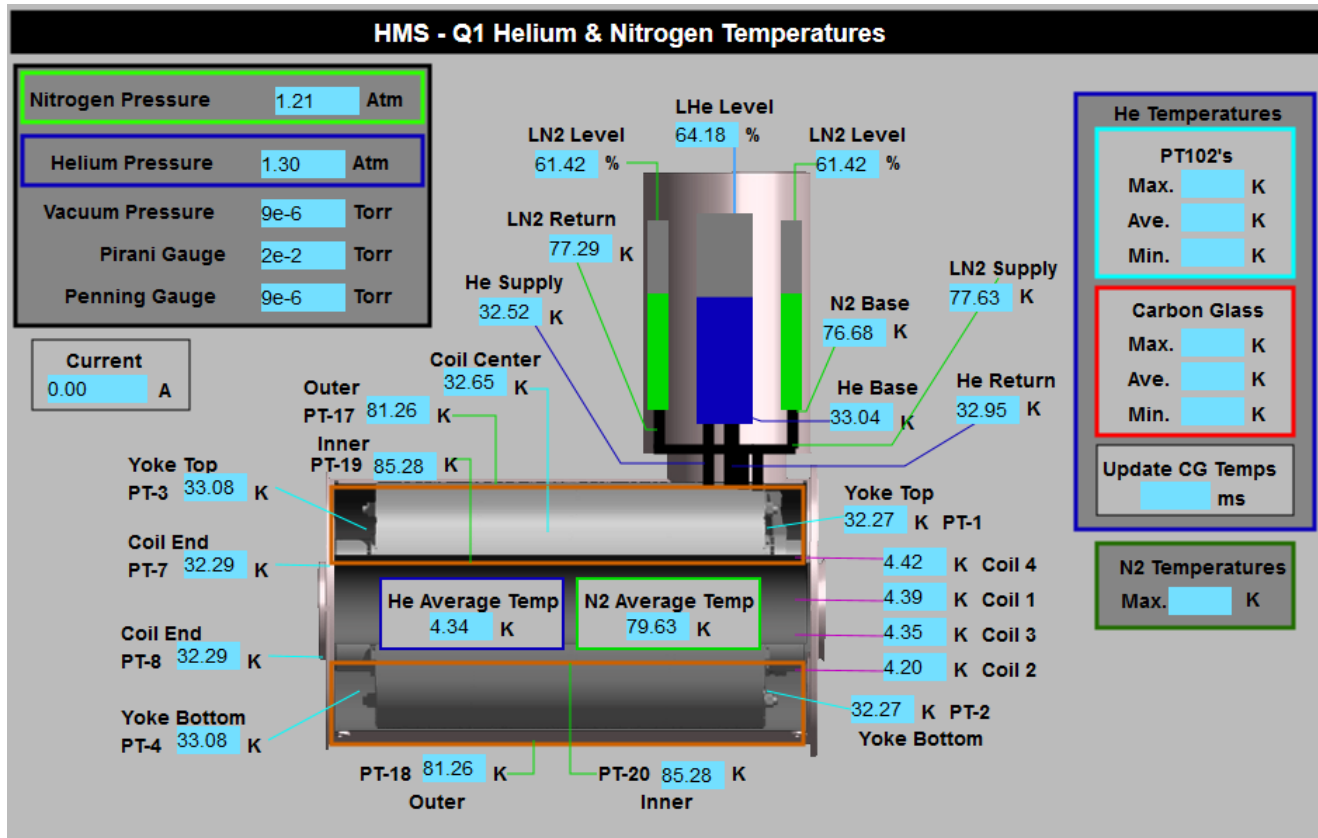


Summary

Hall C EPICS Magnets

- HMS Q1, Q2, and Q3 helium and nitrogen temperatures screens converted from CSS-BOY to WEDM.



WEDM version of HMS Q1 Helium & Nitrogen Temperatures EPICS screen.

