

TORUS



THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY

12000 Jefferson Avenue

Newport News, VA 23606

HALL B PROCEDURE NO.:

B000000401 -P023 Rev - A

**TITLE: Hall B Torus Pre-Power-Up Vapor-Cooled Leads Checkout Procedure**

BY: R. Fair

DATE: 09 / 21 / 2016

Intended Checker and Approvers:

CHK: D. Kashy

1. APP: P. Ghoshal

*Completed*  
*2/13/2020*

*2000/01/15*

*2000/01/15*  
*2000/01/15*

							<i>4/4</i>
A		Added pictures	RF	DK	PG		9/21/16
REV.	ECO#	DESCRIPTION	BY	CHK.	APP.	APP.	DATE
SUMMARY OF CHANGES FROM PREVIOUS REVISION:							

## Hall B Torus Pre-Power-Up Water-Cooled Leads Checkout Procedure Rev A

### Introduction

The checklist below should be completed only in conjunction with the most current release of the B000000401-P021 Hall B Torus Operations Power Up Checklists.

This document refers to the Vapor-Cooled Leads connecting the Water-Cooled Leads on the Torus Service Tower to the Torus magnet.

### Checklist

#### Hall B Torus Pre-Power-Up Vapor-Cooled Leads Checkout Procedure

Date

7/13/2020

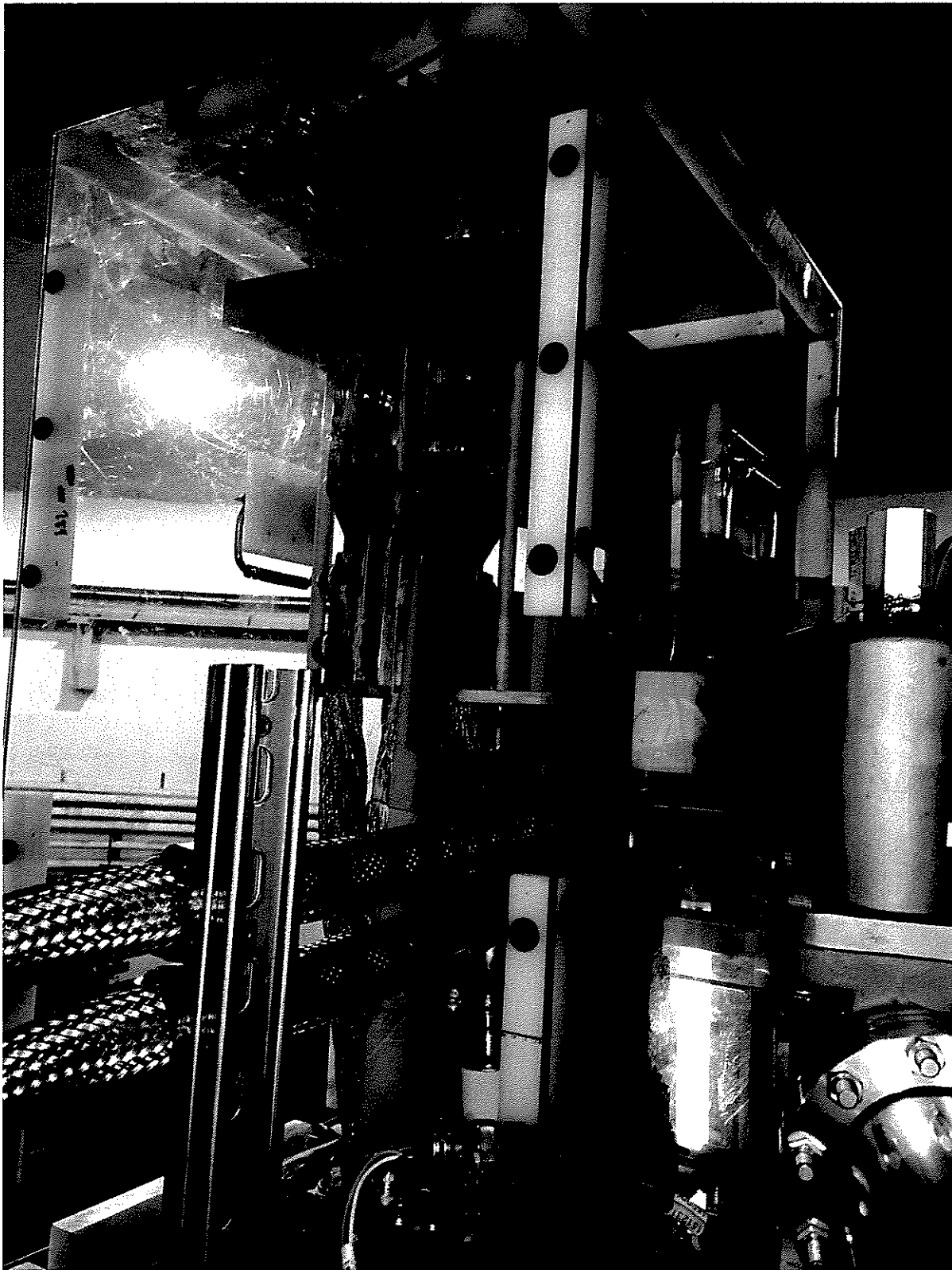
Indicate relevant items requiring check below!

