# Argonne National Lab

## Strongback -L143-110700

## Inspection and Test Results

| | | | | |
|---|---|---|---|---|
| Serial Number | # | 5 | Inspector | Floyd |
| Date | | 1/23/07 | | |

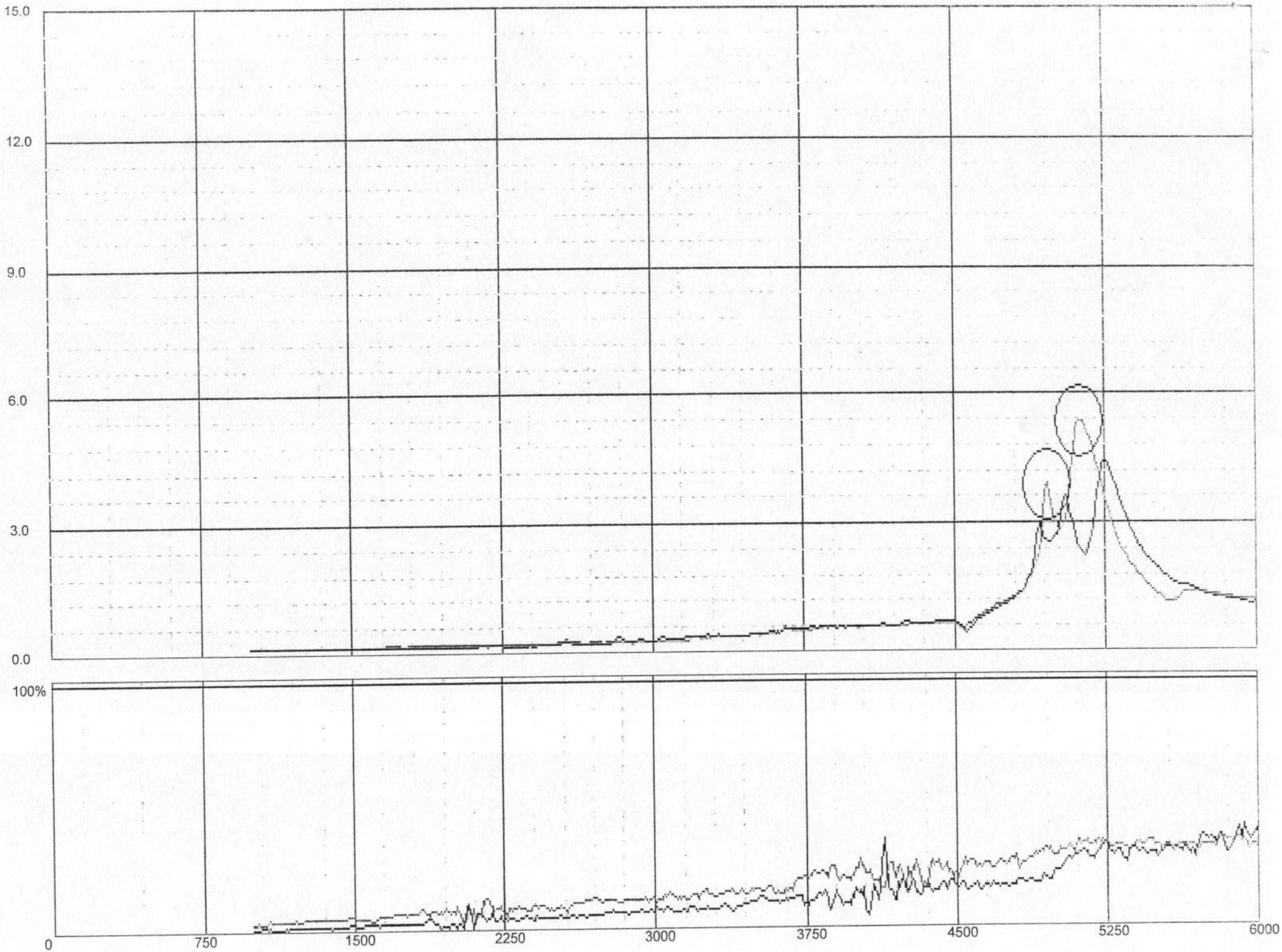
| *CMM Critical Feature Results* | *Req* | *Tolr* | *Actual* | |
|---|---|---|---|---|
| flatness - plane -A- | | .050 | .020 | |
| side opposite -A- flatness | | .050 | .019 | |
| surface finish -A- | 1.6 | | .6 | |
| surface finish side opposite -A- | 1.6 | | .6 | |
| -B- surface flatness | | .050 | .026 | |
| -B- surface perp to -A- | | .100 | .010 | |
| | | | | |
| Pads | | | | |
| RH Mounting Pad parallel to -A- | | .050 | .025 | |
| LH Mounting Pad parallel to -A- | | .050 | .025 | |
| | | | | |
| Overall Length | 3400.00 | +.000/-.200 | 3399.945 | |
| LH end to 1700mm holes right | 1700.00 | +.000/-.100 | 1699.963 | |
| LH end to 1700mm holes left | 1700.00 | +.000/-.100 | 1699.963 | |
| side opposite -A- 167.00 dim | 167.00 | +.050/-.000 | 167.020 | plane to plane |
| Individual Gaps | 167.00 | | 167.010 | direct gaps |
| side -A- to Centerline 83.5 | 83.50 | +/- .080 | 83.510 | |
| | | | | |
| | | | | |
| | | | | |

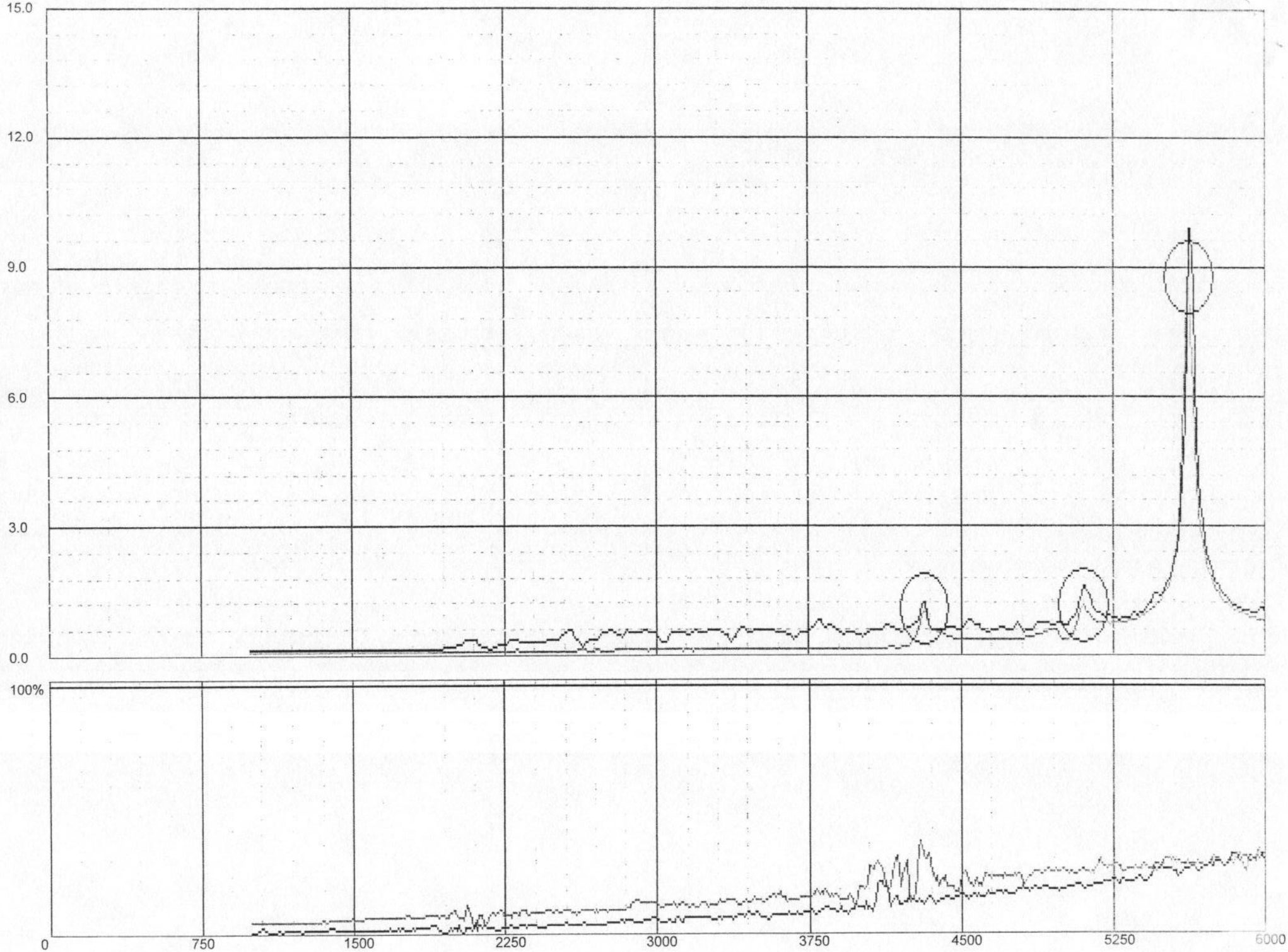
| *Other Dimensions* | | *Date* | *Reviewer* | |
|---|---|---|---|---|
| | | 1-22 | skl | |

| *Material and Certifications* | | *Date* | *Reviewer* | |
|---|---|---|---|---|
| Material Certs | | 1-22 | skl | |
| Heat Treat Certs | | 1-22 | skl | |
| Visual inspection of Material | | 1-22 | skl | |

| *Approvals* | |
|---|---|
| . | |
| . | |

| Temps | |
|---|---|
| 20.7 | Start |
| 21.2 | Finish |


15.0
12.0
9.0
6.0
3.0
0.0
100%
0
750
1500
2250
3000
3750
4500
5250
6000


15.0
12.0
9.0
6.0
3.0
0.0
100%
0
750
1500
2250
3000
3750
4500
5250
6000

#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 CMI No: C71263

Alloy: Ti GR2 Heat No: 063-1 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: Elongation in 2":

Yield Strength: Reduction in Area:

Hardness:

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.

# 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. 5-1-8

3. SDR Date 01/0 /2007

**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 |
|---|---|---|---|
| | All hole patterns in end are rotated relative to milling. Deviations are documented on attached drawings and CMM reports. | | Cause is error in set up.<br><br>Corrective action is to:<br>1. determine whether attached equipment can function in this rotated condition.<br>2. plug and redrill if necessary. |

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:**
The six Ø6.35 holes should be plugged and re-drilled. The mounting pad should be re-worked to correct parallel to -A-

1-15-07

15. SUPPLIER REPRESENTATIVE – TITLE – DATE

16. ANL REPRESENTATIVE – DATE

**17. ANL Disposition and Remarks:** Plug & redrill the six Ø6.35 holes. Rework mounting pads to be parallel to -A- per drawing.

