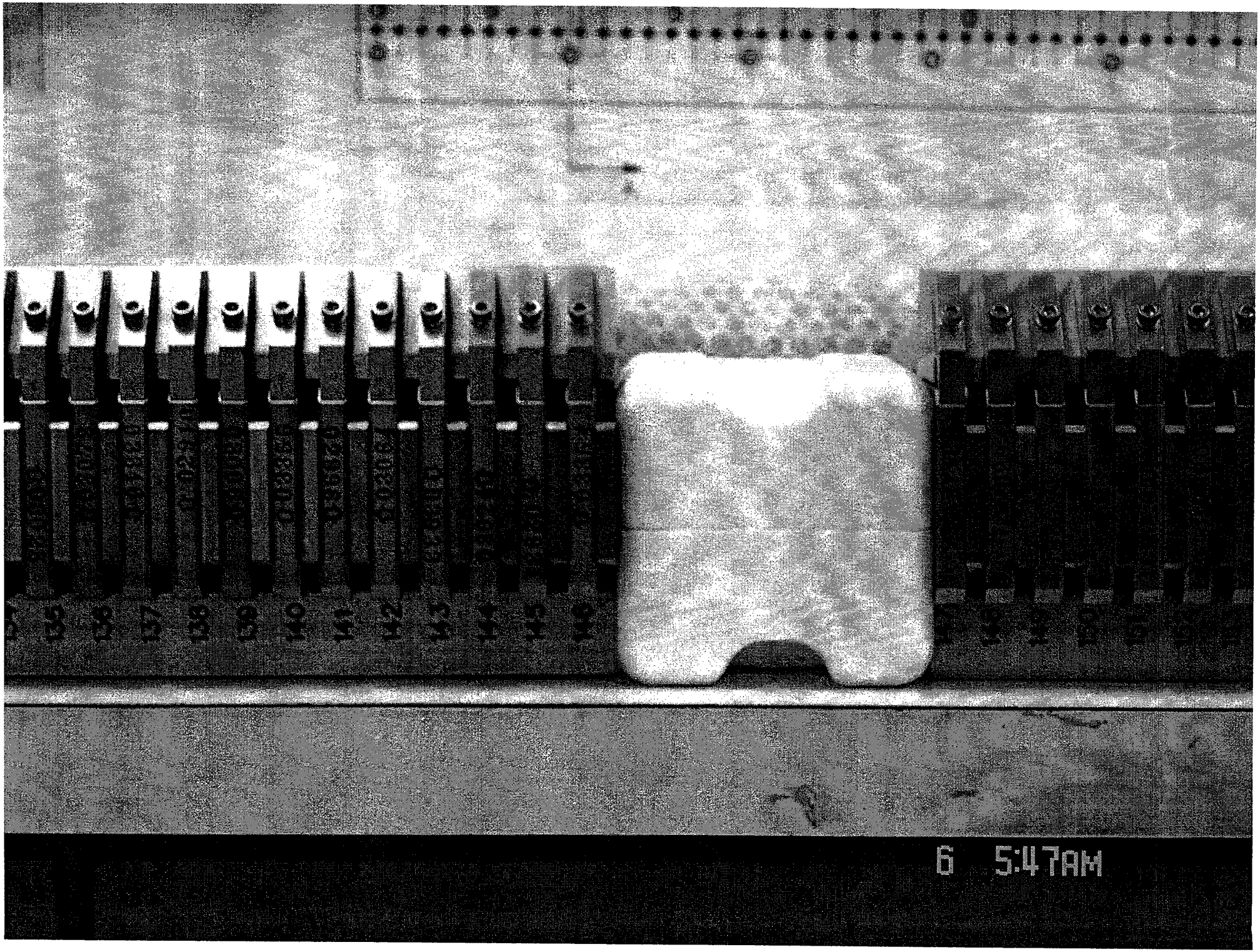
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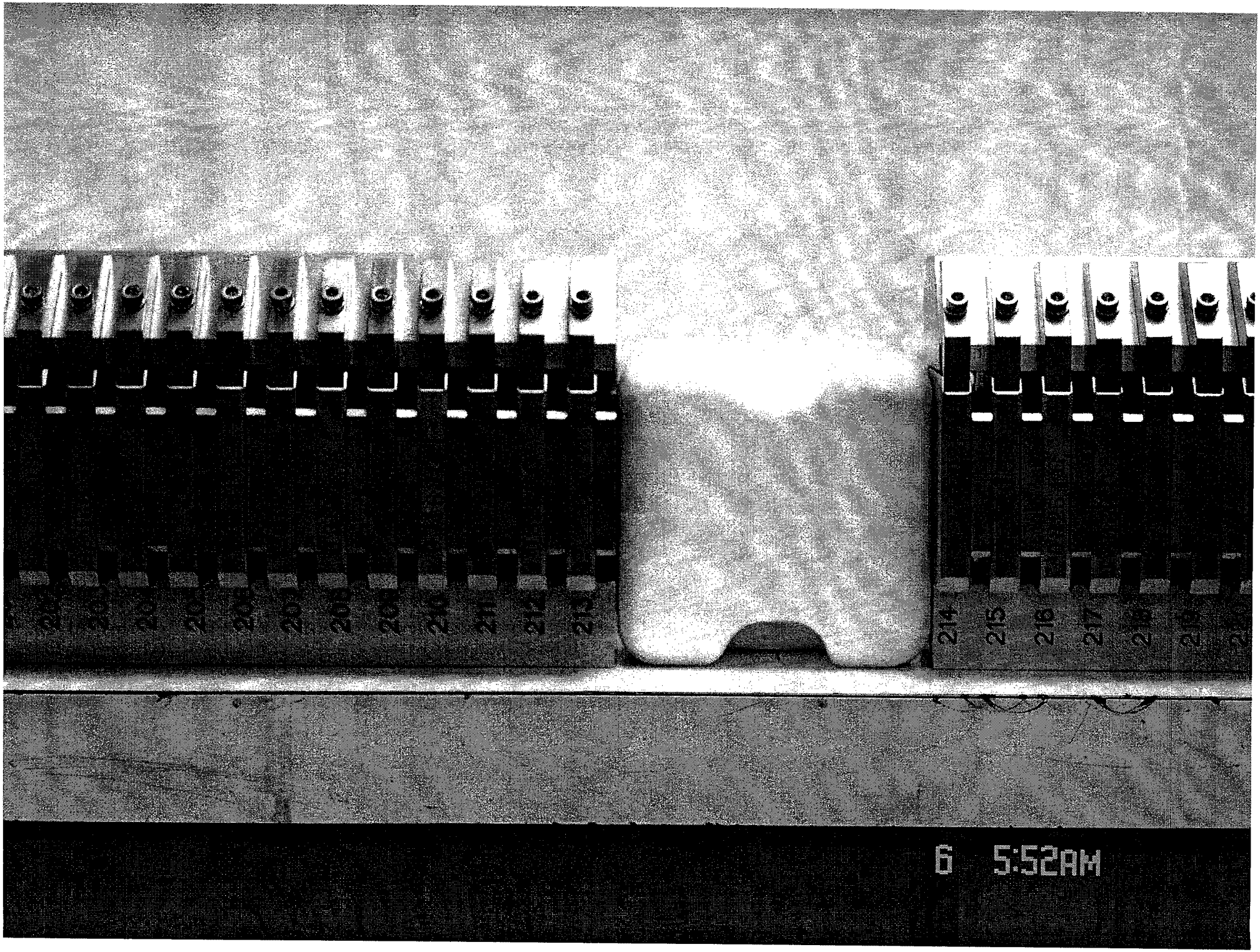
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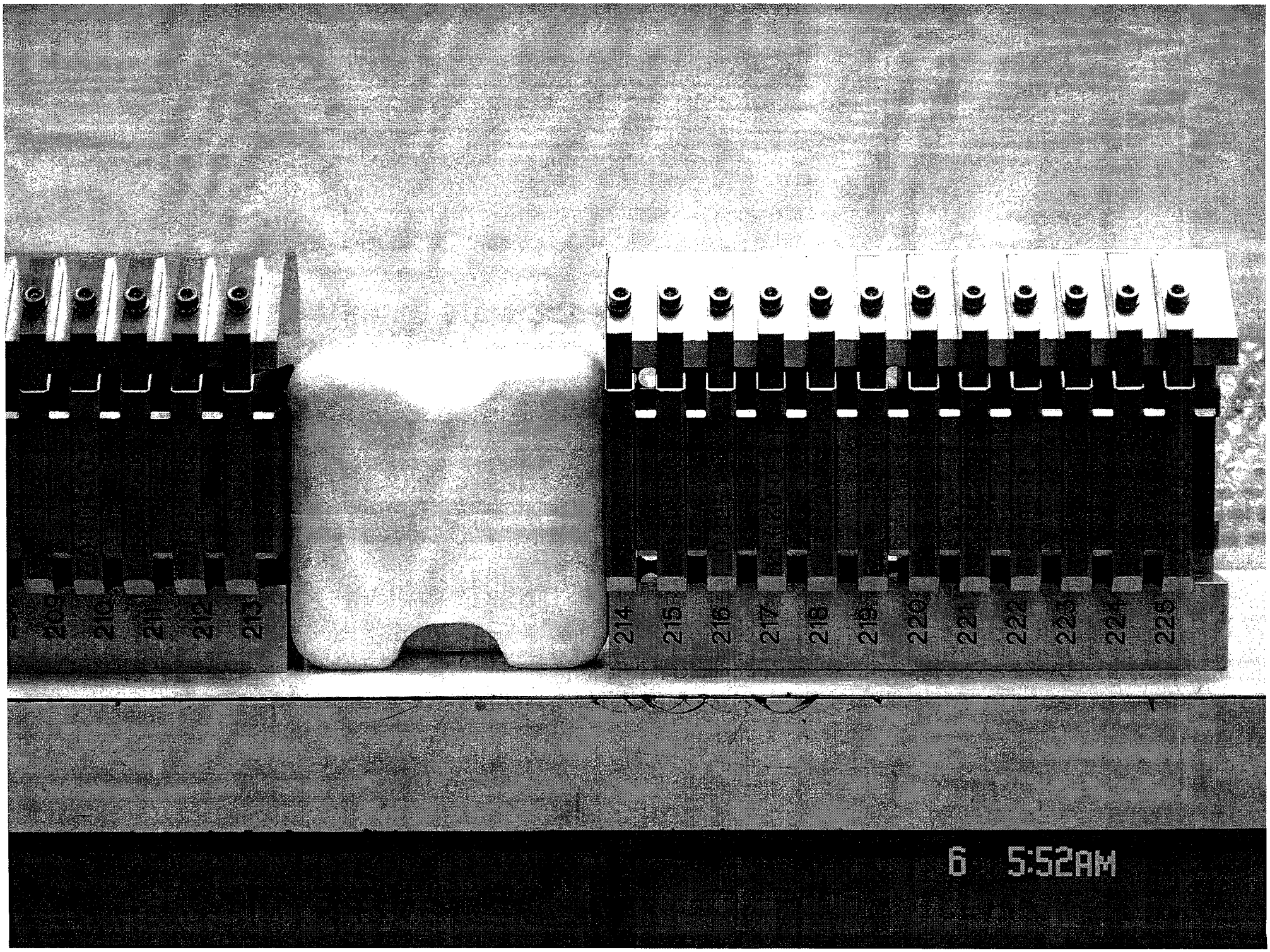