Hall C EPICS HV

- Python scripts developed to use built-in CSS utility to control multiple HV channels from one control.
- HV group controls added to *Tcl/Tk-to-CSS* conversion program.
- Development and debugging of start-up script in progress for Hall C HV CSS screens.
- Drop down menu for commands created to be able to turn all HV channels on/off and reset the HV crates.
- All HV CSS and Python scripts modified to test their functionality on HV CAEN SY4527 test station.

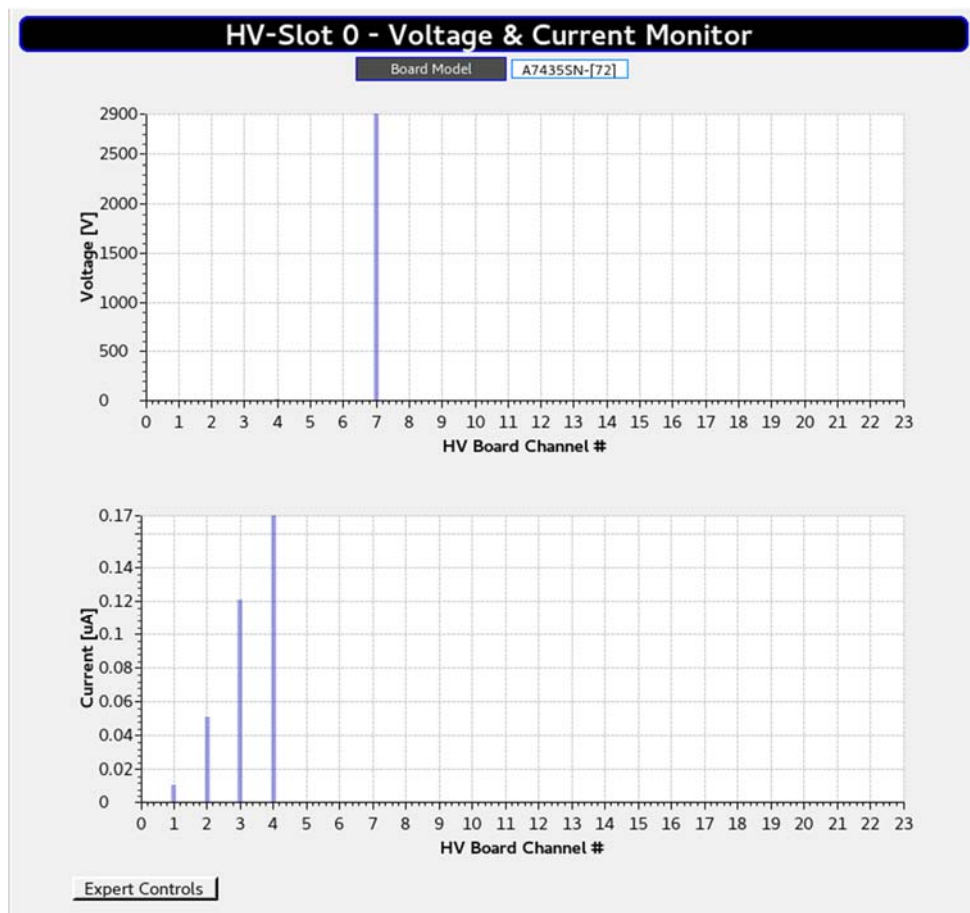


Detector Support Group

Weekly Report, 2019-05-01

Hall C HV-CAEN EPICS Test Station

- Java script written to turn all channels ON/OFF on CAEN A7435SN HV board
- CSS-BOY screens developed to monitor current and voltage in CAEN A7435SN HV board.
 - ★ CSS-BOY screen plots a graph-bar to show the voltage and current monitored by the SY4527 HV CAEN power supply for HV board channel located in slot 0.



HV BOARD – Voltage and Current monitor CSS-BOY screen

Hall C CAEN HV Test Station

- Test stand setup modified for load test.
- Test stand LabVIEW code modified to use Keithley 6517b electrometer.