**18. Approved**

Emil Trautenberg 01/22/07 — TECHNICAL REPRESENTATIVE – DATE

1/22/07 — QUALITY ASSURANCE REPRESENTATIVE – DATE

1/22/07 — PROCUREMENT REPRESENTATIVE – DATE

ANL-311 (4-94)

Magnet lot 37

21.1°C in device
70F air

Date 15 Feb 07 Device# 05 Start Time 10:36 Start Temperature

| Slot | Value | Slot | Value | Slot | Value | Slot | Value | Slot | Value |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 51 | -1.27 | 101 | -1.27 | 151 | -1.27 | 201 | -1.27 |
| 2 | +0.72 | 52 | +1.27 | 102 | +1.27 | 152 | +1.27 | 202 | +1.27 |
| 3 | -1.20 | 53 | -1.27 | 103 | -1.26 | 153 | -1.27 | 203 | -1.27 |
| 4 | +1.29 | 54 | +1.26 | 104 | +1.26 | 154 | +1.27 | 204 | +1.26 |
| 5 | -1.25 | 55 | -1.26 | 105 | -1.26 | 155 | -1.27 | 205 | -1.26 |
| 6 | +1.26 | 56 | +1.26 | 106 | +1.26 | 156 | +1.26 | 206 | +1.27 |
| 7 | -1.26 | 57 | -1.27 | 107 | -1.26 | 157 | -1.26 | 207 | -1.27 |
| 8 | +1.27 | 58 | +1.27 | 108 | +1.26 | 158 | +1.26 | 208 | +1.27 |
| 9 | -1.26 | 59 | -1.27 | 109 | -1.27 | 159 | -1.27 | 209 | -1.27 |
| 10 | +1.27 | 60 | +1.27 | 110 | +1.26 | 160 | +1.27 | 210 | +1.27 |
| 11 | -1.27 | 61 | -1.27 | 111 | -1.26 | 161 | -1.27 | 211 | -1.27 |
| 12 | +1.26 | 62 | +1.26 | 112 | +1.26 | 162 | +1.27 | 212 | +1.26 |
| 13 | -1.26 | 63 | -1.26 | 113 | -1.26 | 163 | -1.27 | 213 | -1.26 |
| 14 | +1.26 | 64 | +1.27 | 114 | +1.26 | 164 | +1.26 | 214 | +1.26 |
| 15 | -1.27 | 65 | -1.27 | 115 | -1.26 | 165 | -1.26 | 215 | -1.26 |
| 16 | +1.26 | 66 | +1.27 | 116 | +1.26 | 166 | +1.26 | 216 | +1.27 |
| 17 | -1.26 | 67 | -1.26 | 117 | -1.26 | 167 | -1.27 | 217 | -1.27 |
| 18 | +1.26 | 68 | +1.27 | 118 | +1.27 | 168 | +1.27 | 218 | +1.26 |
| 19 | -1.27 | 69 | -1.26 | 119 | -1.26 | 169 | -1.27 | 219 | -1.26 |
| 20 | +1.26 | 70 | +1.26 | 120 | +1.26 | 170 | +1.26 | 220 | +1.25 |
| 21 | -1.26 | 71 | -1.26 | 121 | -1.26 | 171 | -1.27 | 221 | -1.26 |
| 22 | +1.26 | 72 | +1.26 | 122 | +1.25 | 172 | +1.26 | 222 | +1.25 |
| 23 | -1.25 | 73 | -1.27 | 123 | -1.27 | 173 | -1.26 | 223 | -1.28 |
| 24 | +1.27 | 74 | +1.27 | 124 | +1.27 | 174 | +1.26 | 224 | +1.20 |
| 25 | -1.27 | 75 | -1.26 | 125 | -1.26 | 175 | -1.26 | 225 | -0.702 |
| 26 | +1.27 | 76 | +1.27 | 126 | +1.26 | 176 | +1.27 | | |
| 27 | -1.27 | 77 | -1.26 | 127 | -1.25 | 177 | -1.27 | | |
| 28 | +1.27 | 78 | +1.27 | 128 | +1.26 | 178 | +1.27 | | |
| 29 | -1.26 | 79 | -1.25 | 129 | -1.26 | 179 | -1.27 | | |
| 30 | +1.26 | 80 | +1.26 | 130 | +1.26 | 180 | +1.26 | | |
| 31 | -1.26 | 81 | -1.26 | 131 | -1.27 | 181 | -1.26 | | |
| 32 | +1.26 | 82 | +1.26 | 132 | +1.28 | 182 | +1.27 | | |
| 33 | -1.26 | 83 | -1.27 | 133 | -1.27 | 183 | -1.27 | | |
| 34 | +1.27 | 84 | +1.27 | 134 | +1.27 | 184 | +1.27 | | |
| 35 | -1.27 | 85 | -1.27 | 135 | -1.26 | 185 | -1.27 | | |
| 36 | +1.27 | 86 | +1.27 | 136 | +1.27 | 186 | +1.27 | | |
| 37 | -1.24 | 87 | -1.27 | 137 | -1.27 | 187 | -1.27 | | |
| 38 | +1.26 | 88 | +1.27 | 138 | +1.26 | 188 | +1.27 | | |
| 39 | -1.27 | 89 | -1.26 | 139 | -1.27 | 189 | -1.26 | | |
| 40 | +1.27 | 90 | +1.26 | 140 | +1.27 | 190 | +1.27 | | |
| 41 | -1.27 | 91 | -1.26 | 141 | -1.27 | 191 | -1.26 | | |
| 42 | +1.26 | 92 | +1.26 | 142 | +1.27 | 192 | +1.27 | | |
| 43 | -1.27 | 93 | -1.27 | 143 | -1.27 | 193 | -1.27 | | |
| 44 | +1.27 | 94 | +1.27 | 144 | +1.26 | 194 | +1.27 | | |
| 45 | -1.26 | 95 | -1.27 | 145 | -1.27 | 195 | -1.27 | | |
| 46 | +1.26 | 96 | +1.26 | 146 | +1.25 | 196 | +1.27 | | |
| 47 | -1.27 | 97 | -1.26 | 147 | -1.27 | 197 | -1.27 | | |
| 48 | +1.27 | 98 | +1.27 | 148 | +1.26 | 198 | +1.27 | | |
| 49 | -1.27 | 99 | -1.27 | 149 | -1.26 | 199 | -1.27 | | |
| 50 | +1.27 | 100 | +1.26 | 150 | +1.26 | 200 | +1.27 | | |

End Temperature 21.5°C / 70F air

End Time 10:56

Hall Probe S/N 01231053 01340076

Signatures:

## LOT37 magnets Serial # 17281-17760

Bottom Jaw

| Slot Number | Serial No. | Main filed Orientation | x-axis orientation |
|---|---|---|---|
| 1 | 17690 | Upstream | Left |
| 2 | 17357 | Downstream | Left |
| 3 | 17338 | Upstream | Right |
| 4 | 17392 | Downstream | Left |
| 5 | 17471 | Upstream | Right |
| 6 | 17399 | Downstream | Right |
| 7 | 17666 | Upstream | Right |
| 8 | 17423 | Downstream | Right |
| 9 | 17456 | Upstream | Left |
| 10 | 17361 | Downstream | Left |
| 11 | 17321 | Upstream | Right |
| 12 | 17386 | Downstream | Right |
| 13 | 17642 | Upstream | Left |
| 14 | 17431 | Downstream | Right |
| 15 | 17535 | Upstream | Right |
| 16 | 17445 | Downstream | Right |
| 17 | 17575 | Upstream | Right |
| 18 | 17420 | Downstream | Right |
| 19 | 17479 | Upstream | Right |
| 20 | 17505 | Downstream | Right |
| 21 | 17537 | Upstream | Right |
| 22 | 17348 | Downstream | Right |
| 23 | 17543 | Upstream | Right |
| 24 | 17740 | Downstream | Left |
| 25 | 17376 | Upstream | Right |
| 26 | 17302 | Downstream | Right |
| 27 | 17713 | Upstream | Left |
| 28 | 17717 | Downstream | Right |
| 29 | 17474 | Upstream | Right |
| 30 | 17440 | Downstream | Right |
| 31 | 17421 | Upstream | Right |
| 32 | 17724 | Downstream | Right |
| 33 | 17732 | Upstream | Right |
| 34 | 17369 | Downstream | Right |
| 35 | 17552 | Upstream | Left |
| 36 | 17683 | Downstream | Right |
| 37 | 17372 | Upstream | Right |
| 38 | 17381 | Downstream | Right |
| 39 | 17615 | Upstream | Right |
| 40 | 17304 | Downstream | Right |
| 41 | 17477 | Upstream | Right |
| 42 | 17336 | Downstream | Right |
| 43 | 17526 | Upstream | Left |
| 44 | 17566 | Downstream | Right |
| 45 | 17366 | Upstream | Right |
| 46 | 17409 | Downstream | Right |
| 47 | 17548 | Upstream | Right |

Top Jaw

| Slot Number | Serial No. | Main filed Orientation | x-axis orientation |
|---|---|---|---|
| 1 | 17446 | Downstream | Left |
| 2 | 17558 | Upstream | Left |
| 3 | 17422 | Downstream | Left |
| 4 | 17672 | Upstream | Right |
| 5 | 17529 | Downstream | Left |
| 6 | 17727 | Upstream | Left |
| 7 | 17416 | Downstream | Left |
| 8 | 17528 | Upstream | Right |
| 9 | 17379 | Downstream | Left |
| 10 | 17759 | Upstream | Left |
| 11 | 17443 | Downstream | Left |
| 12 | 17331 | Upstream | Left |
| 13 | 17432 | Downstream | Left |
| 14 | 17502 | Upstream | Left |
| 15 | 17754 | Downstream | Left |
| 16 | 17729 | Upstream | Right |
| 17 | 17283 | Downstream | Right |
| 18 | 17333 | Upstream | Left |
| 19 | 17430 | Downstream | Left |
| 20 | 17746 | Upstream | Right |
| 21 | 17327 | Downstream | Left |
| 22 | 17389 | Upstream | Left |
| 23 | 17441 | Downstream | Right |
| 24 | 17498 | Upstream | Left |
| 25 | 17306 | Downstream | Right |
| 26 | 17606 | Upstream | Left |
| 27 | 17640 | Downstream | Left |
| 28 | 17680 | Upstream | Right |
| 29 | 17325 | Downstream | Left |
| 30 | 17308 | Upstream | Left |
| 31 | 17439 | Downstream | Left |
| 32 | 17743 | Upstream | Right |
| 33 | 17496 | Downstream | Left |
| 34 | 17396 | Upstream | Left |
| 35 | 17370 | Downstream | Left |
| 36 | 17517 | Upstream | Left |
| 37 | 17692 | Downstream | Left |
| 38 | 17603 | Upstream | Left |
| 39 | 17417 | Downstream | Left |
| 40 | 17335 | Upstream | Left |
| 41 | 17649 | Downstream | Left |
| 42 | 17510 | Upstream | Right |
| 43 | 17352 | Downstream | Left |
| 44 | 17696 | Upstream | Right |
| 45 | 17628 | Downstream | Left |
| 46 | 17547 | Upstream | Left |
| 47 | 17751 | Downstream | Left |

| | | | |
|---|---|---|---|
| 48 | 17701 | Downstream | Right |
| 49 | 17500 | Upstream | Left |
| 50 | 17448 | Downstream | Right |
| 51 | 17604 | Upstream | Left |
| 52 | 17400 | Downstream | Right |
| 53 | 17462 | Upstream | Right |
| 54 | 17387 | Downstream | Right |
| 55 | 17636 | Upstream | Right |
| 56 | 17297 | Downstream | Right |
| 57 | 17674 | Upstream | Left |
| 58 | 17472 | Downstream | Left |
| 59 | 17600 | Upstream | Left |
| 60 | 17433 | Downstream | Left |
| 61 | 17305 | Upstream | Right |
| 62 | 17610 | Downstream | Left |
| 63 | 17689 | Upstream | Left |
| 64 | 17344 | Downstream | Right |
| 65 | 17542 | Upstream | Right |
| 66 | 17710 | Downstream | Left |
| 67 | 17515 | Upstream | Right |
| 68 | 17550 | Downstream | Right |
| 69 | 17752 | Upstream | Left |
| 70 | 17444 | Downstream | Right |
| 71 | 17653 | Upstream | Left |
| 72 | 17483 | Downstream | Right |
| 73 | 17435 | Upstream | Right |
| 74 | 17750 | Downstream | Right |
| 75 | 17712 | Upstream | Right |
| 76 | 17591 | Downstream | Right |
| 77 | 17643 | Upstream | Right |
| 78 | 17646 | Downstream | Right |
| 79 | 17595 | Upstream | Right |
| 80 | 17334 | Downstream | Right |
| 81 | 17521 | Upstream | Right |
| 82 | 17465 | Downstream | Left |
| 83 | 17484 | Upstream | Left |
| 84 | 17616 | Downstream | Right |
| 85 | 17582 | Upstream | Right |
| 86 | 17403 | Downstream | Left |
| 87 | 17317 | Upstream | Right |
| 88 | 17723 | Downstream | Left |
| 89 | 17708 | Upstream | Right |
| 90 | 17318 | Downstream | Right |
| 91 | 17709 | Upstream | Left |
| 92 | 17589 | Downstream | Left |
| 93 | 17342 | Upstream | Right |
| 94 | 17687 | Downstream | Right |
| 95 | 17626 | Upstream | Right |
| 96 | 17735 | Downstream | Right |
| 97 | 17623 | Upstream | Left |
| 98 | 17504 | Downstream | Right |
| 99 | 17716 | Upstream | Right |