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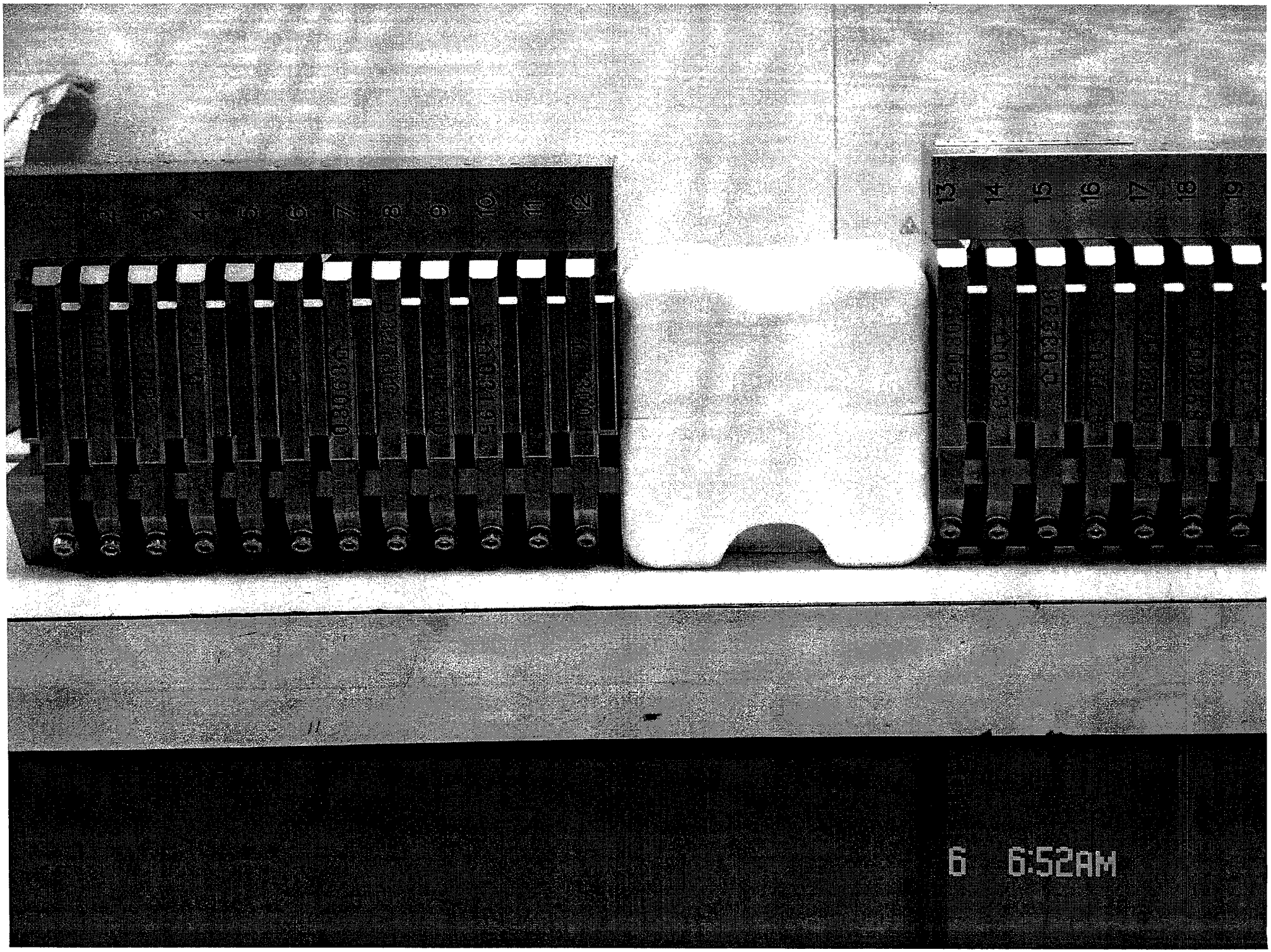
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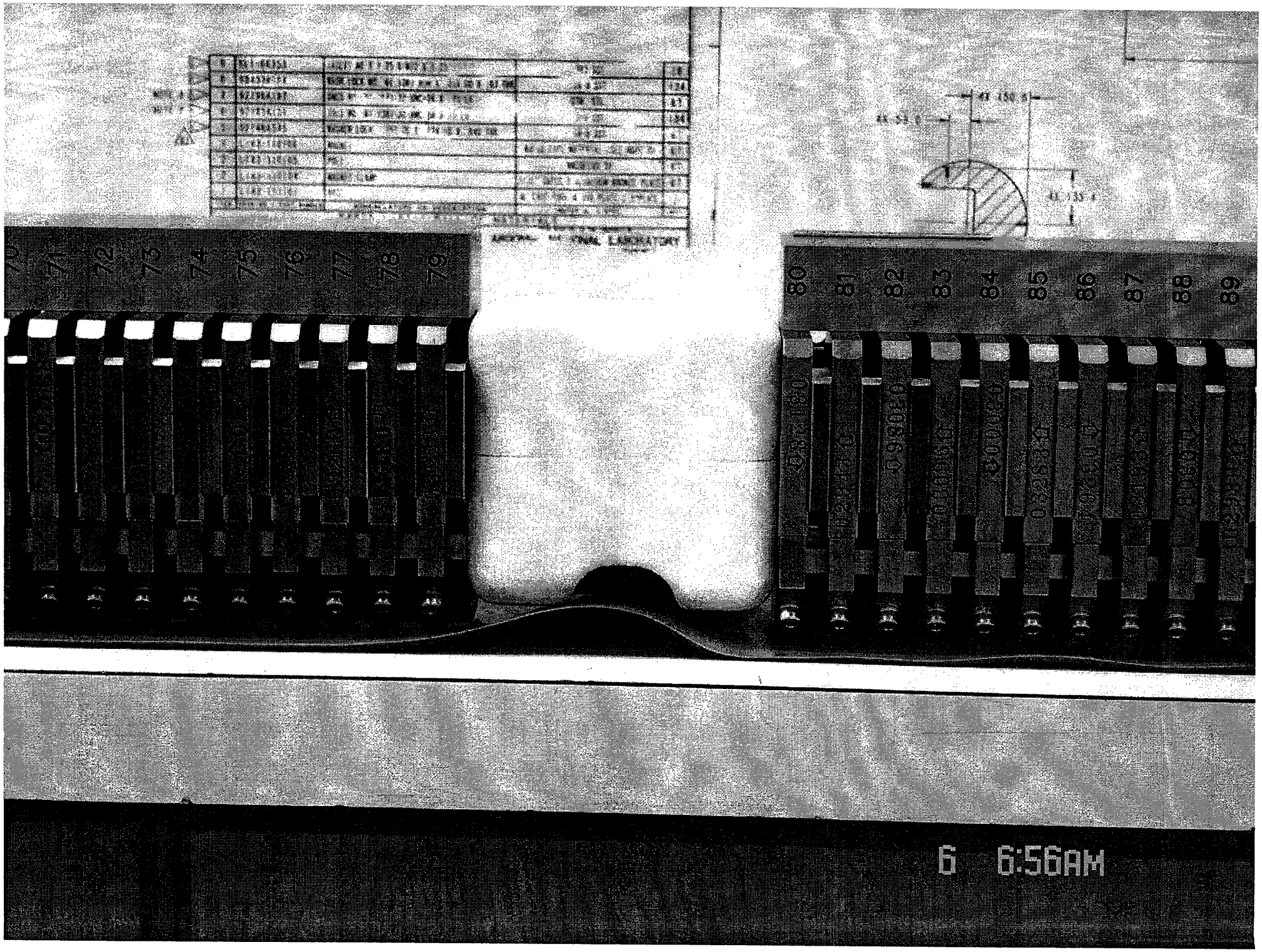
