

Phoebus Screens for Hall A SoLID

Mary Ann Antonioli
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Phoebus Screens for SoLID

After an HMI screen is developed for SoLID, I develop the associated Phoebus screen. Three Phoebus screens were completed this month and additions made to two previously developed screens.

To develop a screen, the process variables are copied from the provided spreadsheet to a Word document, and then dragged in groups of the same widget (all text updates or all Boolean buttons) onto the screen. The widget type is selected from the drop-down menu presented after dragging onto the screen. After type selection, the widgets are automatically added to the screen, already linked to a process variable. Any changes needed to the widget are made (text, size, color, etc.) and they are arranged on the screen.

When attempting to add a feature to two previously completed screens that, depending upon the value of a Boolean process variable, shows text notating interlock disabled, a sensor fault, or out of set limits, the feature did not respond as expected. I tried adding two types of rules, text dependent on the process variable value or visibility of the text dependent upon the process variable value, to three types of widgets – a label, a text update, and a symbol update. No combination gave the expected result. After closer examination, it was discovered that after adding a second symbol to the symbol update, one blank and one with the appropriate text, and no rule, this widget worked. Figure 1 shows the radial supports screen with the text interlock disabled visible and the other two invisible, dependent upon the process variable value.

The three screens completed are for interlock setup, reading of voltage taps, and the menu, which is ongoing as screens are completed. The interlock setup screen is shown in Fig. 2.

Next month, I will be working on the LabVIEW hardware interlock system for NPS.

- **After an HMI screen is developed for SoLID, a comparable Phoebus screen is developed**
- **Two screens were revised**
- **Three screens were completed**

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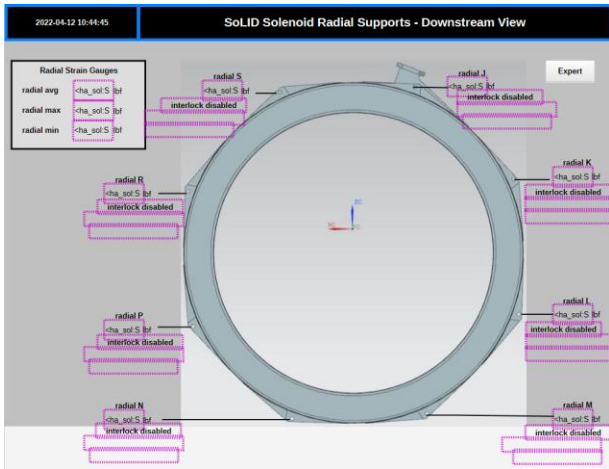


FIG. 1. Radial supports screen. Empty pink boxes are where text will appear, depending upon process variables' values.

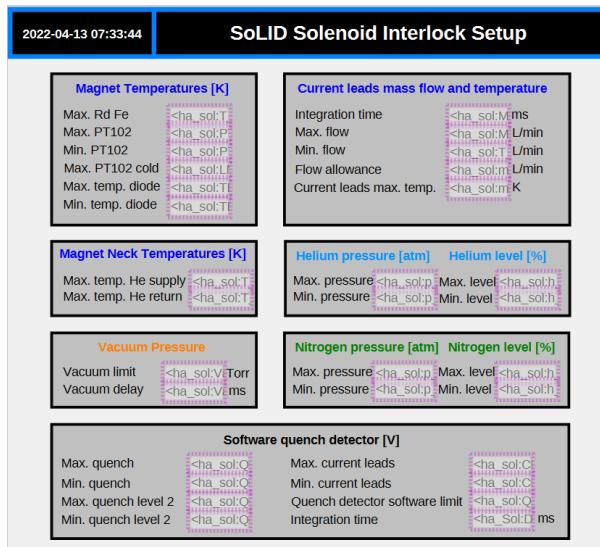


FIG. 2. Interlock setup screen. Pink boxes are where values are entered.