| | | | |
|---|---|---|---|
| 48 | 17516 | Upstream | Left |
| 49 | 17315 | Downstream | Right |
| 50 | 17753 | Upstream | Right |
| 51 | 17451 | Downstream | Left |
| 52 | 17576 | Upstream | Right |
| 53 | 17287 | Downstream | Left |
| 54 | 17563 | Upstream | Right |
| 55 | 17414 | Downstream | Left |
| 56 | 17634 | Upstream | Left |
| 57 | 17310 | Downstream | Left |
| 58 | 17473 | Upstream | Left |
| 59 | 17637 | Downstream | Left |
| 60 | 17424 | Upstream | Left |
| 61 | 17611 | Downstream | Left |
| 62 | 17487 | Upstream | Right |
| 63 | 17579 | Downstream | Left |
| 64 | 17398 | Upstream | Left |
| 65 | 17756 | Downstream | Right |
| 66 | 17546 | Upstream | Right |
| 67 | 17497 | Downstream | Left |
| 68 | 17512 | Upstream | Right |
| 69 | 17452 | Downstream | Right |
| 70 | 17605 | Upstream | Left |
| 71 | 17691 | Downstream | Left |
| 72 | 17613 | Upstream | Left |
| 73 | 17419 | Downstream | Left |
| 74 | 17568 | Upstream | Right |
| 75 | 17532 | Downstream | Right |
| 76 | 17645 | Upstream | Left |
| 77 | 17665 | Downstream | Left |
| 78 | 17598 | Upstream | Left |
| 79 | 17332 | Downstream | Left |
| 80 | 17597 | Upstream | Right |
| 81 | 17328 | Downstream | Left |
| 82 | 17412 | Upstream | Left |
| 83 | 17580 | Downstream | Right |
| 84 | 17688 | Upstream | Right |
| 85 | 17571 | Downstream | Left |
| 86 | 17458 | Upstream | Right |
| 87 | 17494 | Downstream | Left |
| 88 | 17556 | Upstream | Left |
| 89 | 17551 | Downstream | Right |
| 90 | 17702 | Upstream | Right |
| 91 | 17454 | Downstream | Right |
| 92 | 17405 | Upstream | Right |
| 93 | 17288 | Downstream | Right |
| 94 | 17572 | Upstream | Left |
| 95 | 17383 | Downstream | Left |
| 96 | 17612 | Upstream | Right |
| 97 | 17736 | Downstream | Right |
| 98 | 17468 | Upstream | Left |
| 99 | 17508 | Downstream | Left |

| | | | |
|---|---|---|---|
| 100 | 17523 | Downstream | Right |
| 101 | 17669 | Upstream | Left |
| 102 | 17644 | Downstream | Right |
| 103 | 17509 | Upstream | Right |
| 104 | 17469 | Downstream | Left |
| 105 | 17525 | Upstream | Left |
| 106 | 17608 | Downstream | Left |
| 107 | 17731 | Upstream | Right |
| 108 | 17345 | Downstream | Left |
| 109 | 17290 | Upstream | Right |
| 110 | 17755 | Downstream | Right |
| 111 | 17481 | Upstream | Left |
| 112 | 17704 | Downstream | Right |
| 113 | 17453 | Upstream | Left |
| 114 | 17555 | Downstream | Left |
| 115 | 17699 | Upstream | Left |
| 116 | 17511 | Downstream | Left |
| 117 | 17490 | Upstream | Right |
| 118 | 17406 | Downstream | Right |
| 119 | 17388 | Upstream | Right |
| 120 | 17574 | Downstream | Left |
| 121 | 17429 | Upstream | Right |
| 122 | 17652 | Downstream | Right |
| 123 | 17292 | Upstream | Left |
| 124 | 17340 | Downstream | Right |
| 125 | 17631 | Upstream | Left |
| 126 | 17478 | Downstream | Right |
| 127 | 17337 | Upstream | Right |
| 128 | 17745 | Downstream | Right |
| 129 | 17617 | Upstream | Right |
| 130 | 17733 | Downstream | Right |
| 131 | 17655 | Upstream | Right |
| 132 | 17284 | Downstream | Right |
| 133 | 17658 | Upstream | Right |
| 134 | 17585 | Downstream | Right |
| 135 | 17347 | Upstream | Right |
| 136 | 17545 | Downstream | Right |
| 137 | 17705 | Upstream | Right |
| 138 | 17513 | Downstream | Right |
| 139 | 17554 | Upstream | Right |
| 140 | 17373 | Downstream | Left |
| 141 | 17588 | Upstream | Right |
| 142 | 17607 | Downstream | Right |
| 143 | 17695 | Upstream | Left |
| 144 | 17463 | Downstream | Left |
| 145 | 17737 | Upstream | Left |
| 146 | 17330 | Downstream | Left |
| 147 | 17599 | Upstream | Left |
| 148 | 17677 | Downstream | Right |
| 149 | 17675 | Upstream | Right |
| 150 | 17667 | Downstream | Left |
| 151 | 17359 | Upstream | Left |

| | | | |
|---|---|---|---|
| 100 | 17360 | Upstream | Left |
| 101 | 17664 | Downstream | Left |
| 102 | 17476 | Upstream | Left |
| 103 | 17561 | Downstream | Left |
| 104 | 17530 | Upstream | Right |
| 105 | 17627 | Downstream | Right |
| 106 | 17426 | Upstream | Left |
| 107 | 17601 | Downstream | Right |
| 108 | 17385 | Upstream | Left |
| 109 | 17350 | Downstream | Right |
| 110 | 17685 | Upstream | Left |
| 111 | 17707 | Downstream | Left |
| 112 | 17590 | Upstream | Right |
| 113 | 17557 | Downstream | Left |
| 114 | 17583 | Upstream | Right |
| 115 | 17703 | Downstream | Left |
| 116 | 17693 | Upstream | Left |
| 117 | 17380 | Downstream | Left |
| 118 | 17384 | Upstream | Right |
| 119 | 17408 | Downstream | Right |
| 120 | 17527 | Upstream | Right |
| 121 | 17659 | Downstream | Left |
| 122 | 17506 | Upstream | Right |
| 123 | 17436 | Downstream | Left |
| 124 | 17427 | Upstream | Left |
| 125 | 17668 | Downstream | Right |
| 126 | 17671 | Upstream | Left |
| 127 | 17301 | Downstream | Left |
| 128 | 17565 | Upstream | Right |
| 129 | 17413 | Downstream | Right |
| 130 | 17629 | Upstream | Left |
| 131 | 17734 | Downstream | Right |
| 132 | 17609 | Upstream | Right |
| 133 | 17488 | Downstream | Right |
| 134 | 17377 | Upstream | Left |
| 135 | 17586 | Downstream | Right |
| 136 | 17499 | Upstream | Left |
| 137 | 17553 | Downstream | Left |
| 138 | 17722 | Upstream | Left |
| 139 | 17706 | Downstream | Left |
| 140 | 17450 | Upstream | Left |
| 141 | 17374 | Downstream | Left |
| 142 | 17395 | Upstream | Right |
| 143 | 17654 | Downstream | Left |
| 144 | 17686 | Upstream | Left |
| 145 | 17470 | Downstream | Right |
| 146 | 17539 | Upstream | Left |
| 147 | 17353 | Downstream | Right |
| 148 | 17592 | Upstream | Left |
| 149 | 17662 | Downstream | Left |
| 150 | 17679 | Upstream | Left |
| 151 | 17596 | Downstream | Left |

| | | | |
|---|---|---|---|
| 152 | 17742 | Downstream | Right |
| 153 | 17562 | Upstream | Right |
| 154 | 17698 | Downstream | Right |
| 155 | 17657 | Upstream | Left |
| 156 | 17489 | Downstream | Left |
| 157 | 17573 | Upstream | Right |
| 158 | 17363 | Downstream | Right |
| 159 | 17495 | Upstream | Left |
| 160 | 17493 | Downstream | Right |
| 161 | 17559 | Upstream | Right |
| 162 | 17375 | Downstream | Right |
| 163 | 17391 | Upstream | Right |
| 164 | 17578 | Downstream | Left |
| 165 | 17681 | Upstream | Left |
| 166 | 17464 | Downstream | Left |
| 167 | 17749 | Upstream | Right |
| 168 | 17475 | Downstream | Right |
| 169 | 17676 | Upstream | Left |
| 170 | 17294 | Downstream | Right |
| 171 | 17648 | Upstream | Left |
| 172 | 17390 | Downstream | Right |
| 173 | 17467 | Upstream | Left |
| 174 | 17394 | Downstream | Right |
| 175 | 17622 | Upstream | Left |
| 176 | 17455 | Downstream | Right |
| 177 | 17726 | Upstream | Left |
| 178 | 17491 | Downstream | Right |
| 179 | 17314 | Upstream | Right |
| 180 | 17349 | Downstream | Right |
| 181 | 17311 | Upstream | Right |
| 182 | 17567 | Downstream | Right |
| 183 | 17282 | Upstream | Right |
| 184 | 17351 | Downstream | Right |
| 185 | 17534 | Upstream | Right |
| 186 | 17635 | Downstream | Left |
| 187 | 17570 | Upstream | Right |
| 188 | 17418 | Downstream | Left |
| 189 | 17402 | Upstream | Right |
| 190 | 17694 | Downstream | Right |
| 191 | 17730 | Upstream | Right |
| 192 | 17367 | Downstream | Right |
| 193 | 17486 | Upstream | Left |
| 194 | 17725 | Downstream | Right |
| 195 | 17538 | Upstream | Left |
| 196 | 17434 | Downstream | Right |
| 197 | 17522 | Upstream | Right |
| 198 | 17569 | Downstream | Right |
| 199 | 17639 | Upstream | Right |
| 200 | 17661 | Downstream | Left |
| 201 | 17620 | Upstream | Right |
| 202 | 17303 | Downstream | Right |
| 203 | 17541 | Upstream | Left |

| | | | |
|---|---|---|---|
| 152 | 17720 | Upstream | Left |
| 153 | 17425 | Downstream | Left |
| 154 | 17466 | Upstream | Right |
| 155 | 17281 | Downstream | Right |
| 156 | 17660 | Upstream | Right |
| 157 | 17459 | Downstream | Left |
| 158 | 17758 | Upstream | Left |
| 159 | 17560 | Downstream | Left |
| 160 | 17544 | Upstream | Right |
| 161 | 17757 | Downstream | Left |
| 162 | 17397 | Upstream | Left |
| 163 | 17630 | Downstream | Left |
| 164 | 17684 | Upstream | Right |
| 165 | 17625 | Downstream | Right |
| 166 | 17298 | Upstream | Right |
| 167 | 17324 | Downstream | Left |
| 168 | 17593 | Upstream | Left |
| 169 | 17295 | Downstream | Left |
| 170 | 17633 | Upstream | Left |
| 171 | 17309 | Downstream | Left |
| 172 | 17711 | Upstream | Left |
| 173 | 17700 | Downstream | Left |
| 174 | 17656 | Upstream | Right |
| 175 | 17581 | Downstream | Right |
| 176 | 17346 | Upstream | Left |
| 177 | 17365 | Downstream | Left |
| 178 | 17519 | Upstream | Right |
| 179 | 17518 | Downstream | Left |
| 180 | 17549 | Upstream | Left |
| 181 | 17577 | Downstream | Right |
| 182 | 17393 | Upstream | Left |
| 183 | 17719 | Downstream | Left |
| 184 | 17507 | Upstream | Right |
| 185 | 17356 | Downstream | Left |
| 186 | 17647 | Upstream | Right |
| 187 | 17741 | Downstream | Left |
| 188 | 17624 | Upstream | Left |
| 189 | 17697 | Downstream | Left |
| 190 | 17514 | Upstream | Right |
| 191 | 17482 | Downstream | Right |
| 192 | 17587 | Upstream | Left |
| 193 | 17316 | Downstream | Left |
| 194 | 17299 | Upstream | Left |
| 195 | 17760 | Downstream | Left |
| 196 | 17533 | Upstream | Left |
| 197 | 17461 | Downstream | Left |
| 198 | 17641 | Upstream | Right |
| 199 | 17339 | Downstream | Right |
| 200 | 17715 | Upstream | Left |
| 201 | 17300 | Downstream | Left |
| 202 | 17520 | Upstream | Left |
| 203 | 17382 | Downstream | Right |

| | | | |
|---|---|---|---|
| 204 | 17447 | Downstream | Right |
| 205 | 17536 | Upstream | Left |
| 206 | 17355 | Downstream | Left |
| 207 | 17594 | Upstream | Right |
| 208 | 17415 | Downstream | Right |
| 209 | 17718 | Upstream | Right |
| 210 | 17584 | Downstream | Right |
| 211 | 17485 | Upstream | Left |
| 212 | 17407 | Downstream | Right |
| 213 | 17480 | Upstream | Right |
| 214 | 17322 | Downstream | Left |
| 215 | 17564 | Upstream | Left |
| 216 | 17362 | Downstream | Left |
| 217 | 17313 | Upstream | Left |
| 218 | 17404 | Downstream | Right |
| 219 | 17293 | Upstream | Right |
| 220 | 17411 | Downstream | Right |
| 221 | 17449 | Upstream | Left |
| 222 | 17289 | Downstream | Right |
| 223 | 17354 | Upstream | Right |
| 224 | 17364 | Downstream | Left |
| 225 | 17307 | Upstream | Right |

| | | | |
|---|---|---|---|
| 204 | 17682 | Upstream | Left |
| 205 | 17438 | Downstream | Left |
| 206 | 17748 | Upstream | Left |
| 207 | 17524 | Downstream | Left |
| 208 | 17673 | Upstream | Left |
| 209 | 17286 | Downstream | Left |
| 210 | 17341 | Upstream | Left |
| 211 | 17319 | Downstream | Right |
| 212 | 17747 | Upstream | Right |
| 213 | 17437 | Downstream | Left |
| 214 | 17670 | Upstream | Left |
| 215 | 17285 | Downstream | Left |
| 216 | 17378 | Upstream | Left |
| 217 | 17320 | Downstream | Left |
| 218 | 17291 | Upstream | Right |
| 219 | 17296 | Downstream | Left |
| 220 | 17618 | Upstream | Left |
| 221 | 17326 | Downstream | Left |
| 222 | 17678 | Upstream | Right |
| 223 | 17343 | Downstream | Right |
| 224 | 17492 | Upstream | Left |
| 225 | 17401 | Downstream | Left |