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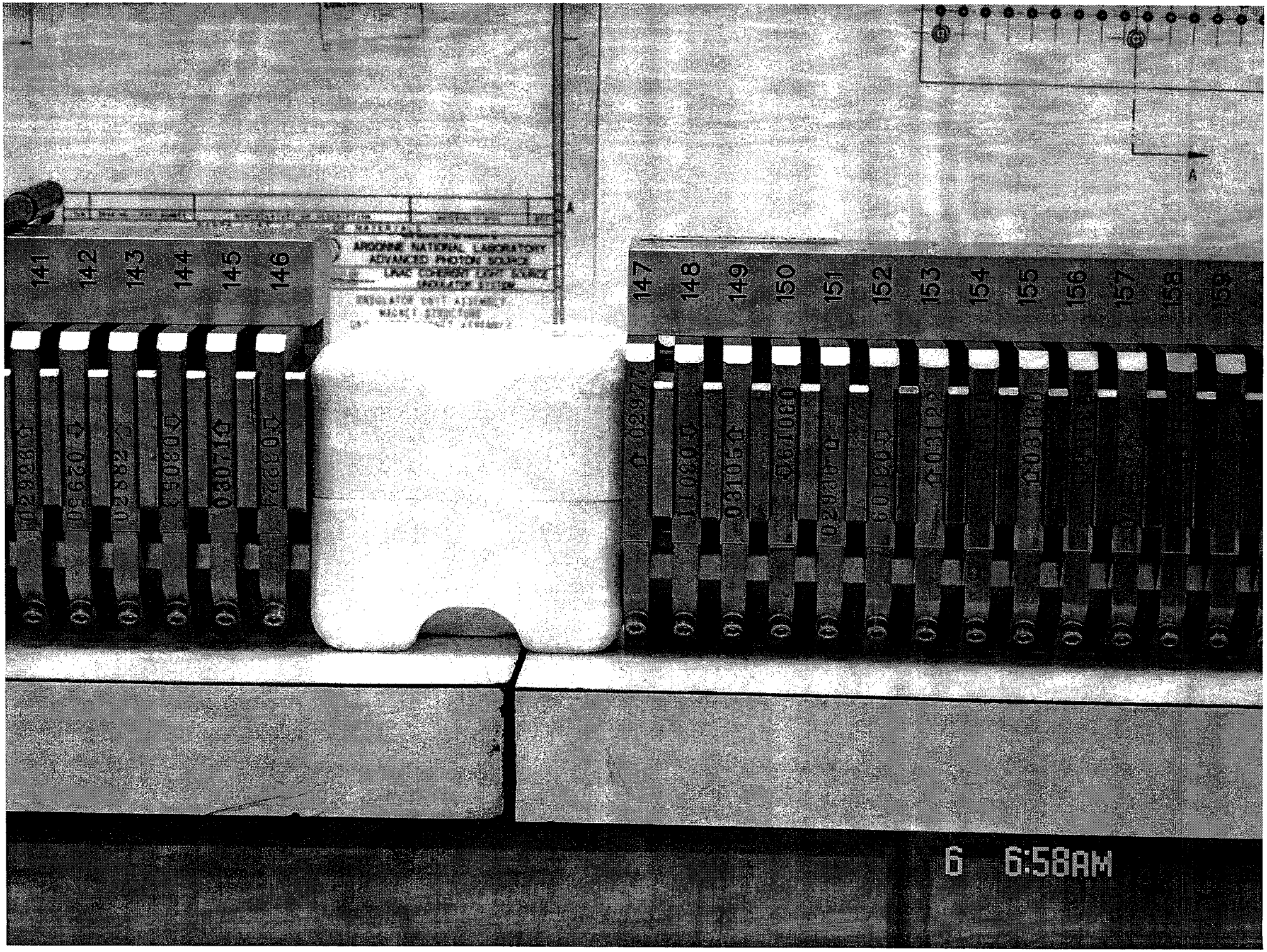
ARGONNE NATIONAL LABORATORY
ADVANCED PHOTON SOURCE
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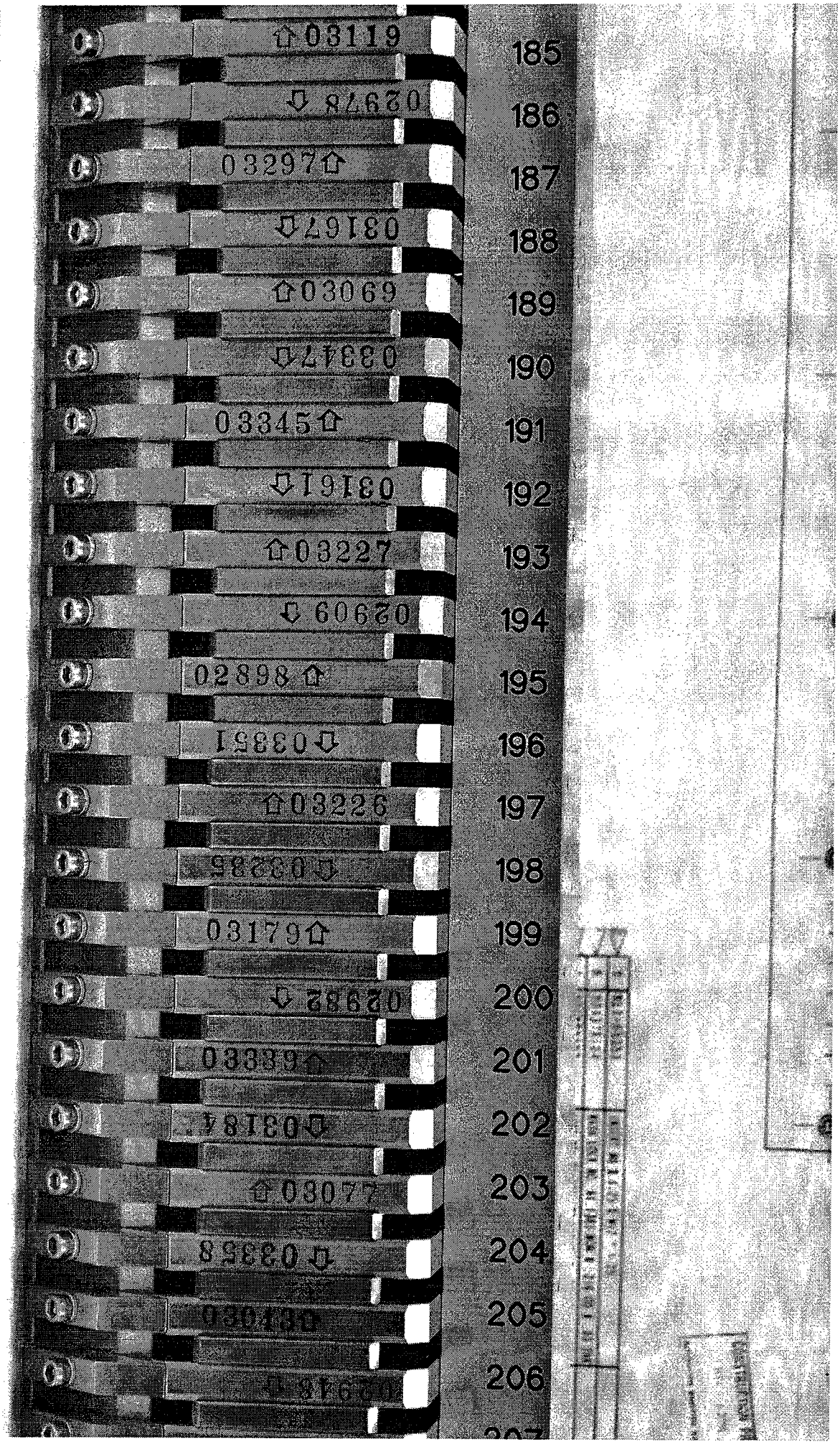