Relevant Item:	Checked By/Date	Verified By/Date	
✓	PKG 7/13/20	TL 7/13/20	<p>1. Have the lead flows for EACH Vapor-Cooled Lead been calibrated and programmed. Use a local flow meter and FI8651, and do a subtraction between the values measured.</p> <p>Check that the lead flow rate is higher than 112 SLPM.</p> <p>Lead flow for VCL1 lead 88.4 SLPM Date 7/13/20</p> <p>Lead flow for VCL2 lead 88.27 SLPM Date 7/13/20</p>
N/A			<p>2. Check that EACH of the Vapor-Cooled Lead heaters have been turned ON and have been set to temperature. Set the temperature to approximately 15°C (60 F) for all the heaters</p> <p>Set temp for VCL1 lead Heater #1 _____ °C Date _____ Heater #2 _____ °C Date _____ Heater #3 _____ °C Date _____</p> <p>Set temp for VCL2 lead Heater #1 _____ °C Date _____ Heater #2 _____ °C Date _____ Heater #3 _____ °C Date _____</p> <p><u>Note:</u> As necessary adjust the heater temperature settings to prevent condensation and ice on any of the flanges.</p>

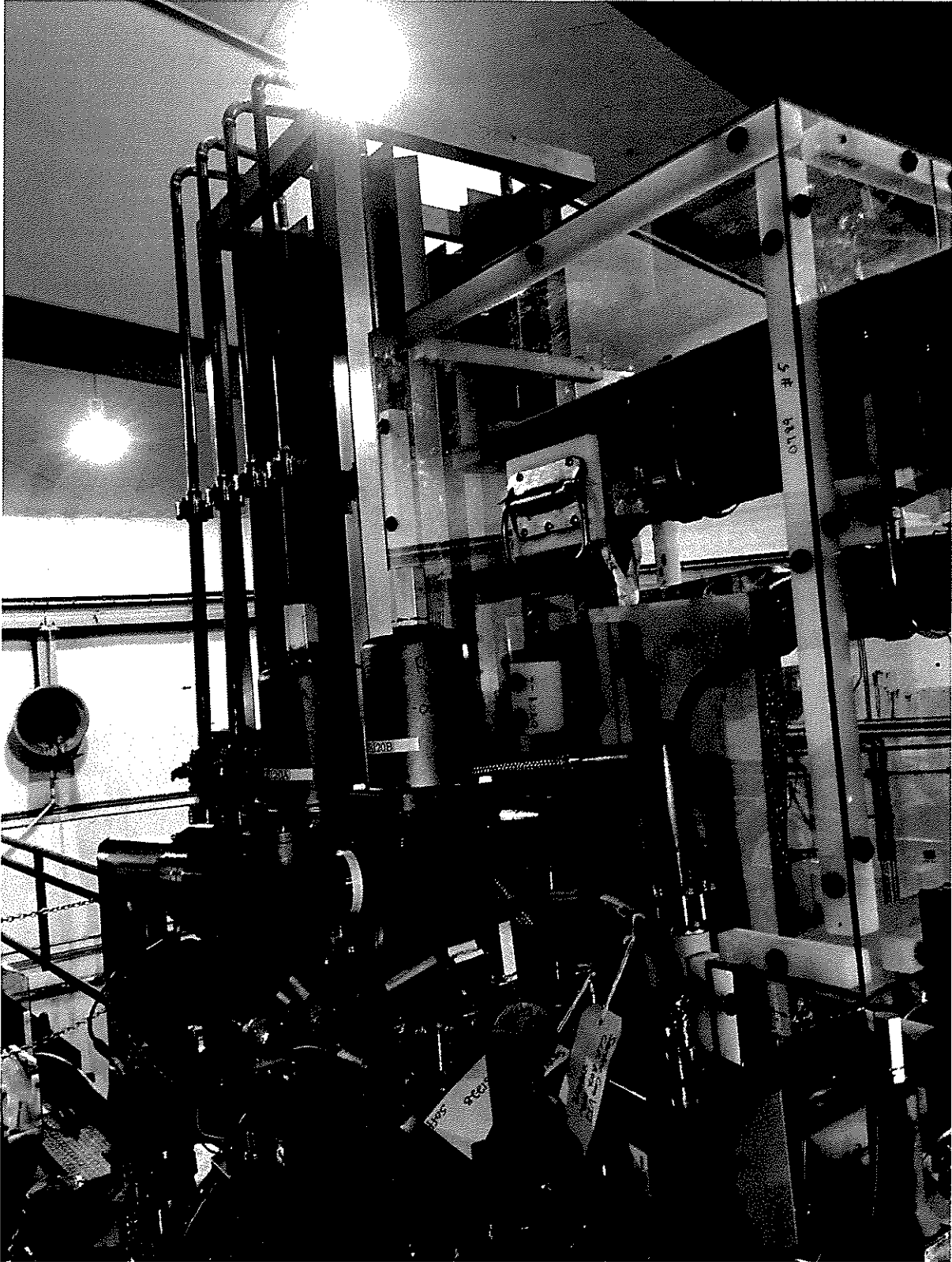
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N/A			3. Check that the G10 electrical isolation plates have been installed correctly between the two Vapor-Cooled Leads and in-between each lead and the lead gas exhaust port. (Ref. Drawing No. B00000-09-01-0813 and the figures below)
Ma			4. Check that the electrical isolation box at the Torus Service Tower end has been installed correctly (Ref Drawing Nos B00000-09-01-0784, B00000-09-01-0789 and the figures below)
N/A			5. Make sure that manual valves MV8121A and B are open
MN			6. Make sure that the vent solenoid valve SV8122 is operational
VAPOR-COOLED LEAD CHECKS COMPLETE			