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

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

**Spare magnets**

| serial No. | Reduced Magnetization |
|---|---|
| 17368 | 33% |
| 17714 | 80% |
| 17358 | |
| 17632 | |
| 17602 | |
| 17738 | |
| 17371 | |
| 17503 | |
| 17663 | |
| 17650 | |
| 17442 | |
| 17410 | |

**Sample magnets**

| serial No. |
|---|
| 17323 |
| 17428 |
| 17540 |
| 17621 |
| 17721 |

| |
|---|
| 17329 |
| 17744 |
| 17457 |
| 17651 |
| 17638 |
| 17531 |
| 17728 |
| 17312 |
| 17501 |
| 17614 |
| 17619 |
| 17739 |
| 17460 |

# INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: **Dial Machine, Inc.**

PART NAME: **LCLS Strongback**

DRAWING #: **L143-110700**

SERIAL #: 05

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

DATE: 02-08-07

| # | Inspection/Test Requirement | Inspection Test Location | Accepted by or Nonconformance Report No. | Date |
|---|---|---|---|---|
| 1 | Visual inspection of part for shipping damage.<br>A) Were critical surfaces protected per SOW L143-00030 Section 4.1.4?<br>B) Is there any visible damage? | H.T. | OK | 02/02/07 |
| 2 | Check Strongback is marked with serial number & part no.'s (ANL & SLAC) per SOW Section 4.1.3? | H.T. | OK | 02/2/07 |
| 3 | Check all accompanying Certifications have correct part serial number | H.T. | OK | 02/06/07 |
| 4 | Check Material Certification for compliance with ASTM B381-03 or ASTM B348, Grade F2 | H.T. | OK | 02/06/07 |
| 5 | Check Forging Annealing Certification for annealing conformance to AMS-H-81200A, Table V, commercial Pure, Bars & Forgings, including Note 8 | H.T. | OK | 02/06/07 |
| 6 | Check Rough Machining Anneal Certification for annealing conformance to AMS-2801B section 3.2.9 | H.T. | OK | 02/06/07 |
| 7 | Check the Strongback contractor's reported dimensional measurements against the part drawing | H.T. | OK | 02/07/07 |
| 8 | Verify the Strongback critical dimensions as listed in the SOW section 4.5.2 are in compliance with the print | H.T. | OK | 02/07/07 |

INSPECTOR: Simon

QA Supervisor: Muelaz

TEST EQUIPMENT USED: VISUAL

COMMENTS:

# INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: DIAL MACHINE, INC. PART NAME: LCLS Strongback

DRAWING #: L143-110700 SERIAL #: 05

P.O. #: 5A-13624 DATE: 02-07-07

## ACCEPTANCE CRITERIA

| | |
|---|---|
| 1. Visually inspect for shipping damage. | Accept/Reject |

## CRITICAL DIMENSIONS (mm)

| FEATURE | TARGET | TOLERANCE | MEASURED VALUE | |
|---|---|---|---|---|
| Overall length | 3400.00 | +0 / -.2 | 3399.96 | Accept/Reject |
| Gap height | 167.00 | +0.05 / -.0 | 167.03 | Accept/Reject |
| Gap flatness (top and bottom) | <= .05 | N/A | <= .03 | Accept/Reject |
| Gap depth | 130.00 | +/- .08 | 130.06 | 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 | <= .03 | Accept/Reject |
| Mounting Pads Area | 60.00 | +0.1/-.0 | 59.8/59.9 | Accept/Reject |
| Holes Location | 2 x 30.00 | +0.1/-0.1 | 29.9 | Accept/Reject |

INSPECTOR: SIMON QA Supervisor: Mullaze

TEST EQUIPMENT USED: DROP INDICATOR

COMMENTS: SQUAR PRECISION
ADJUSTEBLE PARALELS
MICROMETER, DIAL CALIPER

# INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR AS-BUILT DRAWINGS

VENDOR: **Dial Machine, Inc.**

PART NAME: **LCLS Strongback**

DRAWING #: **L143-110700**

SERIAL #: 05

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

DATE: 02-07-07

FEATURE: Gap Flatness

| # | Distance (mm) | Measured A | Measured B | Comments |
|---|---|---|---|---|
| 1 | 50 | .0002 | .0003 | OK |
| 2 | 350 | .0001 | .0001 | OK |
| 3 | 650 | .0002 | .0000 | OK |
| 4 | 950 | .0000 | -.0004 | OK |
| 5 | 1250 | -.0002 | -.0003 | OK |
| 6 | 1550 | -.0004 | -.0002 | OK |
| 7 | 1850 | -.0001 | .0002 | OK |
| 8 | 2150 | .0005 | .0003 | OK |
| 9 | 2450 | .0007 | .0006 | OK |
| 10 | 2750 | .0004 | .0003 | OK |
| 11 | 3050 | .0005 | .0005 | OK |
| 12 | 3350 | .0004 | .0002 | OK |

INSPECTOR: SIMON

QA Supervisor: Muelotz

TEST EQUIPMENT USED: Jig TRANSIT MODEL: 711010 S/N: 231067

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 #: Ll43-111200-05

P.O. #: 5A13624 DATE: 08-19-06

## 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 29.993/29.986 | Accept/Reject |
| Bottom surface flatness | <= .04 | N/A | 0.02 | Accept/Reject |
| Overall length | 189 | +0 / -.1 | 188.97 | Accept/Reject |
| Overall width | 128 | +0 / -.1 | 127.96 | Accept/Reject |

INSPECTOR: Mullaz QA Supervisor: Mullaz

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 #: L143-111300-05

P.O. #: 5A13624 DATE: 08-19-06

## 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 29.995/29.975 | Accept/Reject |
| Bottom surface flatness | <= .04 | N/A | 0.025 | Accept/Reject |
| Overall length | 189 | +0 / -.1 | 188.98 | 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 #: L143-110800-05

P.O. #: 5A13624 DATE: 08-19-06

## 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 29.990/29.985 | Accept/Reject |
| Bottom surface flatness | </= .04 | N/A | 0.015 | Accept/Reject |
| Overall length | 195 | +0 / -.1 | 194.96 | Accept/Reject |
| Overall width | 128 | +0 / -.1 | 127.96 | Accept/Reject |

INSPECTOR: Muelaza QA Supervisor: Muelaza

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: Lower Left Magnet Structure Base

DRAWING #: L143-110901 SERIAL #: L143-110900-05

P.O. #: 5A13624 DATE: 08-19-06

## 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 29.990/29.985 | Accept/Reject |
| Bottom surface flatness | <= .04 | N/A | .035 | Accept/Reject |
| Overall length | 195 | +0 / -.1 | 194.965 | Accept/Reject |
| Overall width | 128 | +0 / -.1 | 127.960 | Accept/Reject |

INSPECTOR: Mustaza QA Supervisor: Mustaza

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 #: L143-111100-1-05

P.O. #:5A13624 DATE: 08-19-06

## 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 | 1004.92 | Accept/Reject |
| Overall width | 128 | +0 / -.1 | 127.97 | Accept/Reject |

INSPECTOR: Murtaza QA Supervisor: Murtaza

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 #: L143-111100-2-05

P.O. #:5A13624 DATE: 08-19-06

## 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 / -.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 #: L143-111100-3-05

P.O. #:5A13624 DATE: 08-19-06

## 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 30.0/29.980 | 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: Murtaza QA Supervisor: Murtaza

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 #: L143-111000-1-05

P.O. #: 5A13624 DATE: 08-19-06

## 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 30.0/29.988 | Accept/Reject |
| Bottom surface flatness | <= .04 | N/A | .04 | Accept/Reject |
| Overall length | 1005.0 | +0 / -.1 | 1004.94 | 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 #: L143-111000-2-05

P.O. #: 5A13624 DATE: 08-19-06

## 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 30.0/29.980 | Accept/Reject |
| Bottom surface flatness | </= .04 | N/A | .04 | Accept/Reject |
| Overall length | 1005.0 | +0 / -.1 | 1004.95 | Accept/Reject |
| Overall width | 128 | +0 / -.1 | 127.97 | 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 #: L143-111000-3-05

P.O. #: 5A13624 DATE: 08-19-06

## 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 29.990/29.970 | 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 | 127.96 | Accept/Reject |

INSPECTOR: Murlaza QA Supervisor: Murlaza

TEST EQUIPMENT USED: CMM & Micrometer.

COMMENTS:

# INSPECTION / ACCEPTANCE REPORT OF COMPONENTS FOR LCLS MAGNET ASSEMBLIES

VENDOR: **Shin-Etsu**

PART NAME: **LCLS Magnet**

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

SERIAL #: 17690

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

DATE: 02-05-07

## ACCEPTANCE CRITERIA

| | |
|---|---|
| 1. Visually inspect for shipping damage. | Accept/Reject |

## CRITICAL DIMENSIONS (mm)

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

INSPECTOR: [signature]

QA Supervisor: [signature]

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 #: 17321

P.O. #: 5A13624

DATE: 02-05-07

## 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: [signature]

QA Supervisor: [signature]

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 #: 17537

P.O. #: 5A13624

DATE: 02-05-07

## 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: [signature]

QA Supervisor: [signature]

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 #: 17421

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17477

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

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17604

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

DATE: 02-05-07

## 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: [illegible]

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 #: 17305

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17653

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17521

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17709

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17669

P.O. #: 5A13624

DATE: 02-05-07

## 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 | 8.96 | Accept/Reject |

INSPECTOR:

QA Supervisor:

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 #: 17481

P.O. #: 5A13624

DATE: 02-05-07

## 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: [signature]

QA Supervisor: Muelize

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 #: 17429

P.O. #: 5A13624

DATE: 02-05-07

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

INSPECTOR: [illegible]

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 #: 17655

P.O. #: 5A13624

DATE: 02-05-07

## ACCEPTANCE CRITERIA

| | |
|---|---|
| 1. Visually inspect for shipping damage. | Accept/Reject |

## CRITICAL DIMENSIONS (mm)

| FEATURE | TARGET | TOLERANCE | MEASURED VALUE | |
|---|---|---|---|---|
| Magnet height | 57.00 | +/- .05 | 57.02 | Accept/Reject |
| Magnet Width | 66.00 | +/- .25 | 66.00 | Accept/Reject |
| Magnet thickness | 9.00 | +0 / -.10 | 8.97 | Accept/Reject |

INSPECTOR: [illegible]

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 #: 17588

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17359

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17559

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17648

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

DATE: 02-05-07

## ACCEPTANCE CRITERIA

| | |
|---|---|
| 1. Visually inspect for shipping damage. | Accept/Reject |

## CRITICAL DIMENSIONS (mm)

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

INSPECTOR: [illegible]

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 #: 1731

P.O. #: 5A13624

DATE: 02-05-07

## ACCEPTANCE CRITERIA

| | |
|---|---|
| 1. Visually inspect for shipping damage. | Accept/Reject |

## CRITICAL DIMENSIONS (mm)

| FEATURE | TARGET | TOLERANCE | MEASURED VALUE | |
|---|---|---|---|---|
| Magnet height | 57.00 | +/- .05 | 57.00 | Accept/Reject |
| Magnet Width | 66.00 | +/- .25 | 65.99 | Accept/Reject |
| Magnet thickness | 9.00 | +0 / -.10 | 8.96 | Accept/Reject |

INSPECTOR: [illegible]

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 #: 17730

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17620

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

DATE: 02-05-07

## 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: [illegible]

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 #: 17485

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

DATE: 02-05-07

## 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: [illegible]

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 #: 17449

P.O. #: 5A13624

DATE: 02-05-07

## 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: [signature]

QA Supervisor: [signature]

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 #: 17446

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

DATE: 02-05-07

## 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:

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 #: 17443

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

QA Supervisor: Muelazo

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 #: 17327

P.O. #: 5A13624

DATE: 02-05-07

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

INSPECTOR: [illegible]

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 #: 17439

P.O. #: 5A13624

DATE: 02-05-07

## 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 | 65.98 | Accept/Reject |
| Magnet thickness | 9.00 | +0 / -.10 | 8.95 | Accept/Reject |

INSPECTOR: [illegible]

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 #: 17649

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

DATE: 02-05-07

## ACCEPTANCE CRITERIA

| | |
|---|---|
| 1. Visually inspect for shipping damage. | Accept/Reject |

## CRITICAL DIMENSIONS (mm)

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

INSPECTOR: [signature]

