

DSG-SoLID R&D Meeting Minutes

Date: September 23, 2022

Time: 11:00 – 12:00

Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Mindy Leffel, Tyler Lemon, and Marc McMullen

1. HMI screens

Pablo Campero

1. Completed modifications to Solenoid Valve Setup HMI screen
 - Added input controls for integral and proportional gain set points
 - Added input control and indicator for set temperature in heat exchanger
 - Added buttons to access POSP screen

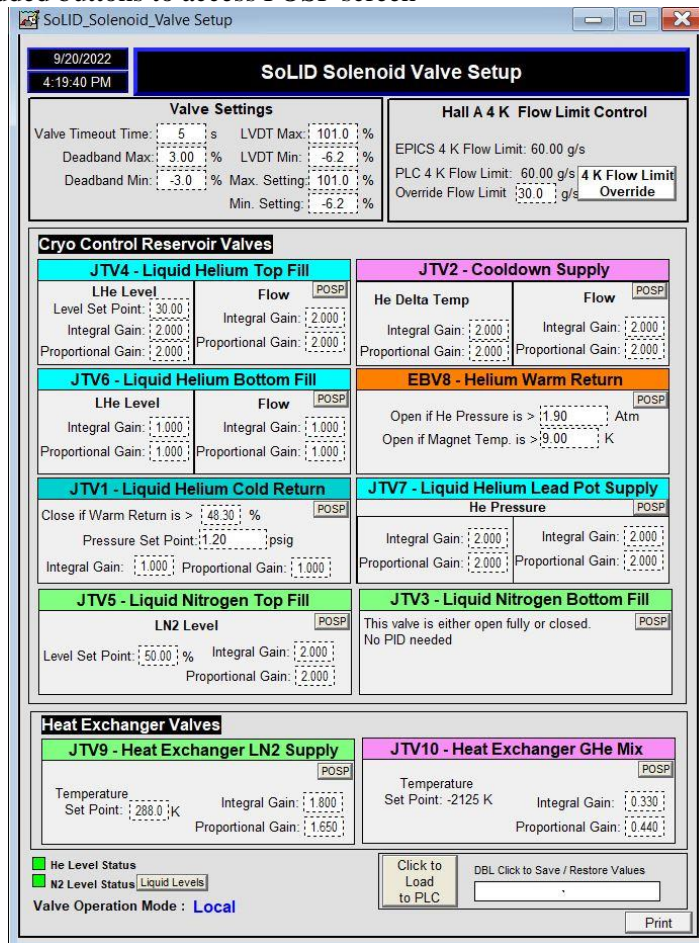


Fig.1. Solenoid Valve Setup HMI screen

2. PLC programming

Pablo Campero

1. Modified PLC code to control the aperture of the heat exchanger valve for the gas helium mix through PLC automatic mode
 - Added code to determine if the heat exchanger is enabled
 - Configured one PID controller instruction
 - Programmed the correct process variable, set point, and limits for PID controller

3. Electrical and Controls Drawings

Mary Ann Antonioli, Pablo Campero, and Brian Eng

1. Modifying drawings for diode and PT-102 temperature sensors wiring
2. Completed revisions and posted drawings
 - A00000-16-03-0221 – Vacuum, Pressure, Mass flow, and Pressure Sensors
 - A00000-16-03-0220 – Liquid Level Controller Wiring Diagram
 - A00000-16-03-0308 – PLC ADC Module Wiring Diagram
 - A00000-16-03-0403 – Radial Strain Gauges Cable Diagram
 - A00000-16-03-0240 – Strain Gauge Measurement Wiring Diagram

4. Instrumentation

Brian Eng and Mindy Leffel

1. Completed connections of six female connectors to the extension cables for the thermocouple temperature sensors
2. Fabricating cable for power supply communication
 - Completed RJ-11 connector end
 - Striping other end and installing ferrules