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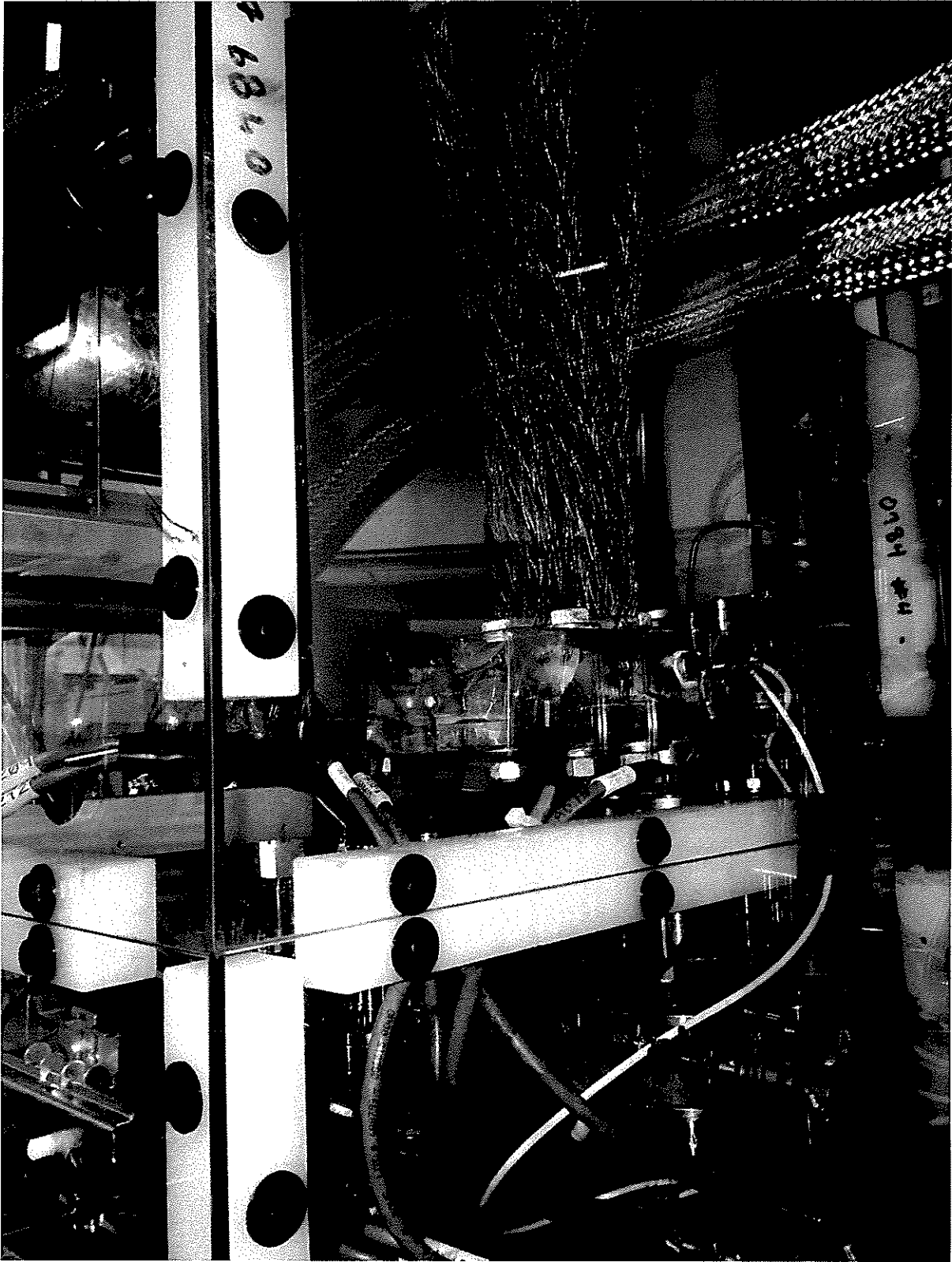