QA Supervisor: [signature]

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 #: 17451

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

DATE: 02-05-07

## 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: [illegible]

QA Supervisor: Mwelaze

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 #: 17611

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17691

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17328

P.O. #: 5A13624

DATE: 02-05-07

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

INSPECTOR: [illegible]

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 #: 17454

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17664

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17707

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17659

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

DATE: 02-05-07

## 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: [illegible]

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 #: 17734

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

DATE: 02-05-07

## 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: [signature]

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 #: 17374

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17596

P.O. #: 5A13624

DATE: 02-05-07

## 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: [illegible]

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 #: 17757

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17309

P.O. #: 5A13624

DATE: 02-05-07

## 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:

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 #: 17577

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

DATE: 02-05-07

## 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: [illegible]

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 #: 17482

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor:

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 #: 17300

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

DATE: 02-05-07

## 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: [signature]

QA Supervisor: Nurlaga

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 #: 17319

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

DATE: 02-05-07

## 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 | 65.99 | Accept/Reject |
| Magnet thickness | 9.00 | +0 / -.10 | 8.97 | Accept/Reject |

INSPECTOR: [illegible]

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 #: 17326

P.O. #: 5A13624

DATE: 02-05-07

## 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:

QA Supervisor: Murtaza

TEST EQUIPMENT USED: **Drop Indicators**

COMMENTS:

