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SMD Operations Procedures Manual

8.1.3.8 OPERATION OF THE MAGCOOL PUMP AND PURGE SYSTEM

Text Pages 1 through 2

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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[Signature on File](#)

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Division Head

Date

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8.1.3.8 Operation of the MAGCOOL Pump and Purge System

1.0 Purpose

This procedure provides instructions for Start and Completion of pump and purge.

2.0 Responsibilities and Scope

- 2.1 Operator is responsible for Start and Completion of pump and purge.
- 2.2 The operator is responsible for the control of environmental aspects as defined in course number AM-ENV-FS6 “Cryogenic System Maintenance”.

3.0 Prerequisites

- 3.1 Operator shall be instructed by a supervisor or designee.
- 3.2 Instruction shall include operation of 100 HP Sullairs, Purifiers, and Vacuum Pumps.

4.0 Precautions

Hearing protection shall be worn in the compressor room. Ensure personnel near units are authorized, or accompanied by authorized personnel.

5.0 Procedure

- 5.1 Manually **START** vacuum **PUMP B**. Enter start in Log.
- 5.2 Turn on air supply to both headers on the bay to be used (either C, D or E).
- 5.3 Display pages D9 Magnet Test Stand Function Control, as shown in Figure 1. Flow diagram of MAGCOOL Test Stand is given in the lower portion. MANUALS for control selection are given in the upper.
- 5.4 Bring cursor to **PUMP & PURGE** position for the bay in use (Stand C, D or E). Press **OPEN or ON**. **ON** flag will appear. Enter start time in Log.
- 5.5 Computer will open valves corresponding allowing the selected magnet to be pump down. When vacuum reaches ~ 500 μ vacuum **valves will close**.

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- 5.6 Computer will open valve connected to purge supply and pressurize the **magnet** to 6 - 10 atms. with helium. After the magnet is charged by clean helium from the purifier, pressure will be released.
- 5.7 The vacuum cycle will start again, 5.6 to 5.7.
- 5.8 The P/P program is automatically repeated 3 times, followed by a **DONE** flag appearing in the display. Enter "done" time in Log.
- 5.9 Magnet will be at the pressure in the purge return line until the **COOLDOWN I PROGRAM** is installed.

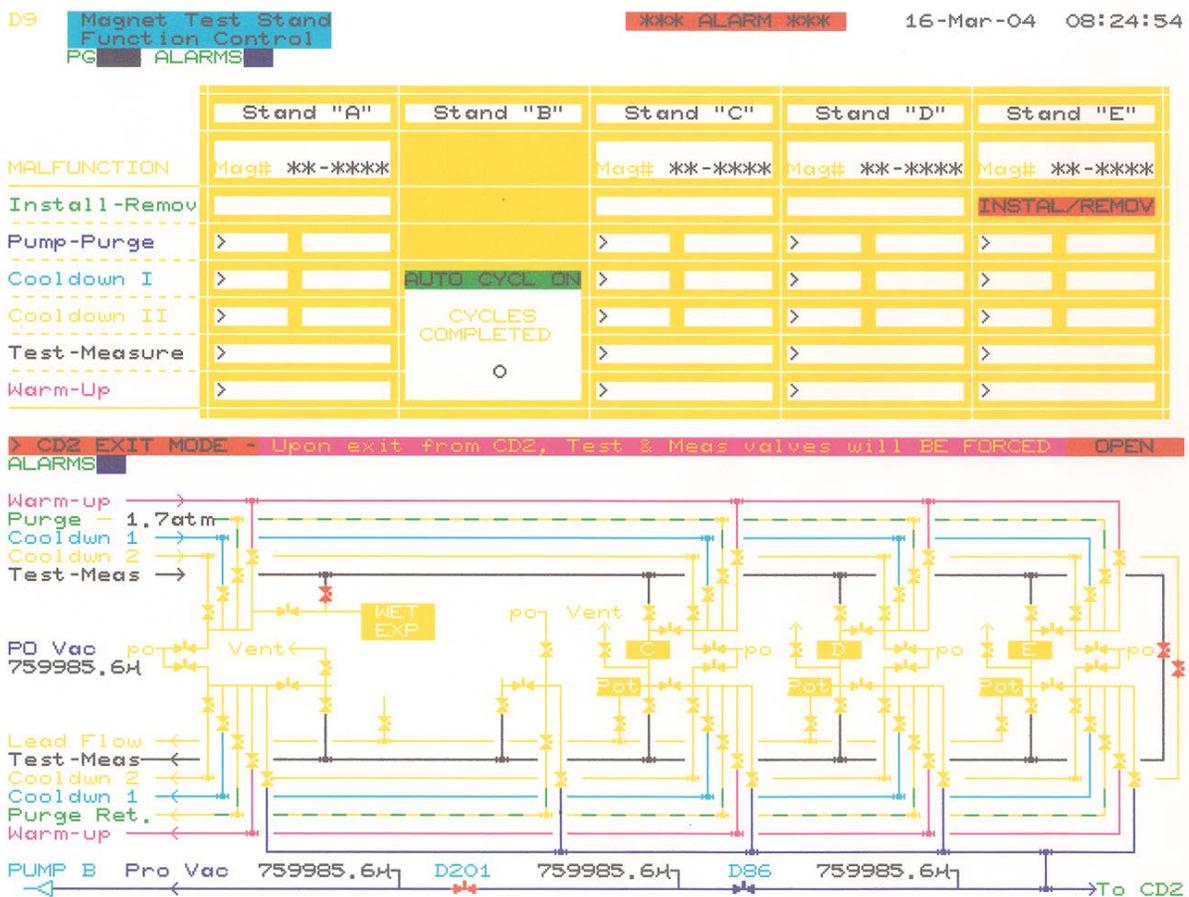


Figure 1. Display of control page D9 for MAGCOOL Test Stand

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6.0 Documentation

Documentation as indicated in the procedures is kept in the CRYOGENIC Logbook located in Building 902. Enter any unusual repairs or events (leaks, etc.) in the Log.

7.0 Reference

Operation and Maintenance manual provided by CVI is kept in the CRYOGENIC Control Room located in Bldg. 902. An operator's program guide and operations guide is given to all operators and a copy is kept in the CRYOGENIC Control Room located in Bldg. 902.

8.0 Attachments

None