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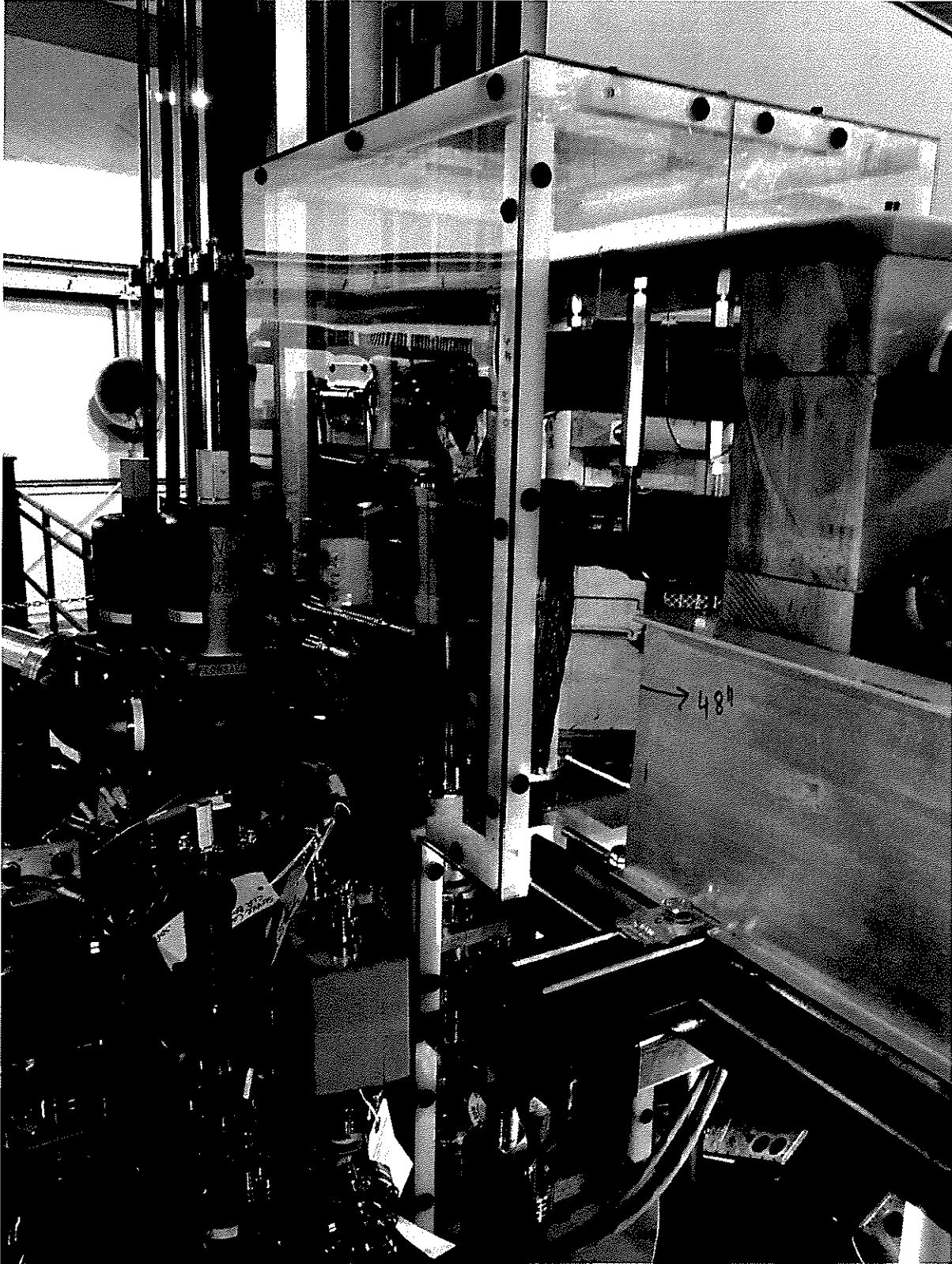