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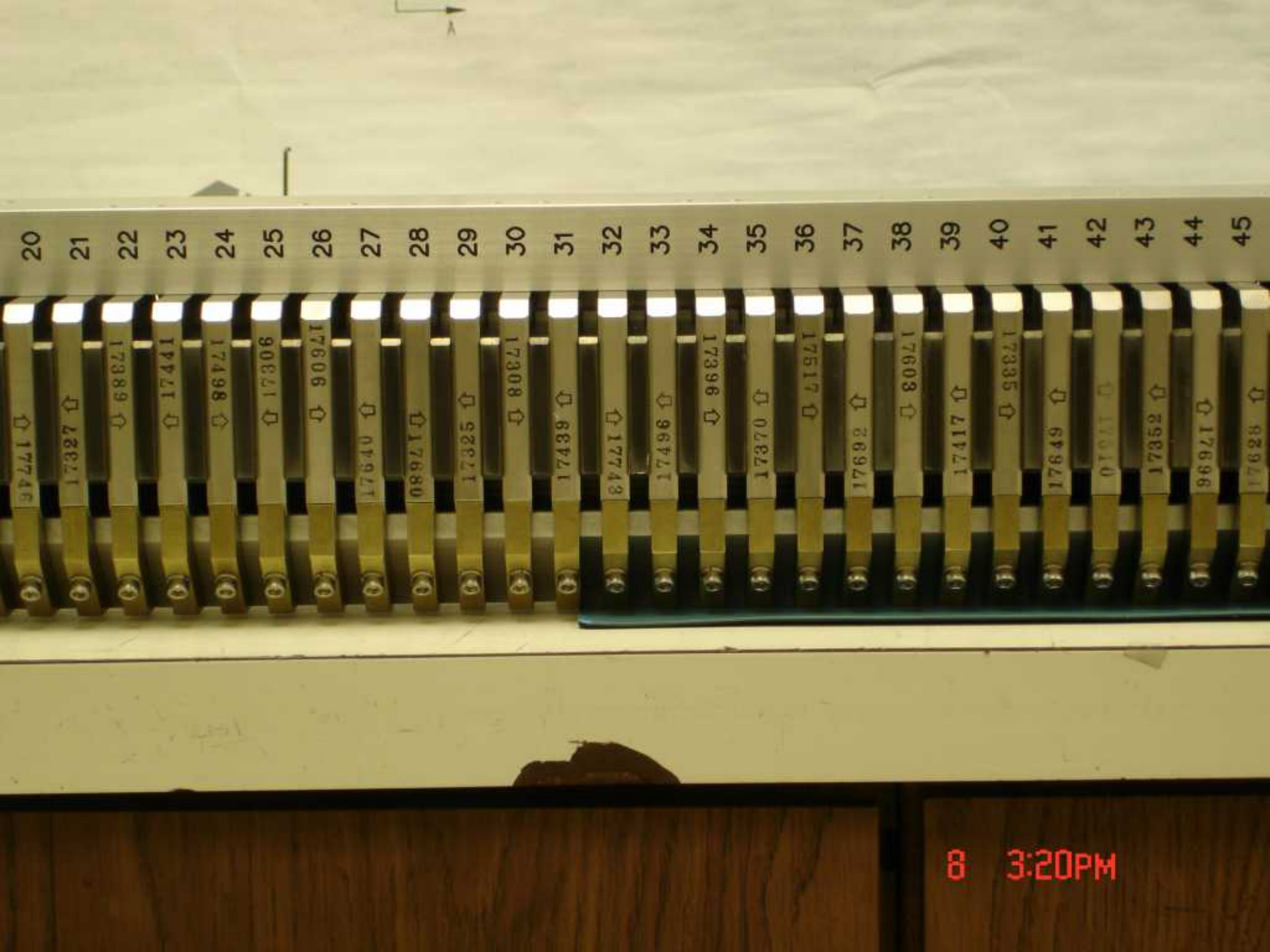
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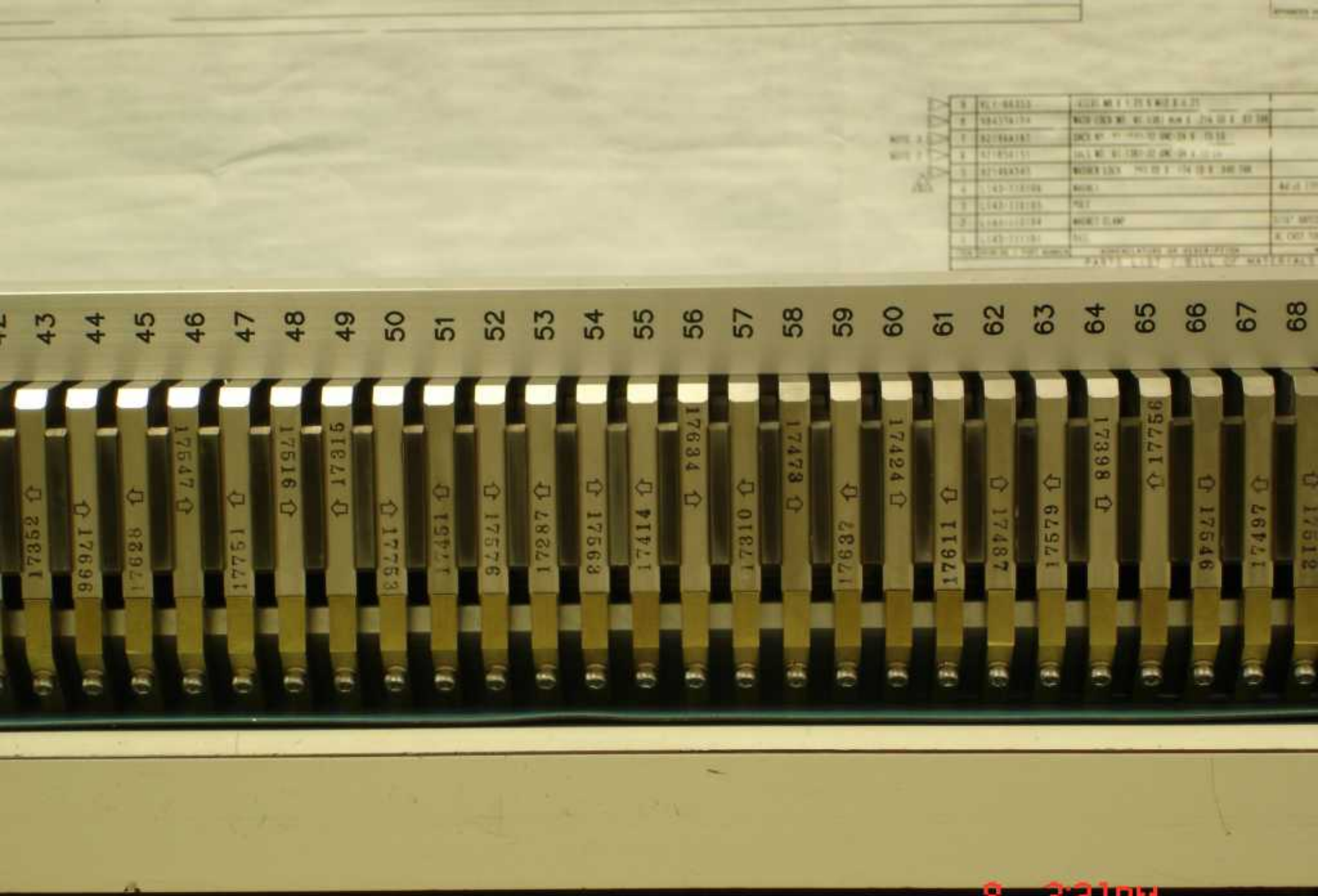
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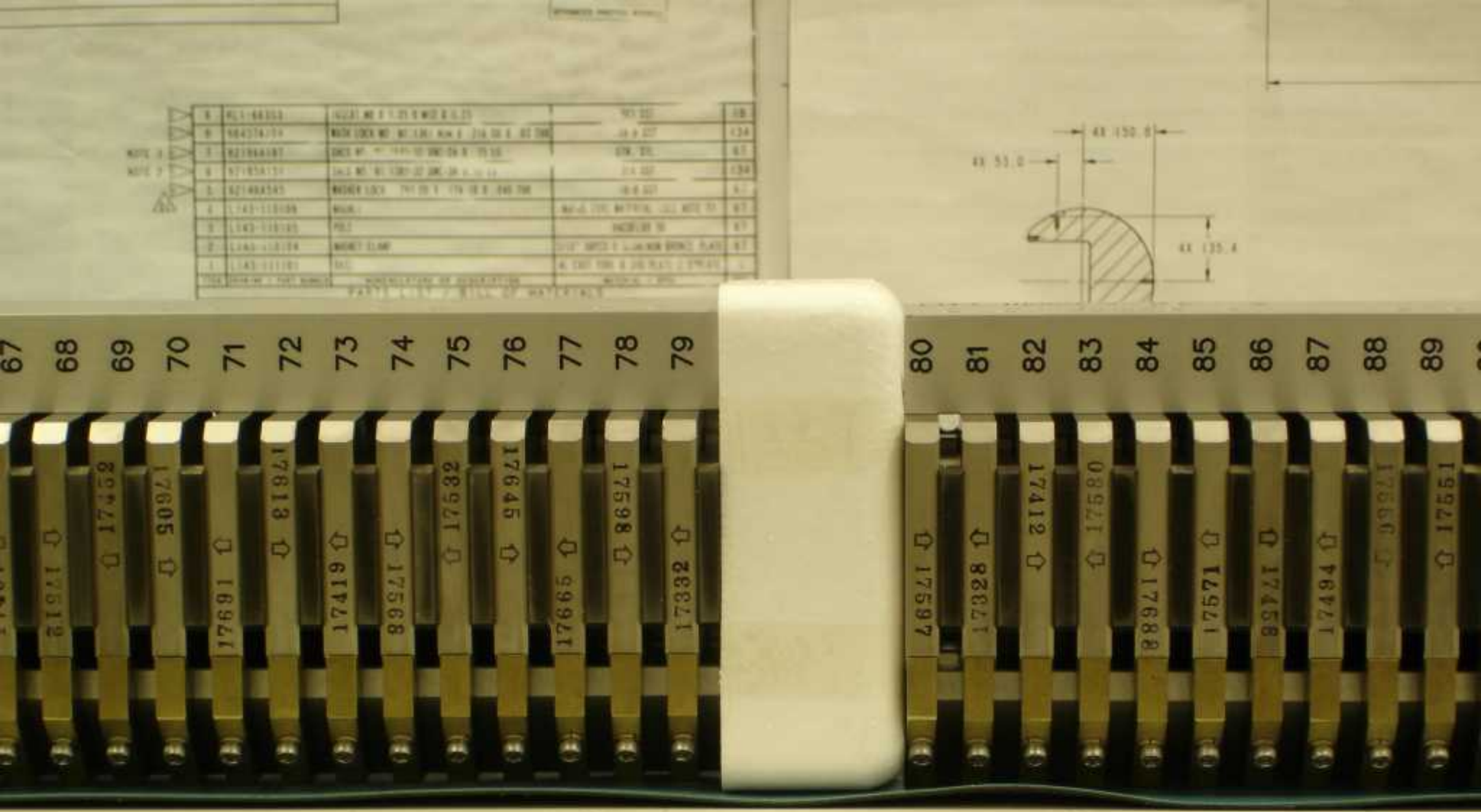
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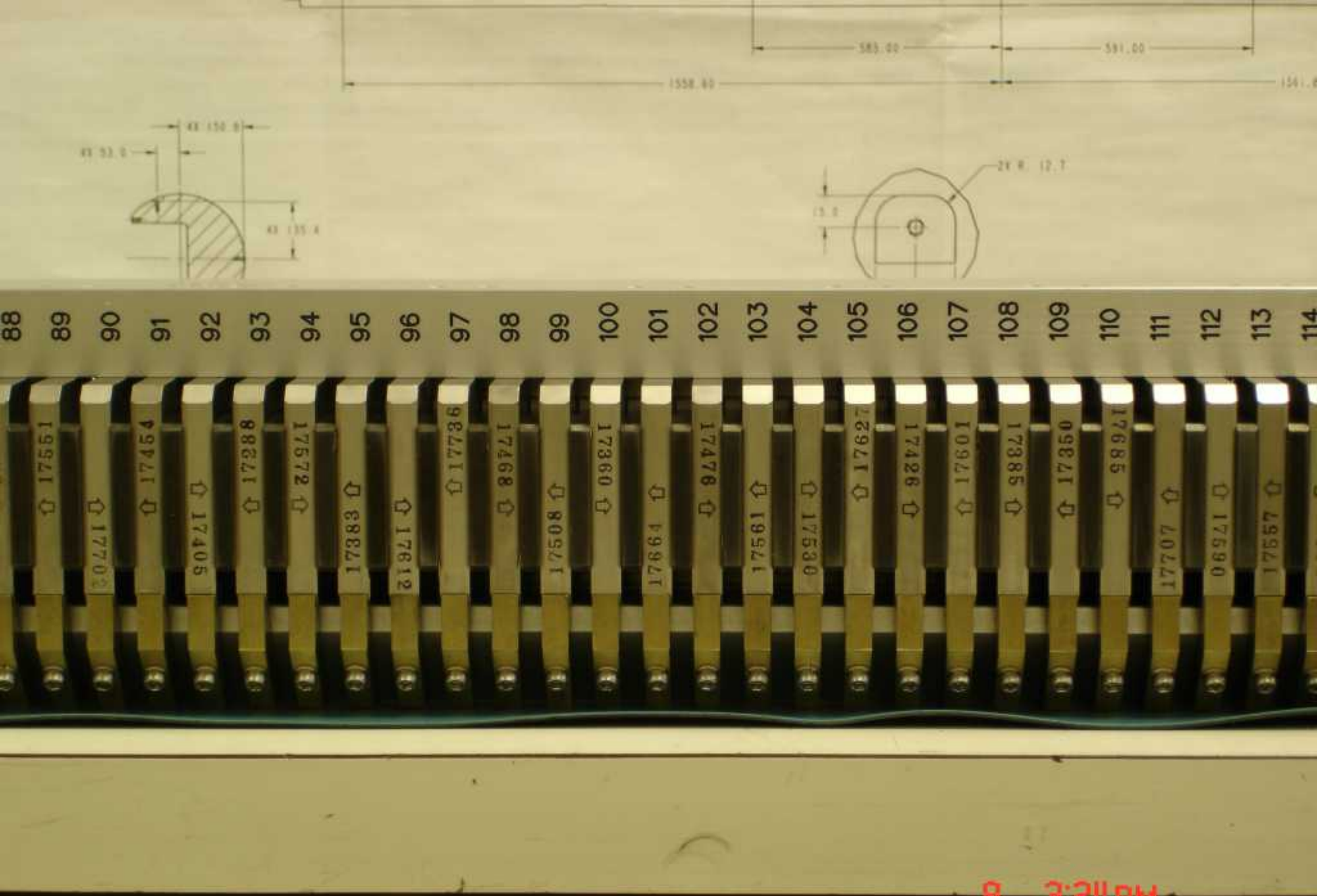
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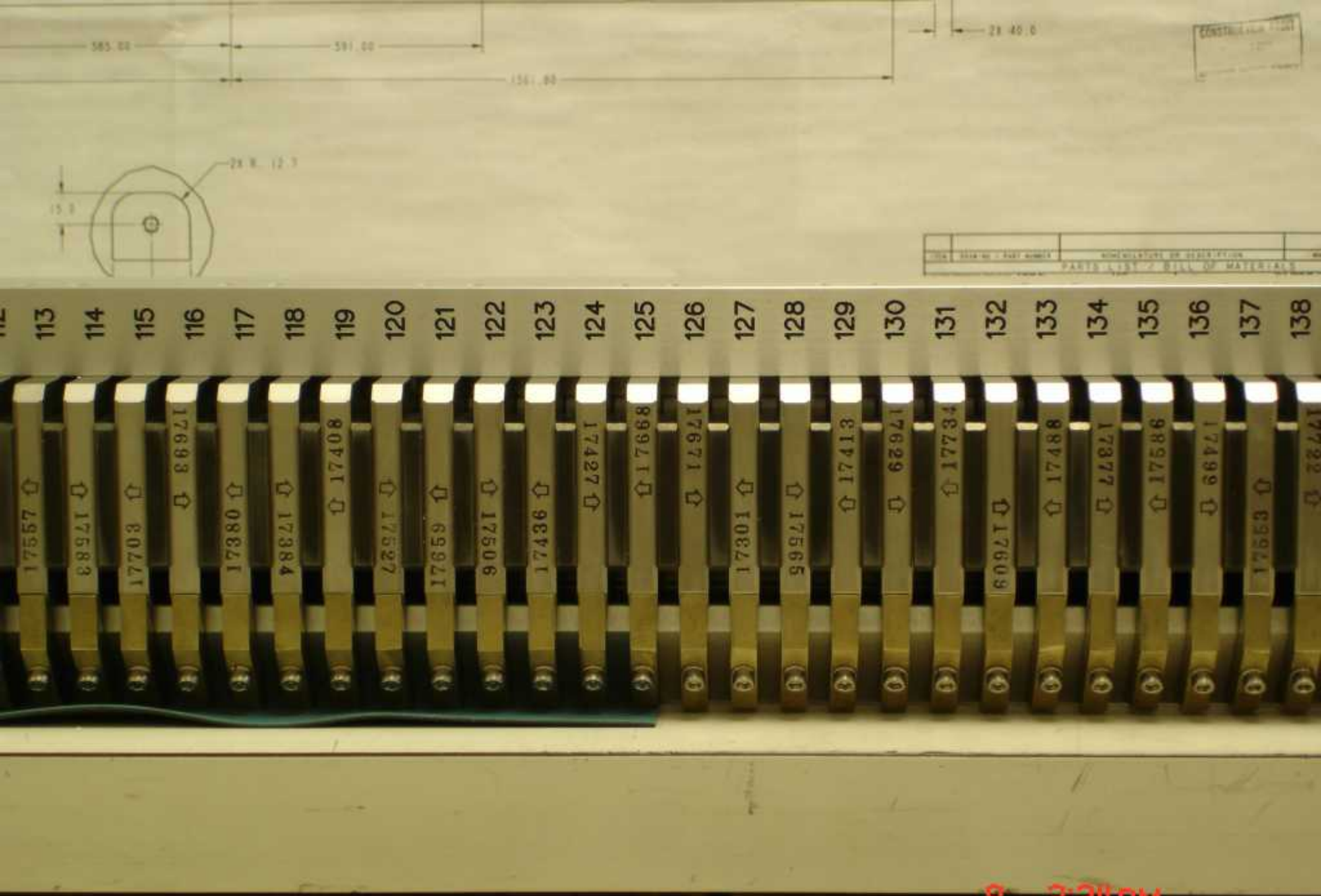
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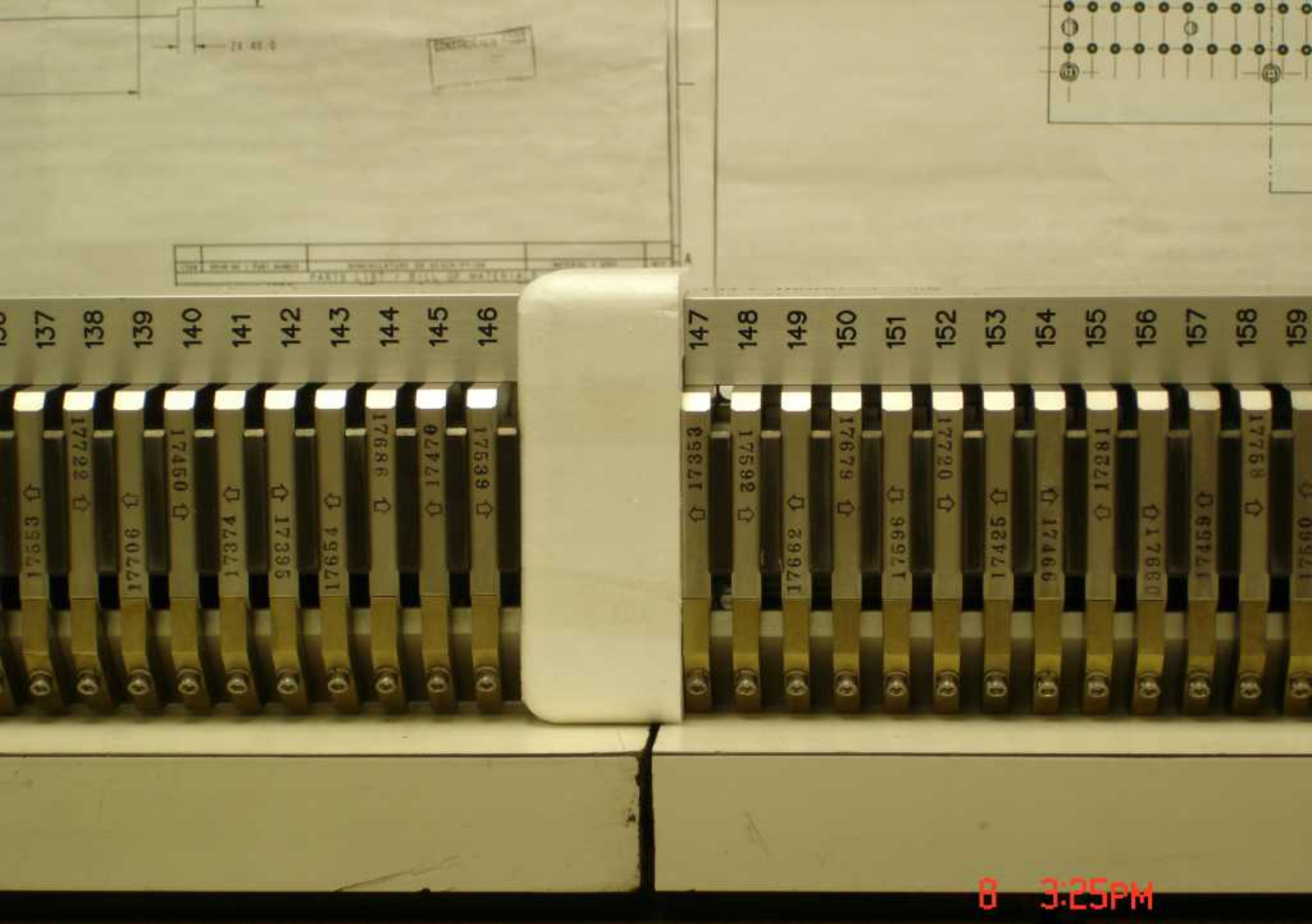