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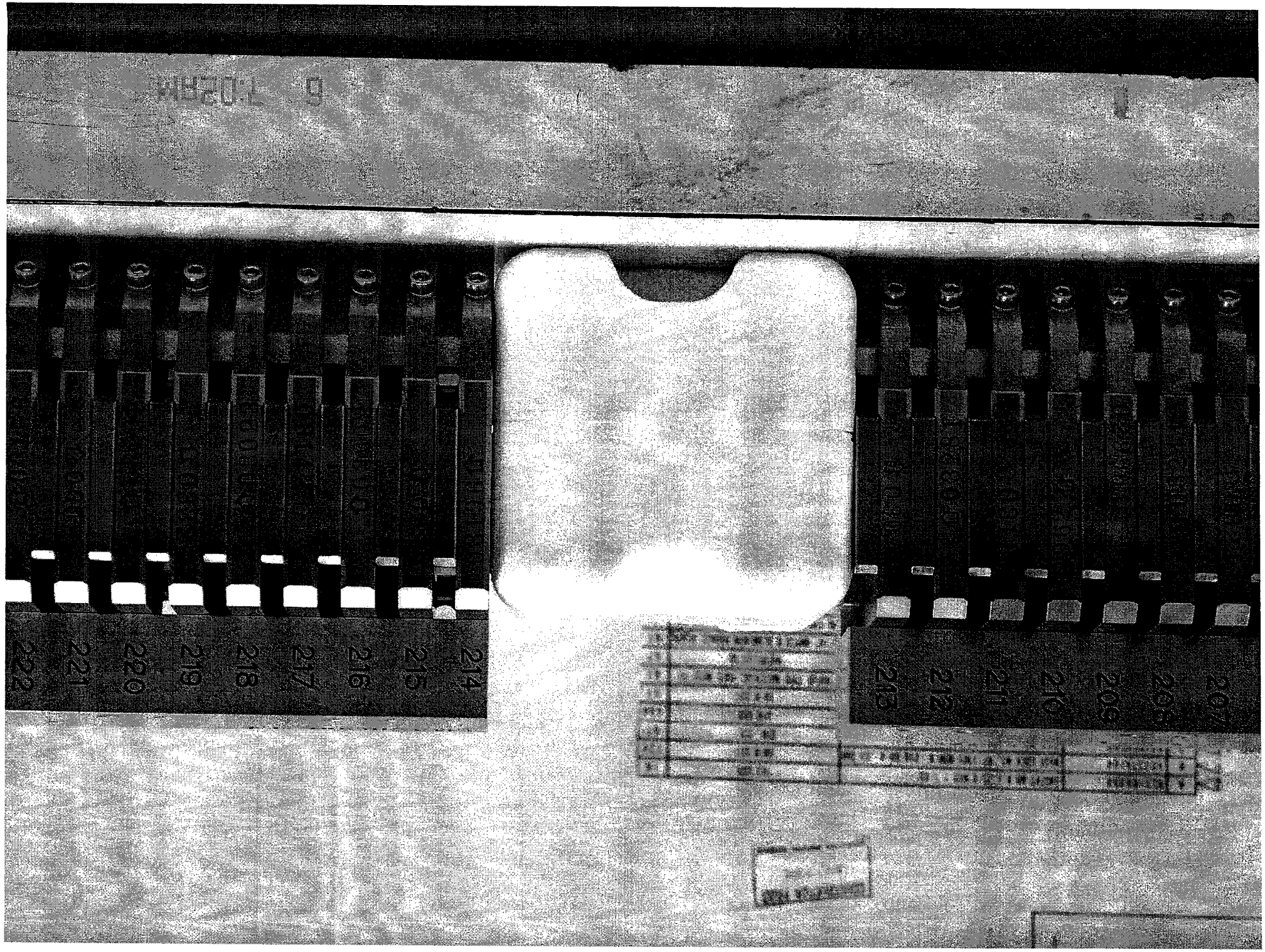
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INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: **Dial Machine, Inc.**