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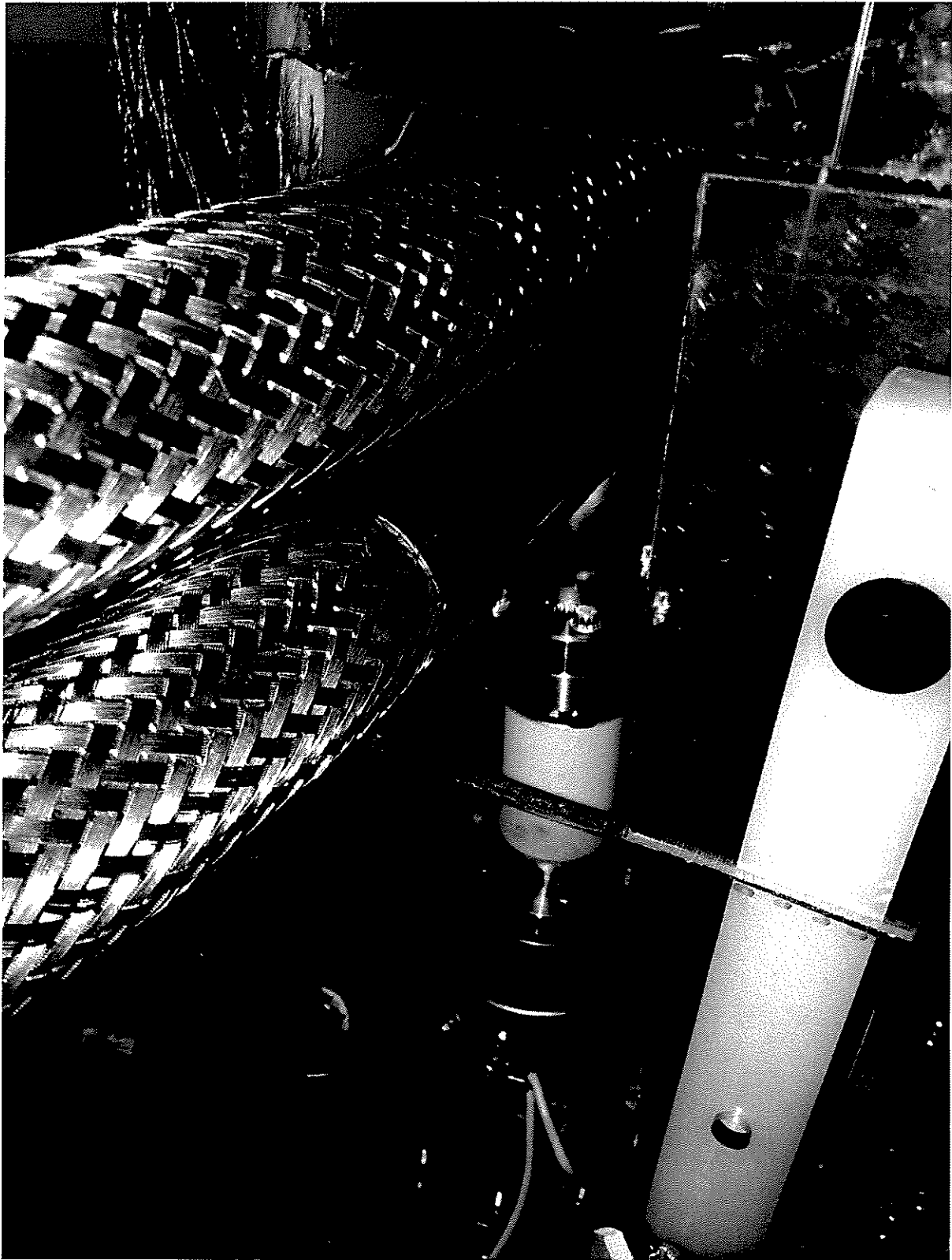
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