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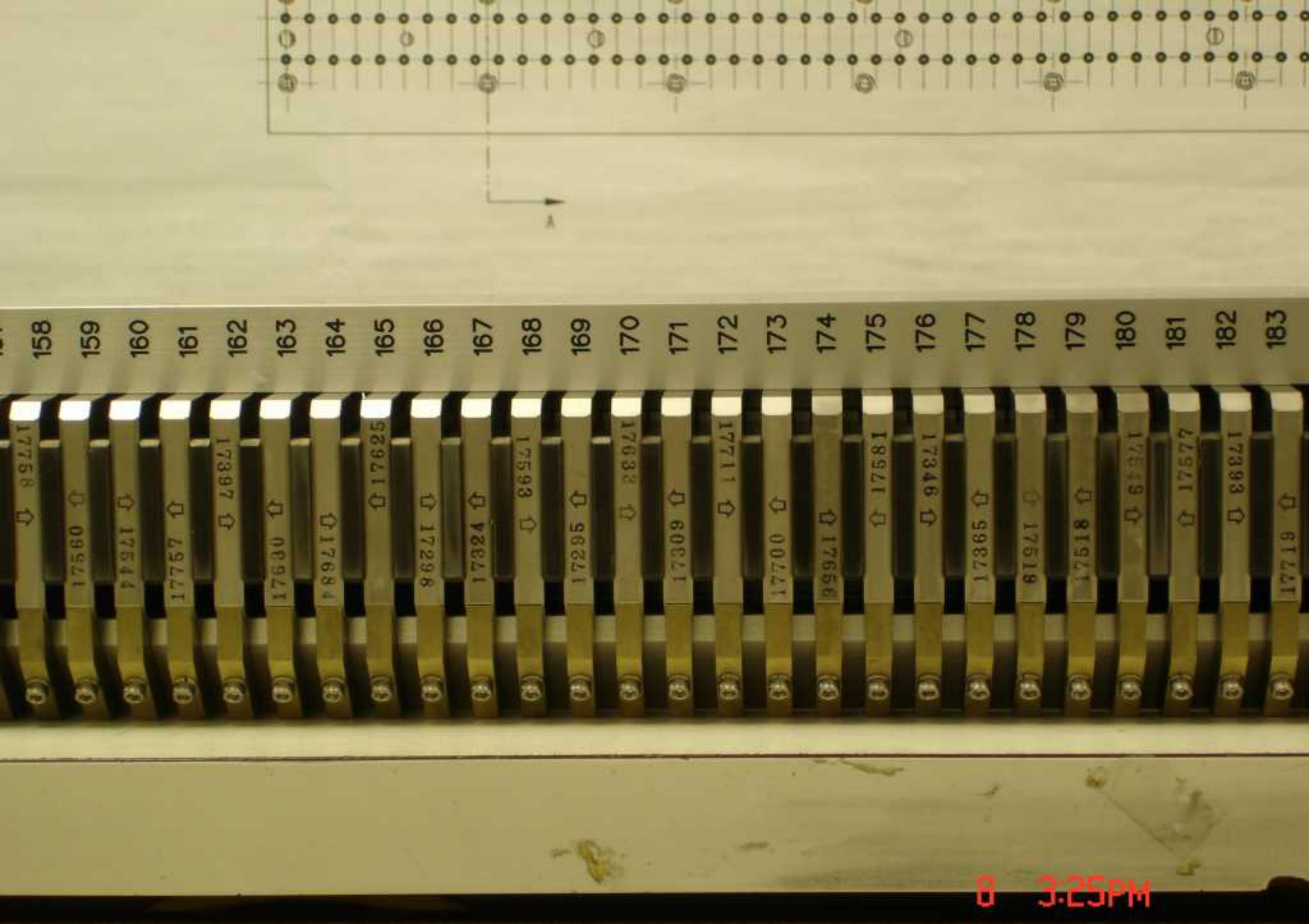
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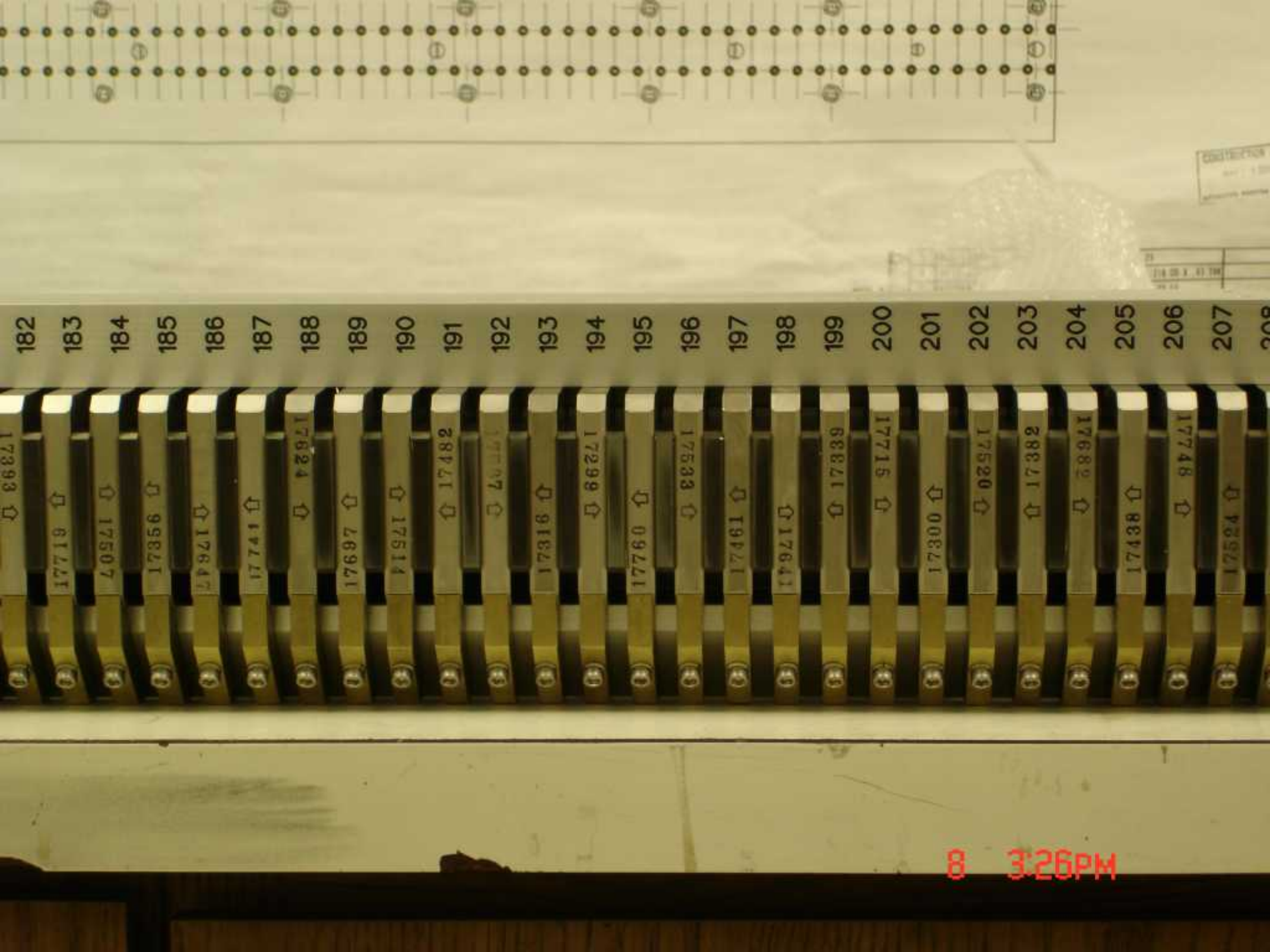
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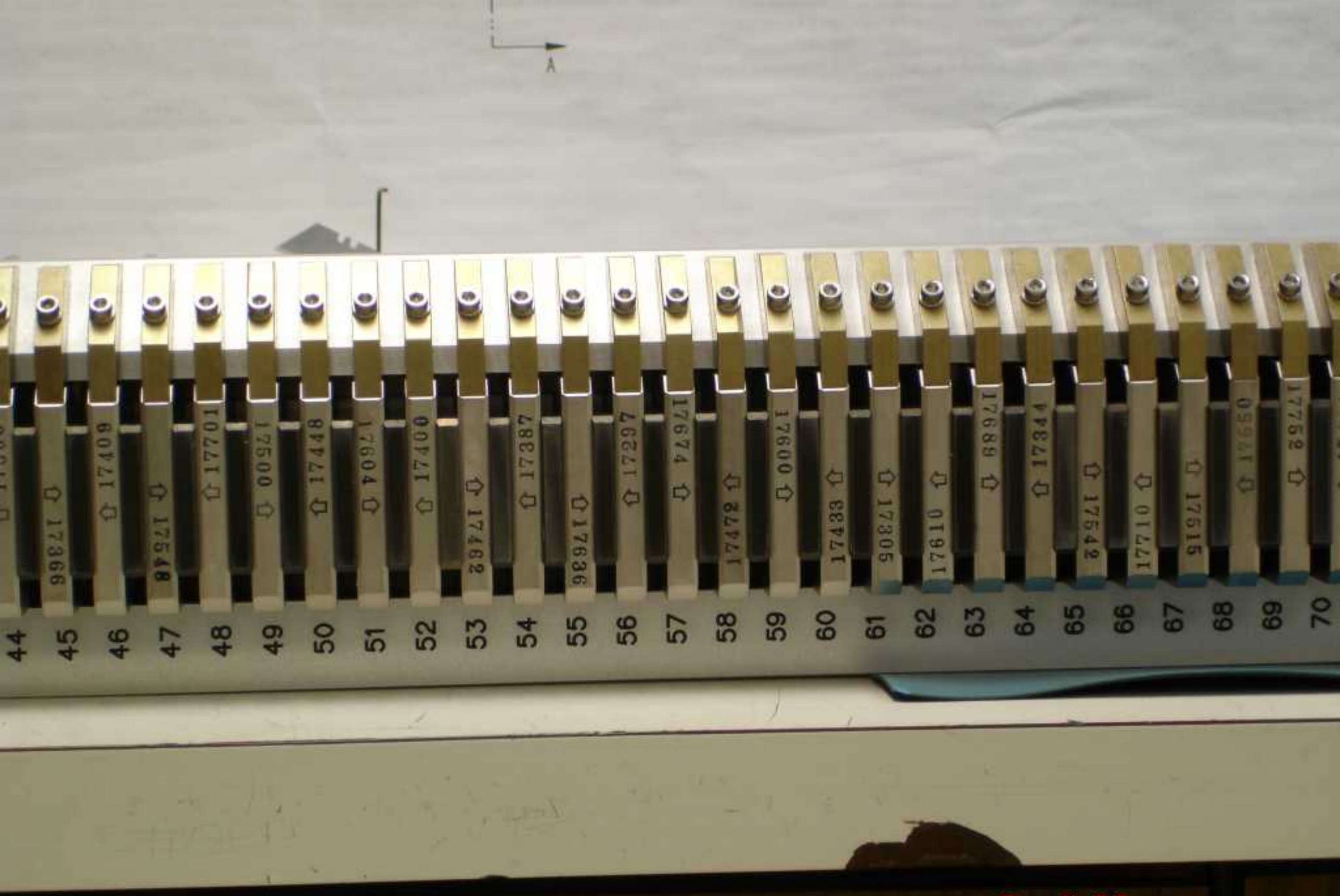
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NOTE 3
NOTE 7
PARTS LIST - BILL OF MATERIALS
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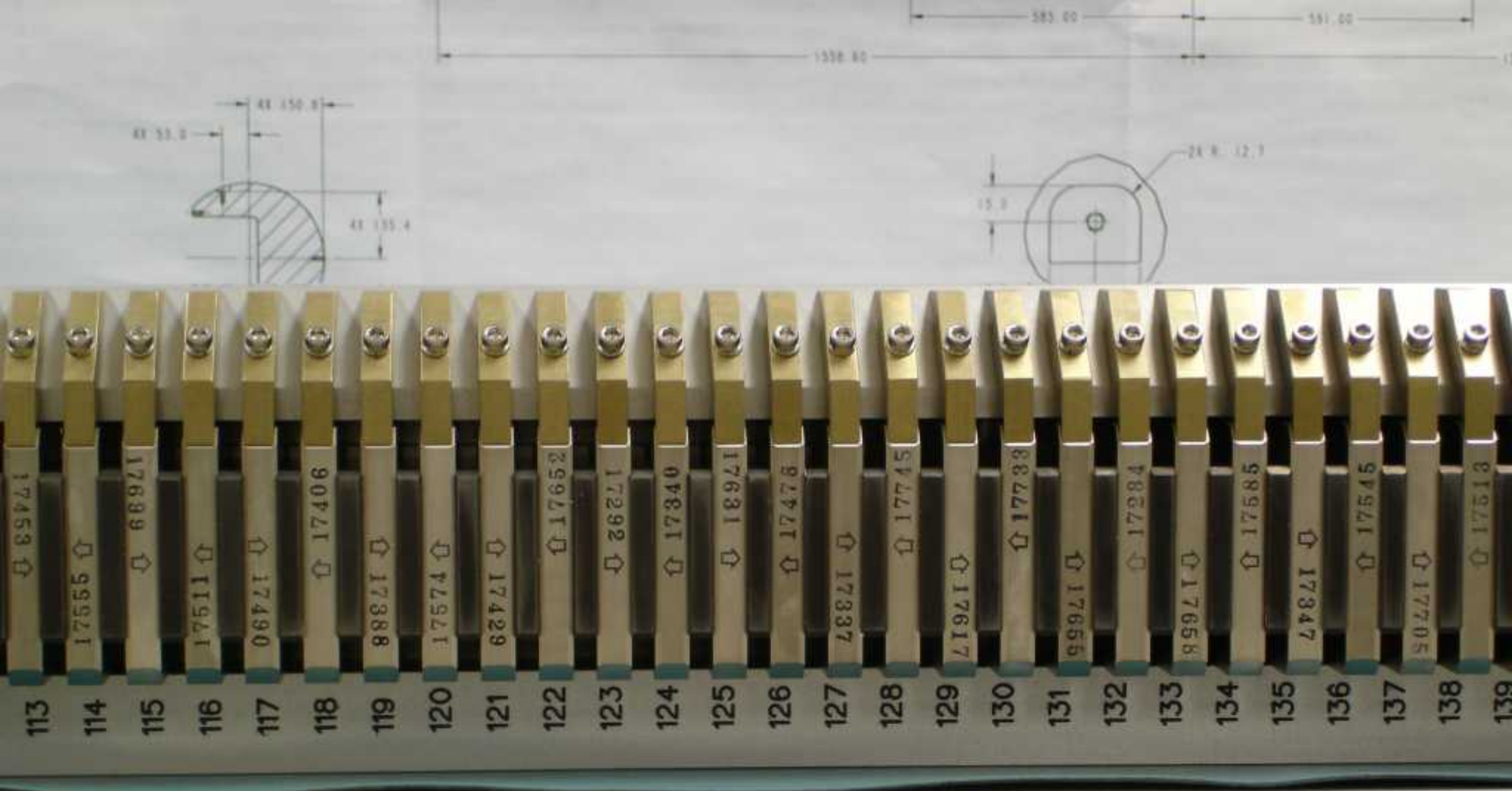
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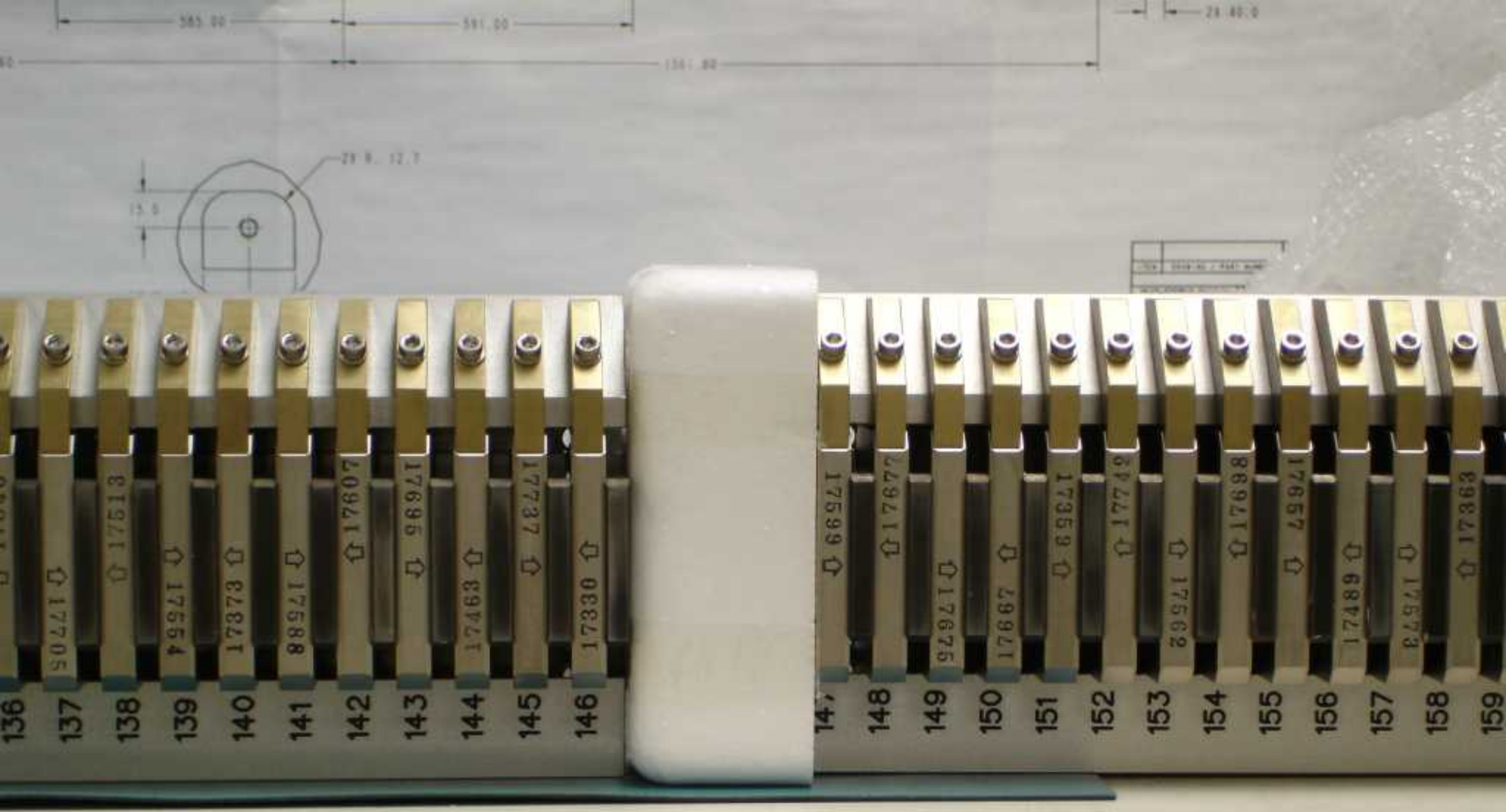
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8 4:12PM

