

Logging of P & T of Roots Pump

- ▶ Remote access to roots-pump PLC (not HMI) via Ethernet

- ▶ Past trial by ACU group
— [DocDB #6067](#)

- ▶ The sample code ran fine with one correction (“cpu=PLC5” → “cpu=SLC”)

- ▶ C++ program on Linux server

- ▶ Read P & T every 5 sec for example

- ▶ Write them into TSV files under

- /data2/e1039_data/target_data/roots_pump

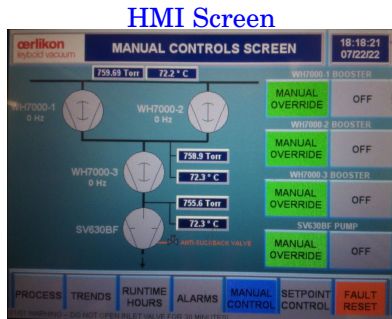
- ▶ Will write into MySQL DB also??

- ▶ Viewer

- ▶ Chart them at E1039 Data Summary as usual:

- <https://e906-gat1.fnal.gov/data-summary/e1039/target-roots-pump.php>

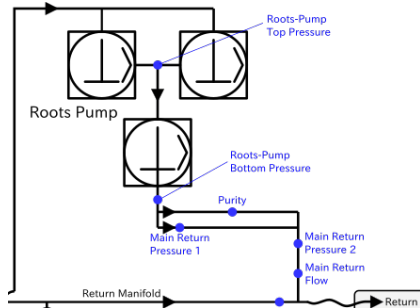
- https://e906-gat1.fnal.gov/data-summary/e1039/target-roots-pump.php?var_type=t



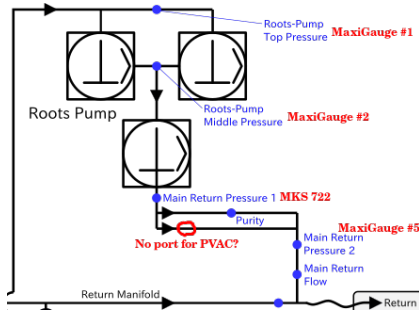
Locations of Sensors around Roots Pump

- ▶ The schematic in Cryo Control Panel is based on the P&ID drawing (DocDB 5834-v84)
- ▶ The actual location of several sensors is different

▷ CCP (version 4)



▷ Actual location



▶ Plans

- ▷ Use APR250 for both the magnet & separator return lines, where P is 10^{-2} -1000 Torr. So purchase one more APR250
- ▷ Purchase a new sensor for “Main Return Pressure 2”, where P is 3-15 psi.