PART NAME: **LCLS Strongback**

DRAWING #: **L143-110700** – 07

SERIAL #: 011

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

DATE: 07-08-06

#	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	07/08/06
2	Check Strongback is marked with serial number & part no.'s (ANL & SLAC) per SOW Section 4.1.3?	H.T.	SIMON	07/08/06
3	Check all accompanying Certifications have correct part serial number	H.T.	SIMON	07/08/06
4	Check Material Certification for compliance with ASTM B381-03, Grade F2	—	—	—
5	Check Forging Annealing Certification for annealing conformance to AMS-H-81200A, Table V, commercial Pure, Bars & Forgings, including Note 8	—	—	—
6	Check Rough Machining Anneal Certification for annealing conformance to AMS-2801B section 3.2.9	—	—	—
7	Check the Strongback contractor's reported dimensional measurements against the part drawing	H.T.	SIMON	07/08/06
8	Verify the Strongback critical dimensions as listed in the SOW section 4.5.2 are in compliance with the print	H.T.	SIMON	07/08/06

INSPECTOR: SIMON

QA Supervisor: Murtaza

TEST EQUIPMENT USED: VISUAL

COMMENTS:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR:

PART NAME: LCLS Strongback

DRAWING #: L143-110700-07

SERIAL #: 011

P.O. #: SA-13624

DATE: 07-08-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Overall length	3400.00	+0 / -.04	34.00	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	130.06	Accept/Reject
Flatness of front face	<= .05	N/A	<= .02	Accept/Reject
Perpendicularity of front face to A	<= .1	N/A	<= .02	Accept/Reject
End face perpendicularity to A and B	<= .05	N/A	<= 1.02 <= 1.02	Accept/Reject

INSPECTOR: SIMON

QA Supervisor: Murtaza

TEST EQUIPMENT USED: JIG TRANSIT MODEL 711010; S/N 231067

COMMENTS: DROP INDICATOR

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 #: L143-110700-07

SERIAL #: 011

P.O.#: 5A-13624

DATE: 07-08-06

FEATURE: Gap Flatness

#	Distance (mm)	Measured A	Measured B	Comments
1	50	.0000	.0001	OK
2	350	.0000	.0006	OK
3	650	.0004	.0006	OK
4	950	.0001	.0005	OK
5	1250	-.0004	.0003	OK
6	1550	-.0008	-.0001	OK
7	1850	-.0004	.0004	OK
8	2150	-.0009	-.0004	OK
9	2450	-.0007	-.0003	OK
10	2750	-.0009	-.0007	OK
11	3050	-.0009	-.0006	OK
12	3350	-.0012	-.0009	OK