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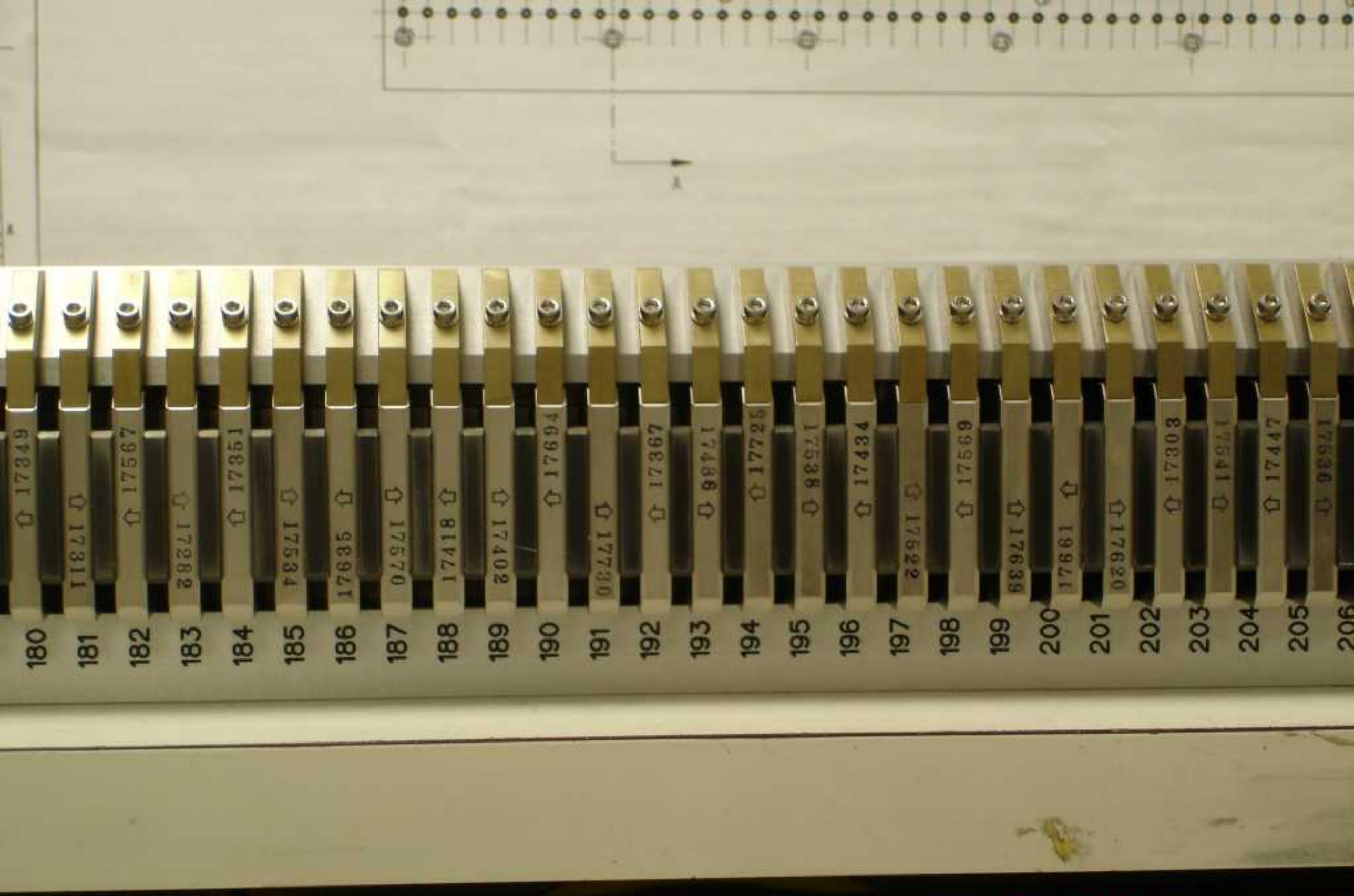
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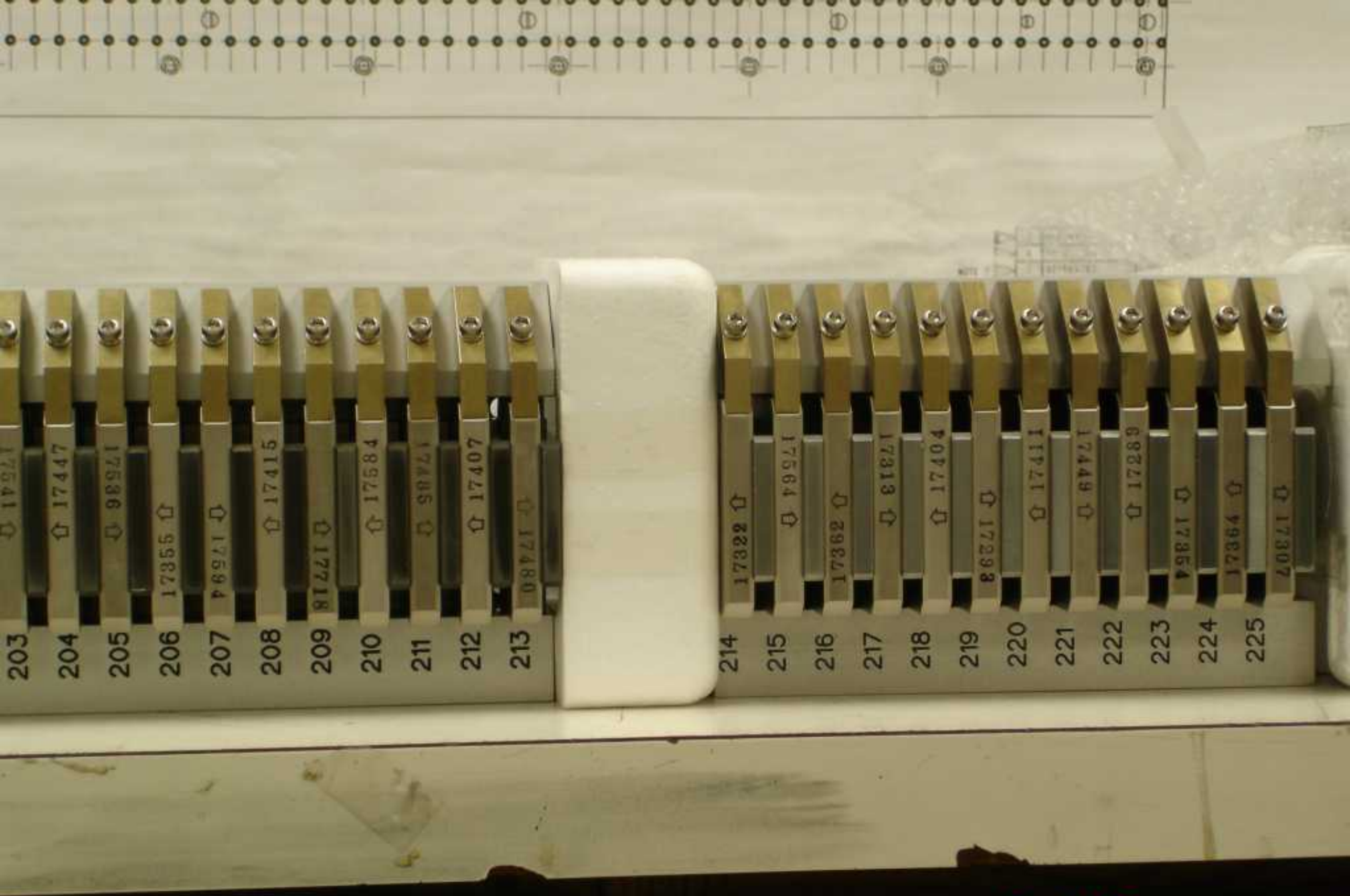
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