HDice

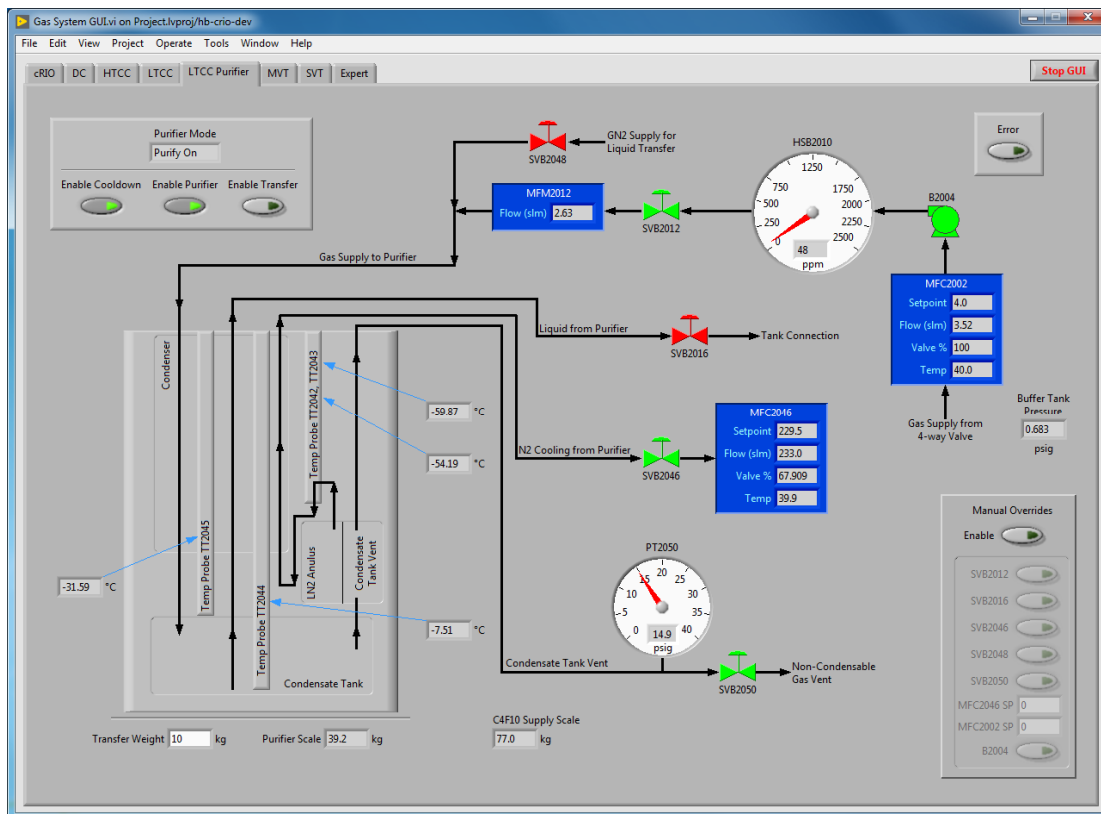
- For the Intelligent Gas Handling (IGH) control board of the Oxford Dilution Fridge recommended a new 24 V, 10 A DC power supply to replace the faulty Farnell power supply currently used.

Gas System

- Gas shed cRIO crashed (affecting Drift Chamber and LTCC purification systems), waiting for a solution from National Instruments.

LTCC

- PID control added for set point of mass flow controller (MFC2046) based on liquid nitrogen temperature (TT2043).
- Main LabVIEW GUI upgrades completed for LTCC Purifier system.



LTCC Purifier LabVIEW GUI

RTPC

- EEL testing OSP reviewed and signed.
- P&I diagram created to test RTPC in EEL building.

Engineering Division

- BPM PCB population continuing.

Wire Bonder Repairs

- Wedge replaced and troubleshooting continuing.

cRIO Test Stand

- Manual mode test for NI 9217 module completed.

DSG – RICH R&D

- Development of temperature and humidity monitoring with new digital high- accuracy Sensirion SHT85 integrated sensor in progress.
- Developing FPGA code for SHT85 serial communication stream.