INSPECTOR: Simon

QA Supervisor: Muelaz

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

COMMENTS:

DIAL MACHINE, INC.
2902 Eastrock Drive • Eastrock Industrial Park • P.O. Box 5246
Rockford, Illinois 61125
Phone 815/397-6660 • Fax 815/397-0562
www.dialmachine.com

Packing Slip No. 23282

Bill To

ARGONNE NATIONAL LABORATORY
ATTN: ACCOUNTS PAYABLE BLDG 201
9700 SOUTH CASS AVENUE
ARGONNE IL 60439-4874

Ship To

HI-TECH MANUFACTURING INC
4637 NORTH 25TH AVENUE
SCHILLER PARK IL 60176

Ship Date	04/28/2006
Your Order	5A-04889
FOB	ROCKFORD
Ship Via	OUR TRUCK
Terms	NET 30
Our Order	21279

Order Qty	Ship Qty	Part ID/Description	Rev	U/M
1	1	SA-381-000-86 TITANIUM STRONGBACK SERIAL #03		EA
1	1	SA-381-000-86 TITANIUM STRONBACK SERIAL #11		EA

MACHINED COMPLETE PER PRINT
INSPECTION REPORTS ENCLOSED

R Juarez

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

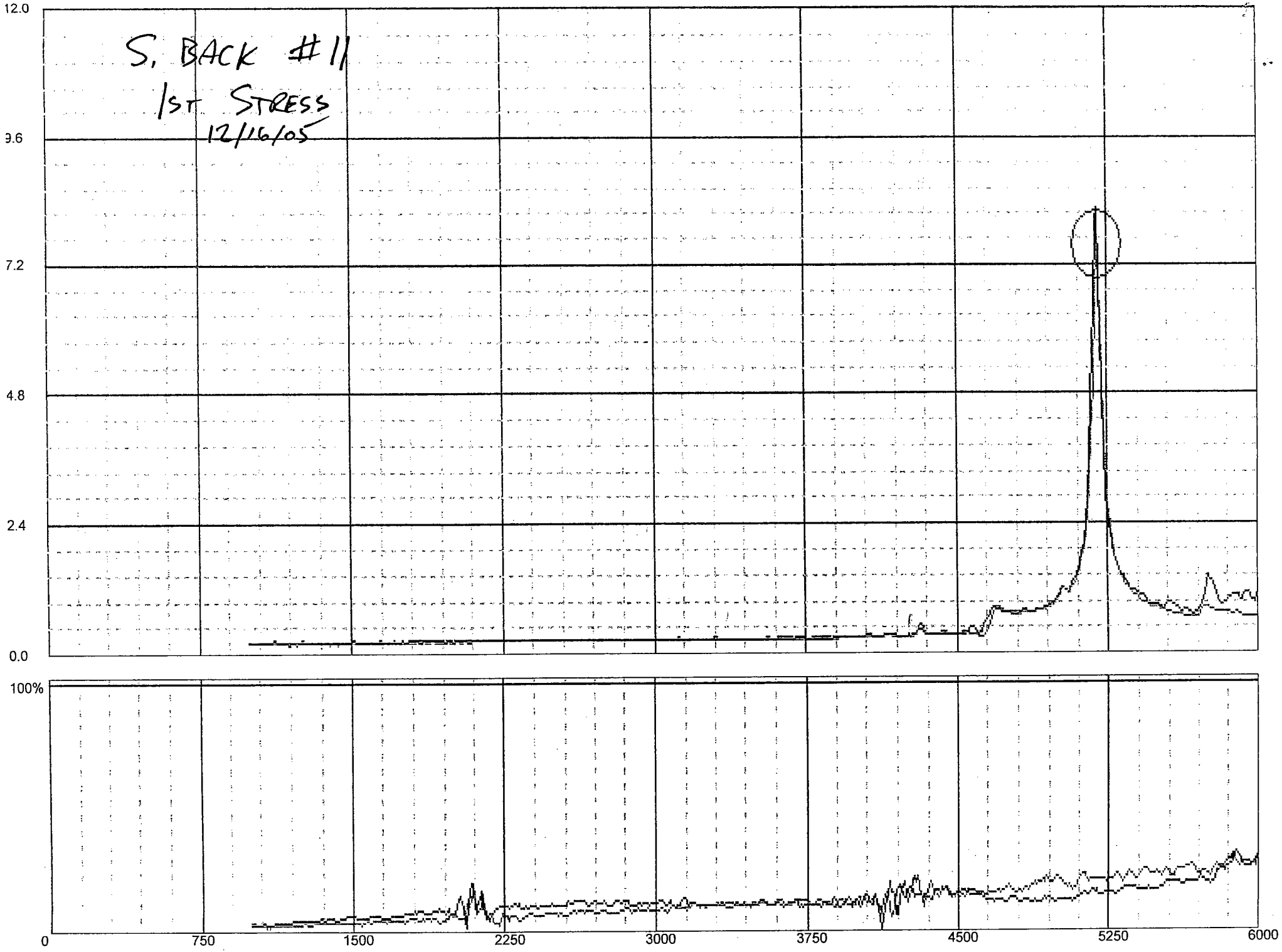
Serial Number	# 11		Inspector	Floyd
Date	19-Apr-06			

CMM Critical Feature Results	*Req*	*Tolr*	*Actual*	
flatness - plane -A-		.050	.007	
side opposite -A- flatness		.050	.013	
surface finish -A-	1.6		.5	
surface finish side opposite -A-	1.6		.5	
-B- surface flatness		.050	.017	
-B- surface perp to -A-		.100	.036	
Pads				
RH Mounting Pad parallel to -A-		.050	.003	
LH Mounting Pad parallel to -A-		.050	.008	
Overall Length	3400.00	+.000/-.200	399.892	-.108
LH end to 1700mm holes right	1700.00	+.000/-.100	1699.947	-.063
LH end to 1700mm holes left	1700.00	+.000/-.100	1699.955	-.045
side opposite -A- 167.00 dim	167.00	+.050/-.000	167.018	plane to plane
Individual Gaps	167.00		167.035	direct gaps
side -A- to Centerline 83.5	83.50	+/- .080	83.509	
Other Dimensions		*Date*	*Reviewer*	skl
			no deviations	

