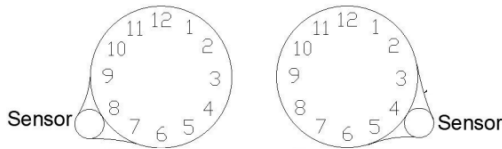


Target iPro Site Validation Process

EMC email - cpcsupport@emcccontrols.com

EMC Office - 608 822 3550 ext. 301

1. Contractor to Confirm what high pressure valve (HPV) is installed? (Take Picture)
 - a. Make & Model _____
2. Contractor to Confirm what vessel bypass valve BPV is installed? (Take Picture)
 - a. Make & Model _____
3. Contractor to email valve Pictures to EMC to validate correct specification.
cpcsupport@emcccontrols.com
4. EMC to perform a back up of the E2 prior to any updates.
5. EMC to initiate case shutdown event to pump down rack.
6. EMC to load updated iPro description file (Rev21) to E2 and reset E2 controller.
7. Contractor to validate drop leg temperature sensors (Take Pictures)
 - a. Are there (2) temperature sensors installed? Yes____ No____
 - b. What type of sensor manufacturer is installed? Emerson____ ACI____ EMC____
 - c. Are they located within 24 inches of the gas cooler header? Yes____ No____
 - d. Ensure the sensors are clamped to drop leg pipe at the 4 o'clock and 8 o'clock positions using a mechanically fastened clamp/strap?



- e. Are the sensors insulated using ArmaFlex with 1 inch wall thickness to a minimum of 12 inches long and protected with PVC jacket? Yes____ No____
 - f. Verify (1) sensor is terminated to the iPro T1 Input (Pb1)
 - g. Verify (1) sensor is terminated to the MultFlex Input board (confirm with EMC)
8. Contractor to validate drop leg pressure transducers (Take Pictures)

- a. Are there (2) pressure transducers installed on the drop leg pipe between the gas cooler and high pressure valve? Yes____ No____
- b. Are the transducers 0-2000 psi? Yes____ No____
- c. Are the transducers installed in a vertical position? Yes____ No____
- d. Verify (1) sensor is terminated to the iPro P1 Input (Pb2)
- e. Verify (1) sensor is terminated to the Multiflex Input board (confirm with EMC)

9. Contractor to validate vessel pressure transducers (Take Pictures)

- a. Are there (2) pressure transducers installed?
- b. What pressure range transducers are installed?

iPro Input	Multiflex Input Board
0-650 psi	0-650 psi
0-1000 psi	0-1000 psi

- c. Are the transducers installed in a vertical position? Yes____ No____
- d. Verify (1) sensor is terminated to the iPro P2 Input (Pb3)
- e. Verify (1) sensor is terminated to the Multiflex Input board (confirm with EMC)

10. Contractor to confirm location of ambient temp sensor. (Take Picture)

- a. What type of sensor manufacturer is installed? Emerson____ ACl____ EMC____
- b. Confirm sensor is not in direct sunlight.

11. Contractor to confirm location of air-on Gas Cooler sensor.

- a. What type of sensor manufacturer is installed? Emerson____ ACl____ EMC____
- b. Dry Gas Cooler – sensor to be located under gas cooler within air stream out of direct sunlight.
- c. Adiabatic Gas Cooler – sensor to be located between wet pad and gas cooler coil without touching coil or getting wet.
- d. Force Adiabatic gas cooler into full water moder and take pictures of both sides showing wetness level of pads.

12. Contractor to provide pictures of Gas Cooler.

- a. Dry Gas Cooler – is the coil clean? Yes____ No____
- b. Adiabatic Gas Cooler – is the coil clean? Yes____ No____
- c. Adiabatic Gas Cooler – Are the pads fully wet? Yes____ No____

13. Contractor to provide pictures of iPro Controller installation.

- a. Include pictures of iPro, XEV20D, XEC and transformers.

14. EMC to program correct valve settings in iPro High Pressure Controller after contractor confirms valve types.
15. EMC to program redundant back up sensors into new description file after contractor confirms sensor locations and types.
16. EMC to update the following setpoints.

HPV Mode Setpoint	87 DF
HPV Mode Hysteresis	4 DDF
HPV Subcool Setpoint	5 DDF

17. Contractor to power cycle iPro Controller once EMC confirms programming updates have been confirmed.
18. EMC to perform a back up of the E2 after updates are made.
19. EMC to re-enable circuit loads to restart rack.
20. Contractor to send all pictures and information to EMC to file. cpcsupport@emccontrols.com