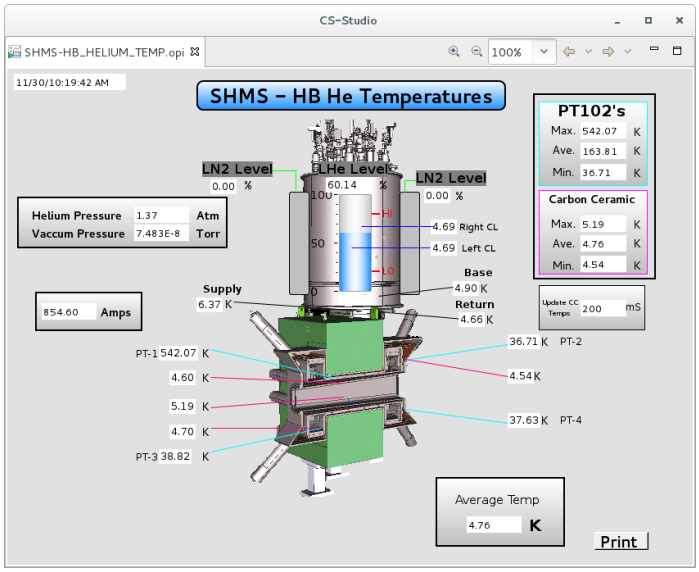
Hall C EPICS Slow Controls Report (11/22/2018 – 12/05/2018)

- Python script developed to create CS-Studio screens from a tabulated list of PVs.
  - ✶ Python script reads in text file containing PVs and corresponding labels to display, and customizes widget template for each row in the user's tabulated list of PVs.
  - ✶ End result of script is a table-like layout of PV indicators in an OPI file that can be imported into and run in CSS.
  - ✶ Preliminary version of CSS screens for HMS and SHMS created using script.
- WebOPI on Tomcat server debugged.
  - ✶ Tomcat verified to be installed correctly.
    - Able to deploy and run the example web app.
- Successfully ran WebOPI on Tomcat servlet from localhost URL.
  - ✶ SHMS HB Helium Temperature CSS screen transferred to servlet.
- Python script developed to convert OPI files (used by CSS-BOY) to EDL files (used by EDM and WEDM).
  - ✶ Conversion script eliminates the need to replicate CSS screens in EDM for web interface.
  - ✶ Converted and deployed test screen showing HMS magnets' current and spectrometer angle on WEDM.
- EPICS-Base and EPICS-CSS installed on dsg-b-linux1 PC.
- SHMS HB Helium temperature OPI screen developed.
  - ✶ New screen based on PLC HMI screen, shows similar appearance and structure for the interface.
  - ✶ Ran OPI screen in real time mode by using PVs from Accelerator SoftIOC.



SHMS HB He Temperature screen developed in EPICS-CS-Studio