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

Approvals	

Temps	
20.8	Start
20.2	Finish


S. BACK #11
1ST STRESS
12/16/05
12.0
9.6
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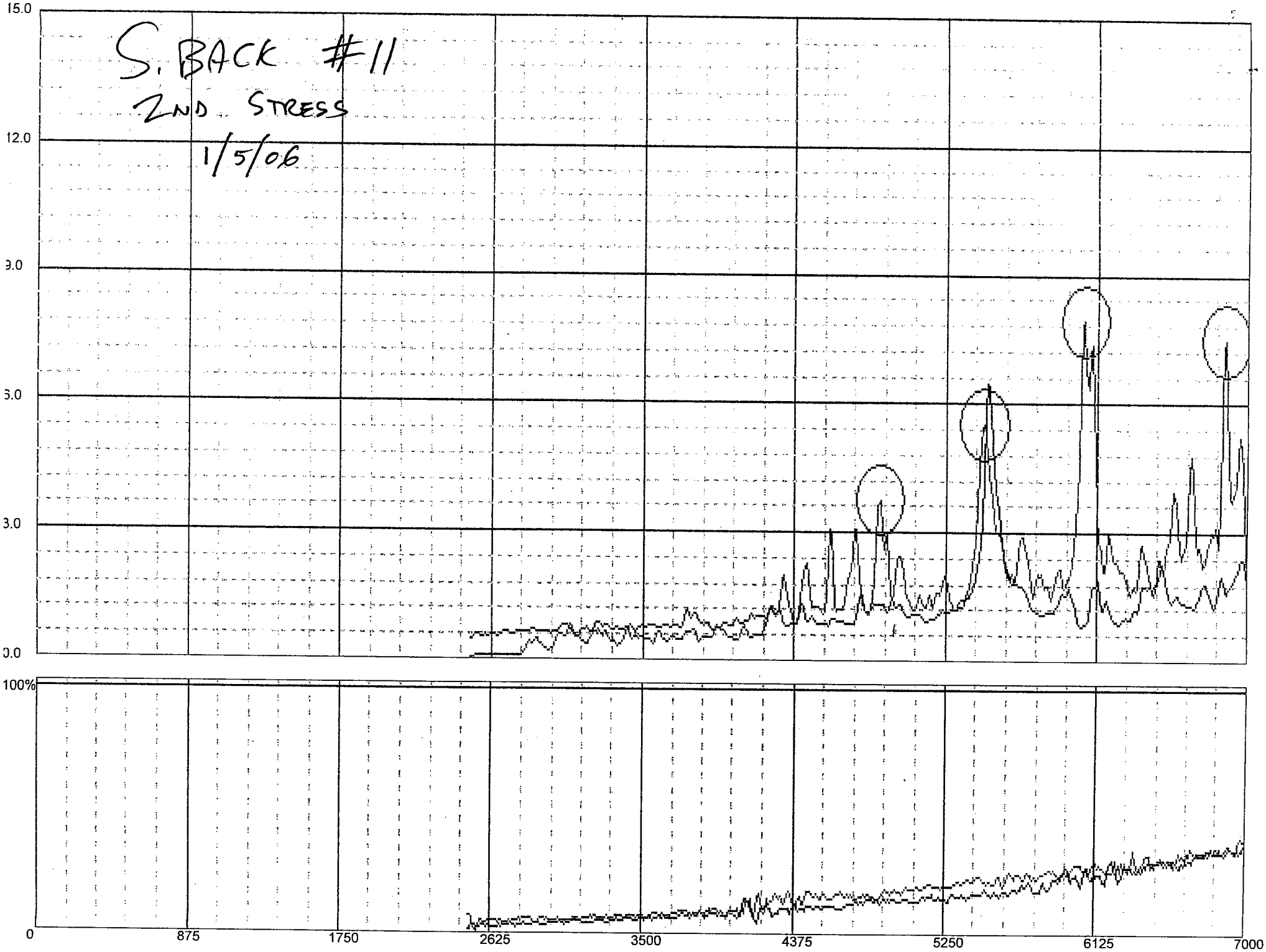
1500
2250
3000
3750
4500
5250
6000


S. BACK #11
2ND STRESS
1/5/06
15.0
12.0
9.0
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3.0
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100%
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875
1750
2625
3500
4375
5250
6125
7000

#1 — #11

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: 11/9/2005

Customer: DIAL MACHINE
PO No: 102437
Alloy: Ti GR2 Heat No: 063-1
CMI No: C71263
Quantity:
Item Description: 12" DIA RD BAR X R/L

Specifications DIN 50049 3.1B ASTM B348, ASTM B381
EN 10204 3.1B

Chemical Components

C	CO	CR	CU	FE	MN	MO	NI	P	S
0.01	—	—	—	0.05	—	—	—	—	—
SI	TI	V	W	CB+TA	SN	AL	ZN	PB	N
—	—	—	—	—	—	—	—	—	0.013

Mechanical Properties

Tensile Strength:
Yield Strength:
Hardness:
Elongation in 2":
Reduction in Area:

Remarks: O=0.04, H=0.002, Ti=BAL

HEAT# PBA1063778 ANNEAI FCC 5 SOAK TIME 4HR SOAK TEMP 1250

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.

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

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

LOT 1

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

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

SERIAL #: 02957

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

DATE: 06-26-06

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	66.05	Accept/Reject
Magnet thickness	9.00	+0 / -.10	8.94	Accept/Reject

INSPECTOR: Simon

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 #: 03298

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

DATE: 06-26-06

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

INSPECTOR: Simon

QA Supervisor: Mulloze

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 #: 02887

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

DATE: 06-26-06

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	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mullaze

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 #: Q2998

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

DATE: 06-26-06

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: Mullage

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 #: 03134

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

DATE: 06-26-06

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: Mullage

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 #: 03021

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

DATE: 06-21-06

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	8.98	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Muñoz

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 #: 03348

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

DATE: 06-26-06

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	8.93	Accept/Reject

INSPECTOR: SIMON

QA Supervisor: Mullaze

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 #: 03158

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

DATE: 06-26-06

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	8.98	Accept/Reject

INSPECTOR: Simon

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 #: 02943

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

DATE: 06-26-06

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

INSPECTOR: Simon

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 #: 02918

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

DATE: 06-26-06

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: Muelage

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 #: 02897

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

DATE: 06-26-06

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

INSPECTOR: Simon

QA Supervisor: Mullage

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 #: 02911

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

DATE: 06-26-06

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	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mujtaba

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 #: 02953

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

DATE: 06-26-06

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	8.95	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mullaze

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 #: 02926

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

DATE: 06-26-06

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: SIMON

QA Supervisor: Muelage

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 #:

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

DATE:

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	8.94	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Mullaz

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 #: 03171

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

DATE: 06-26-06

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

INSPECTOR: Simon

QA Supervisor: Muelaeg

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 #: 02991

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

DATE: 06-26-06

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: Muelleza

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 #: 03031

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

DATE: 06-26-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	56.98	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: 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 #: 03345