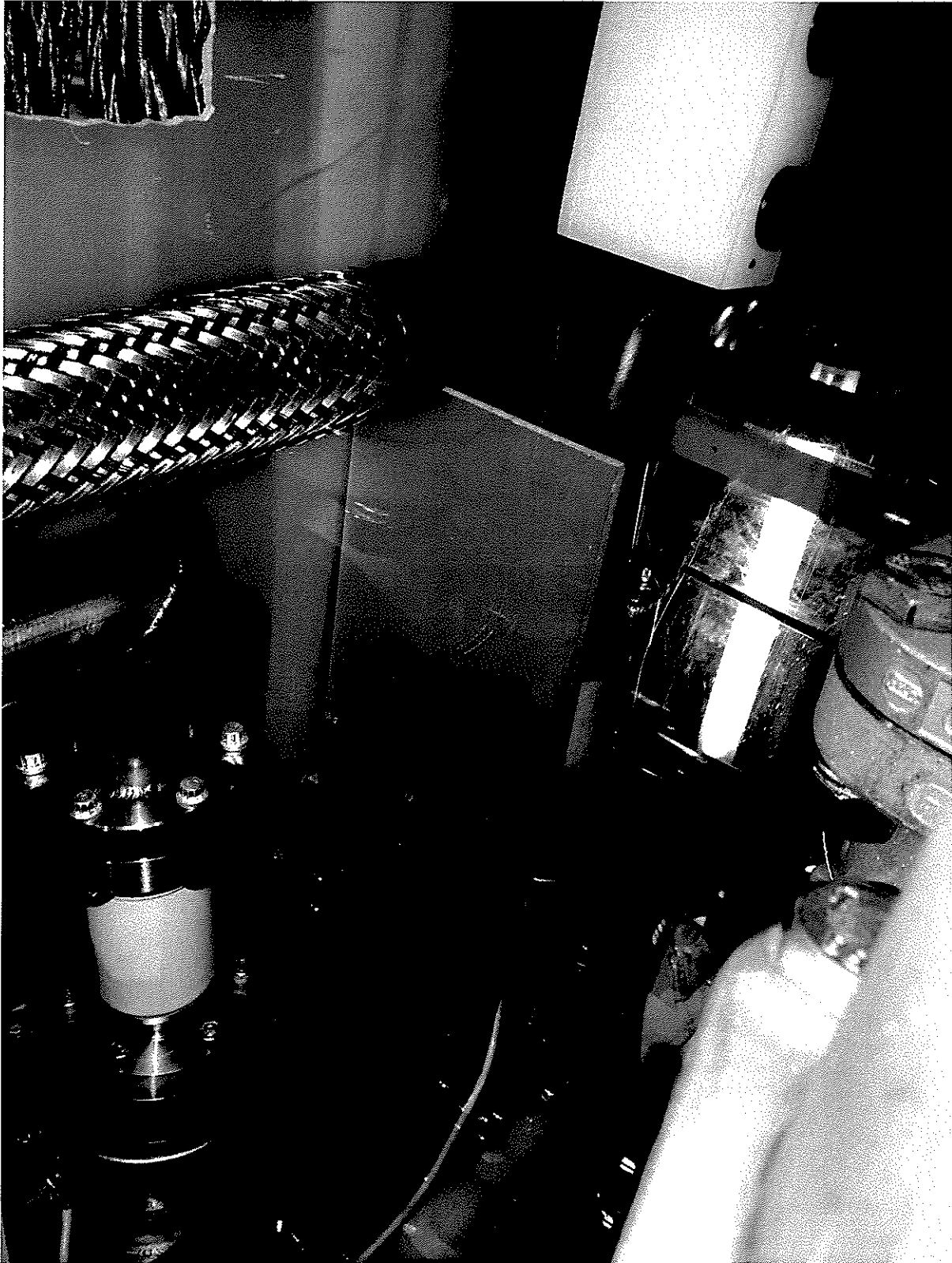
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