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

DATE: 06-26-06

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	8.95	Accept/Reject

INSPECTOR: Simon

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 #: 03339

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

DATE: 06-26-06

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: Mullage

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 #: 03136

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

DATE: 06-26-06

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

INSPECTOR: Simods

QA Supervisor: Mallaza

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 #: 03080

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

DATE: 06-26-06

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	8.97	Accept/Reject

INSPECTOR: SIMON

QA Supervisor: Mullaze

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 #: 03/08

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

DATE: 06-26-06

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: 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

Lot 1

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

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

SERIAL #: 02999

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

DATE: 06-13-06

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: Mulleze

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 #: 03238

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

DATE: 06-13-06

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: Simon

QA Supervisor: Huelage

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 #: 03166

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

DATE: 06-13-06

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: Simon

QA Supervisor: Mullaze

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 #: 03307

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

DATE: 06-13-06

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: Mullage

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 #: 02956

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

DATE: 06-13-06

ACCEPTANCE CRITERIA

1. Visually inspect for shipping damage.	Accept/Reject

CRITICAL DIMENSIONS (mm)

FEATURE	TARGET	TOLERANCE	MEASURED VALUE	
Magnet height	57.00	+/- .05	57.09	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: Muelage

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 #: 03323

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

DATE: 06-13-06

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: Muelaze

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 #: 03200

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

DATE: 06-13-06

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:

INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

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

SERIAL #: 02969

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

DATE: 06-13-06

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: Simon

QA Supervisor: Muloze

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 #: 03165

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

DATE: 06-13-06

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	8.97	Accept/Reject

INSPECTOR: Simon

QA Supervisor: Murlage

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 #: 03168

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

DATE: 06-13-06

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: Muellage

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 #: 03008

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

DATE: 06-13-06

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: SIMON

QA Supervisor: Mulaz

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 #: 03173

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

DATE: 06-13-06

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: Muelge

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 #: 03026

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

DATE: 06-13-06

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: Simon

QA Supervisor: Muelage

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 #: 03170

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

DATE: 06-13-06

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: Mulage

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 #: 02996

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

DATE: 06-13-06

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: 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 #: 03089

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

DATE: 06-13-06

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	8.97	Accept/Reject

INSPECTOR: Simon

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 #: 02892

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

DATE: 06-13-06

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: [illegible]

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 #: 03247

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

DATE: 06-13-06

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: Hurtaze

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 #: 02925

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

DATE: 06-13-06

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: Simon

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 #: 03282

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

DATE: 06-13-06

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: Mullaze

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 #: 03044

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

DATE: 06-13-06

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

INSPECTOR: SIMON

QA Supervisor: [illegible]

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 #: 03127

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

DATE: 06-13-06

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

INSPECTOR: Simon

QA Supervisor: Murlage

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 #: 03272

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

DATE: 06-13-06

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	8.94	Accept/Reject

INSPECTOR: SIMON

QA Supervisor: Muleze

TEST EQUIPMENT USED: **Drop Indicators**

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 #: L143-111300-11

P.O. #: 5A13624 DATE: 07-07-06

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 30.00/29.998	Accept/Reject
Bottom surface flatness	</= .04	N/A	0.015	Accept/Reject
Overall length	189	+0 / -.1	188.99	Accept/Reject
Overall width	128	+0 / -.1	127.98	Accept/Reject

INSPECTOR: Murlaza QA Supervisor: Murlaza

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 #: Ll43-111200-11

P.O. #: 5A13624 DATE: 07-07-06

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 29.999/29.970	Accept/Reject
Bottom surface flatness	</= .04	N/A	0.025	Accept/Reject
Overall length	189	+0 / -.1	188.99	Accept/Reject
Overall width	128	+0 / -.1	127.98	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: Lower Left Magnet Structure Base

DRAWING #: L143-110901 SERIAL #: L143-110900-11

P.O. #: 5A13624 DATE: 07-07-06

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 30.00/29.977	Accept/Reject
Bottom surface flatness	</= .04	N/A	.02	Accept/Reject
Overall length	195	+0 / -.1	194.99	Accept/Reject
Overall width	128	+0 / -.1	127.97	Accept/Reject

INSPECTOR: Murlaze QA Supervisor: Murlaze

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 Left Magnet Structure Base

DRAWING #: L143-110801 SERIAL #: L143-110800-11

P.O. #: 5A13624 DATE: 07-07-06

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 30.00/29.987	Accept/Reject
Bottom surface flatness	</= .04	N/A	0.012	Accept/Reject
Overall length	195	+0 / -.1	194.98	Accept/Reject
Overall width	128	+0 / -.1	127.96	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: Lower Middle Magnet Structure Base

DRAWING #: L143-111101-01 SERIAL #: L143-111100-1-11

P.O. #:5A13624 DATE: 07-07-06

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 30.0/29.98	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005	+0 / -.1	1004.94	Accept/Reject
Overall width	128	+0 / -.1	127.97	Accept/Reject

INSPECTOR: Murlaze QA Supervisor: Murlaze

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 #: L143-111100-2-11

P.O. #:5A13624 DATE: 07-07-06

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 30.0/29.99	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005	+0 / -.1	1004.95	Accept/Reject
Overall width	128	+0 / -.1	127.96	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: Lower Middle Magnet Structure Base

DRAWING #: L143-111101-01 SERIAL #: L143-111100-3-11

P.O. #:5A13624 DATE: 07-07-06

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 30.0/29.978	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005	+0 / -.1	1004.92	Accept/Reject
Overall width	128	+0 / -.1	127.95	Accept/Reject

INSPECTOR: Murlaza QA Supervisor: Murlaza

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 #: L143-111000-1-11

P.O. #: 5A13624 DATE: 07-07-06

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 30.0/29.975	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005.0	+0 / -.1	1004.96	Accept/Reject
Overall width	128	+0 / -.1	127.98	Accept/Reject

INSPECTOR: Murlaze QA Supervisor: Murlaze

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 #: L143-111000-2-11

P.O. #: 5A13624 DATE: 07-07-06

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 30.0/29.98	Accept/Reject
Bottom surface flatness	<= .04	N/A	.04	Accept/Reject
Overall length	1005.0	+0 / -.1	1004.99	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

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

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 #: L143-111000-3-11

P.O. #: 5A13624 DATE: 07-07-06

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 30.0/29.97	Accept/Reject
Bottom surface flatness	</= .04	N/A	.04	Accept/Reject
Overall length	1005.0	+0 / -.1	1004.93	Accept/Reject
Overall width	128	+0 / -.1	127.95	Accept/Reject

INSPECTOR: Murlaza QA Supervisor: Murlaza

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS: