

## Realistic instrumentation diagrams

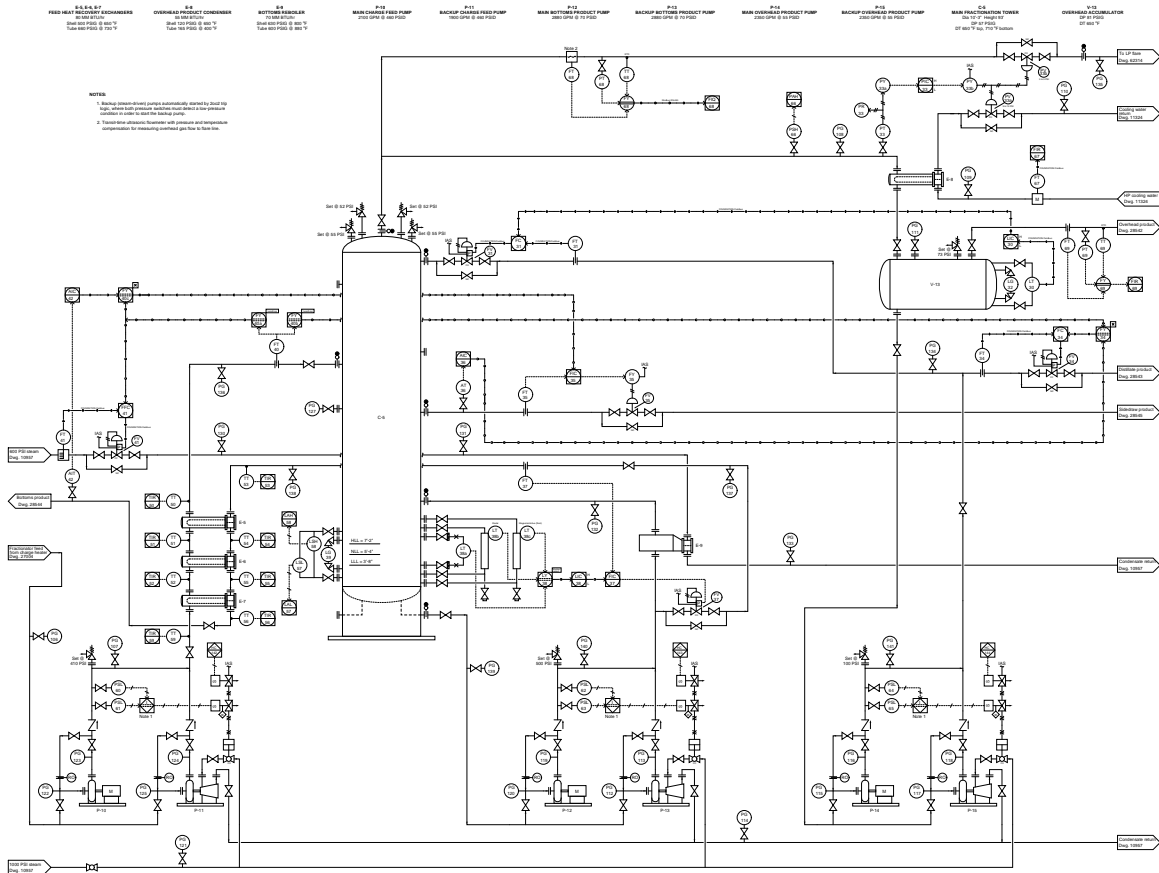
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The purpose of this particular worksheet is to provide examples of realistic instrumentation diagrams (mostly P&IDs) useful as the foundation of specific worksheet questions. The graphic files included in this worksheet are used by many sequenced question files (`i0?????.tex`) in the Socratic Instrumentation collection.

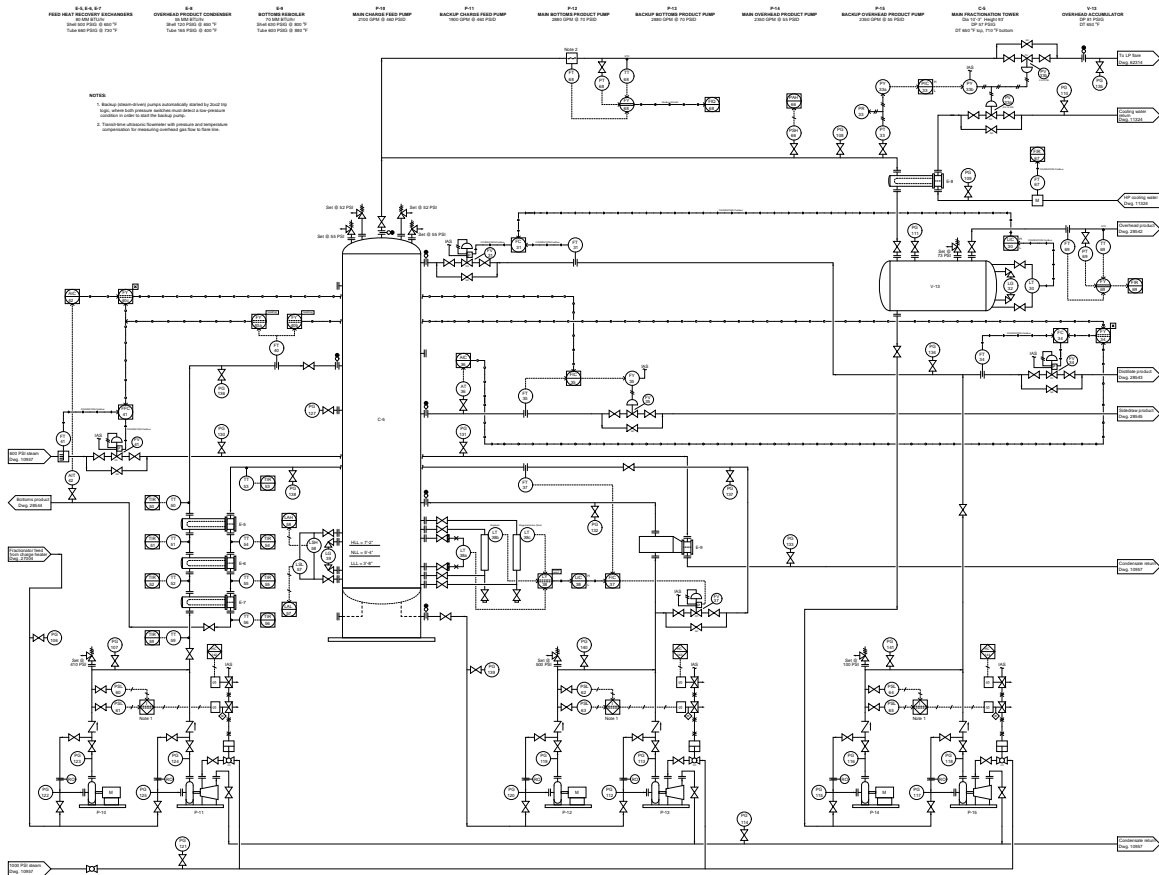
# Questions

## Question 1

### A generic distillation process



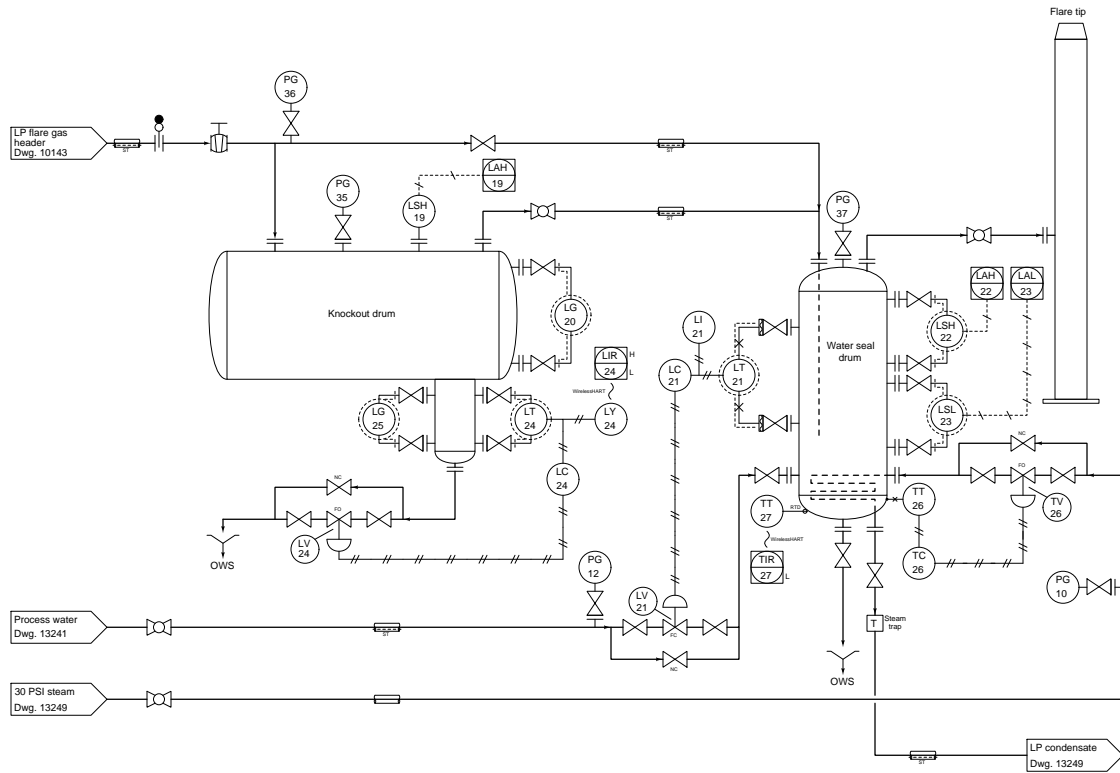
# A generic distillation process (using displacer rather than radar LT-38b)



file i0001r

Question 2

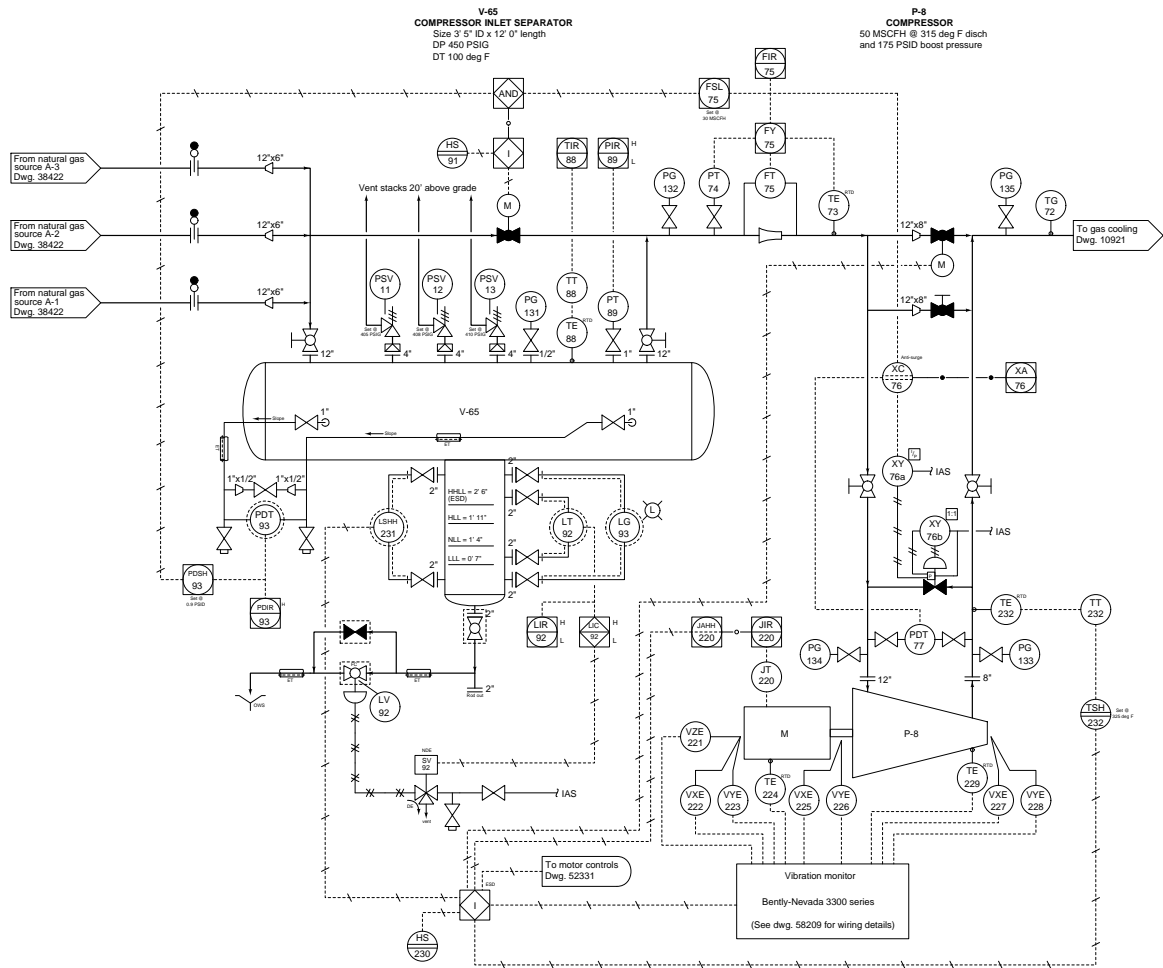
Flare knockout drum and water seal



file i0002r

Question 3

Gas compressor inlet separator

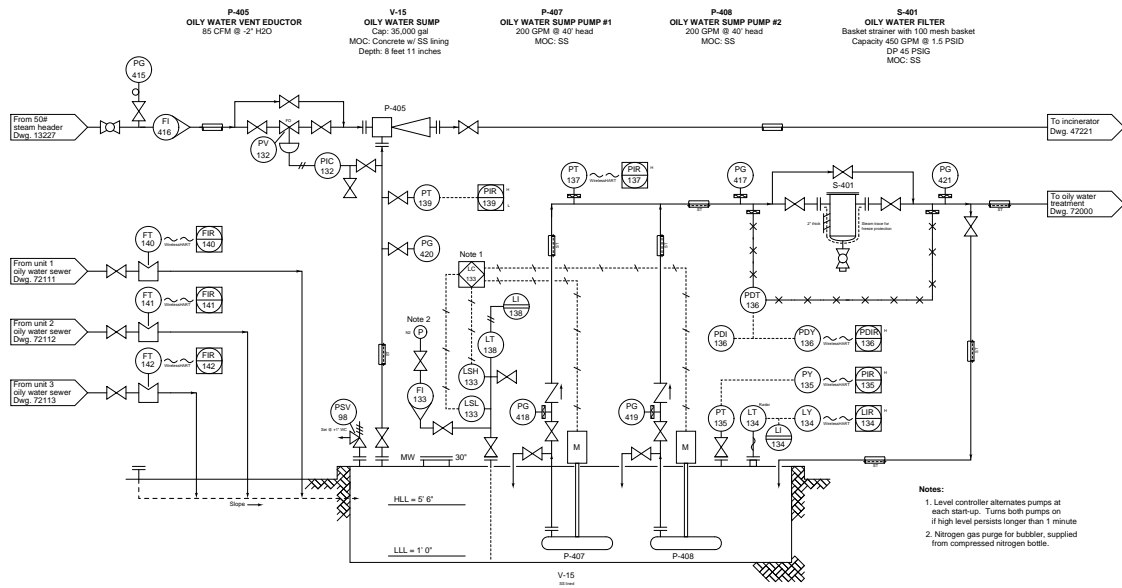


file i0003r



Question 5

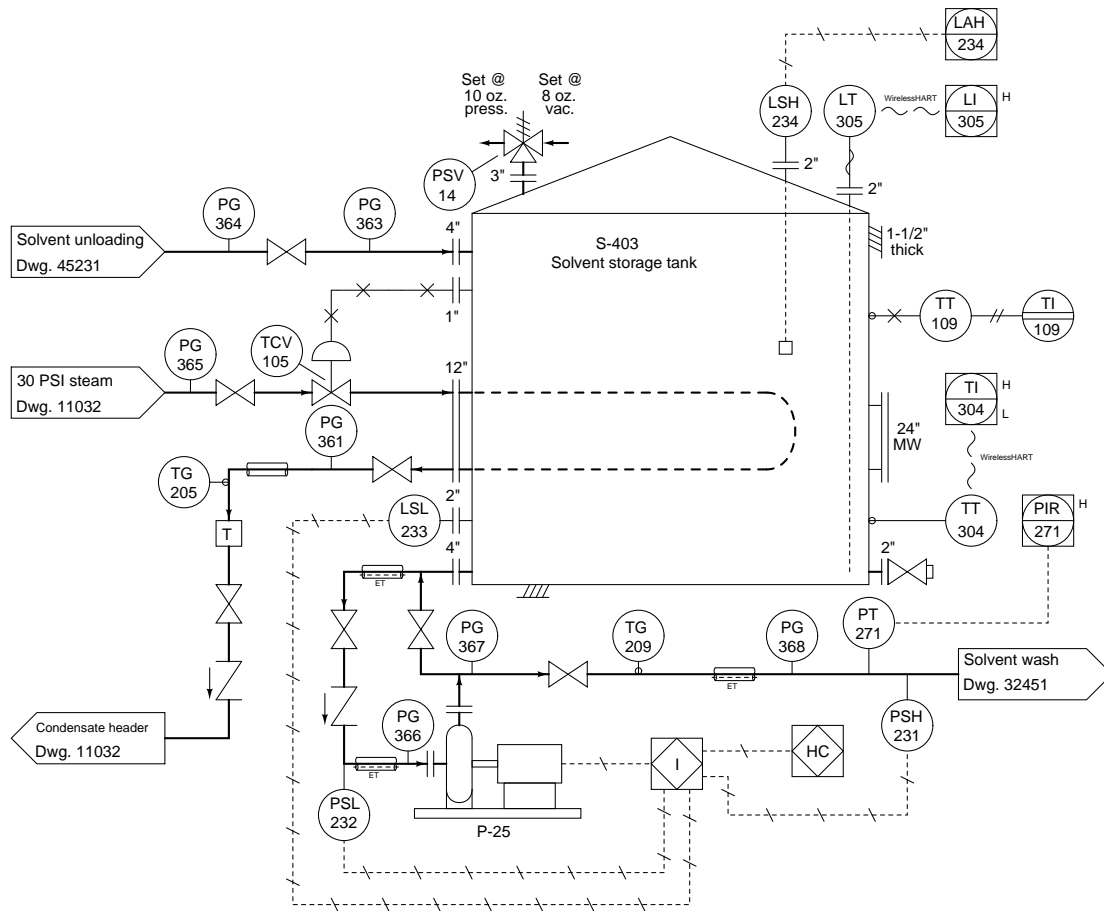
Oily water sump



file i0005r

Question 6

Solvent storage tank

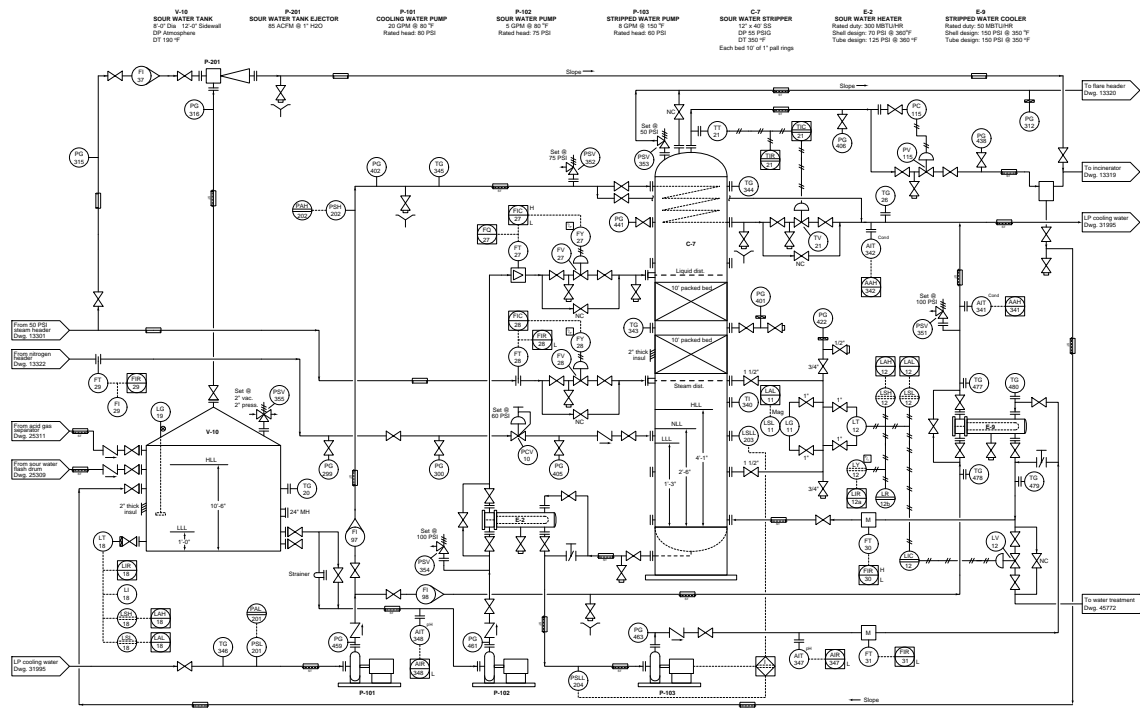


file i0006r



Question 7

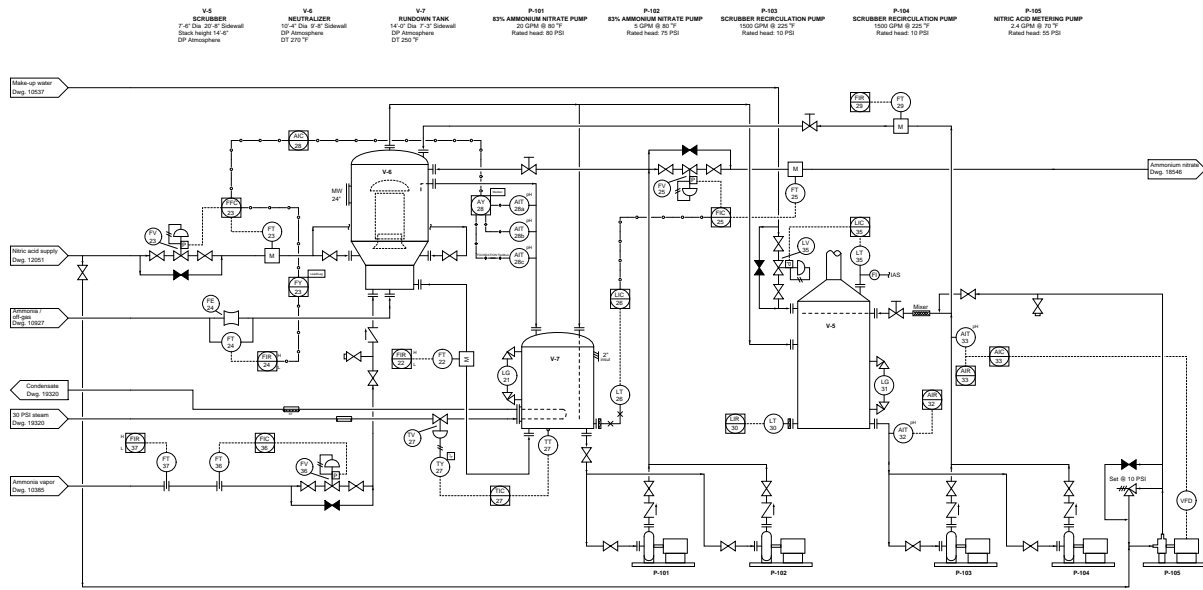
Sour water stripping process



file i0007r

Question 8

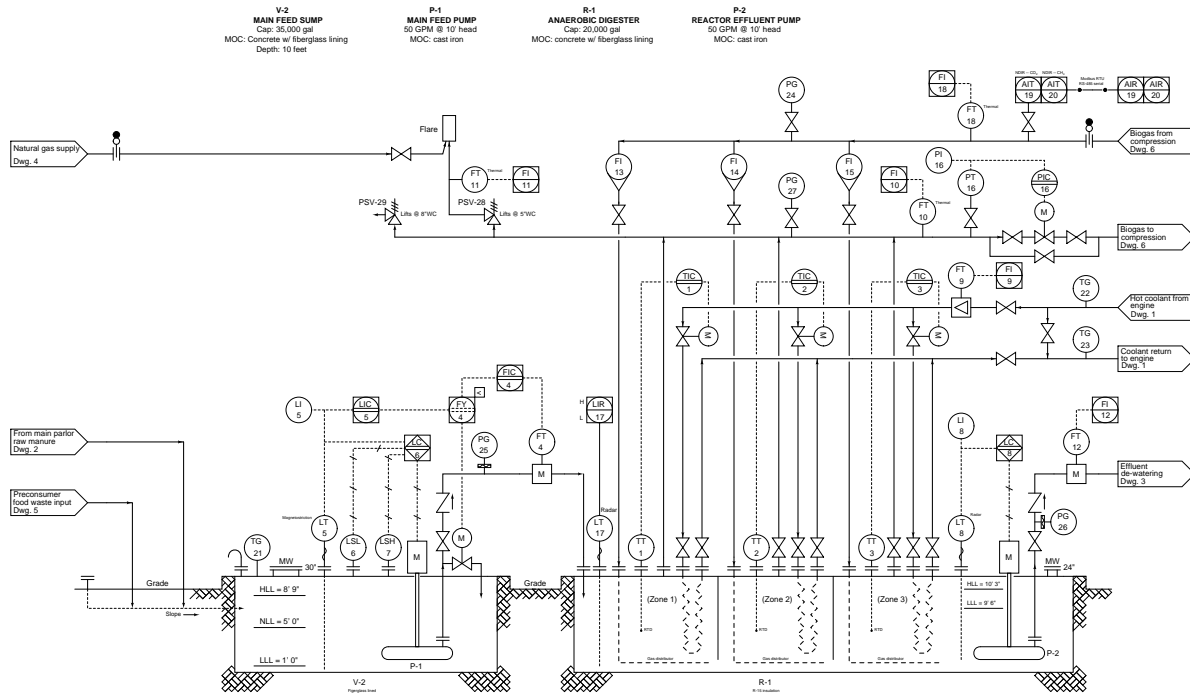
Ammonium nitrate fertilizer production unit



file i0008r

Question 9

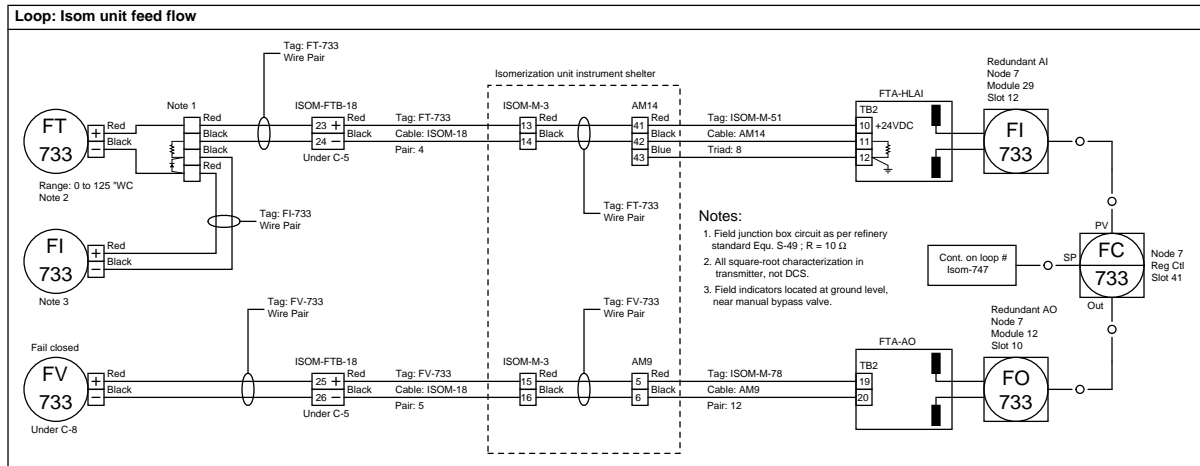
Anaerobic digester controls



file i0015r

Question 10

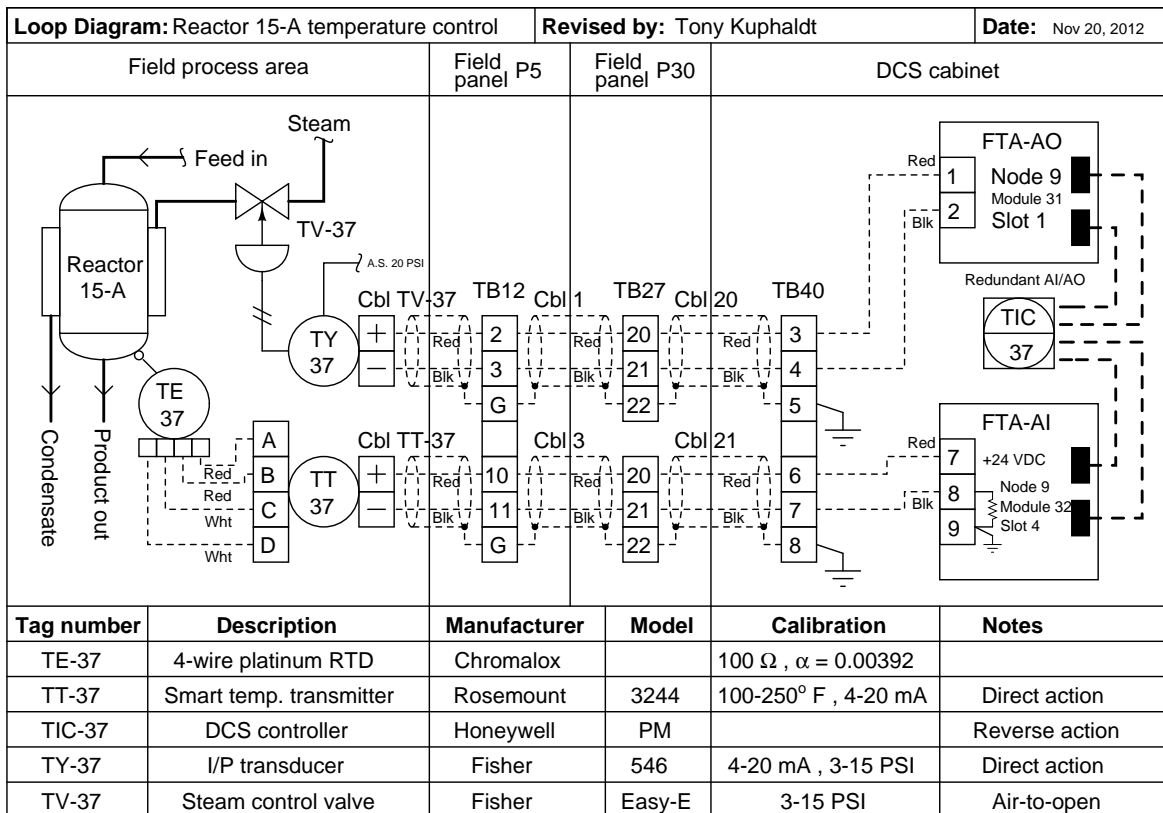
Isomerization feed flow control loop



file i0009r

Question 11

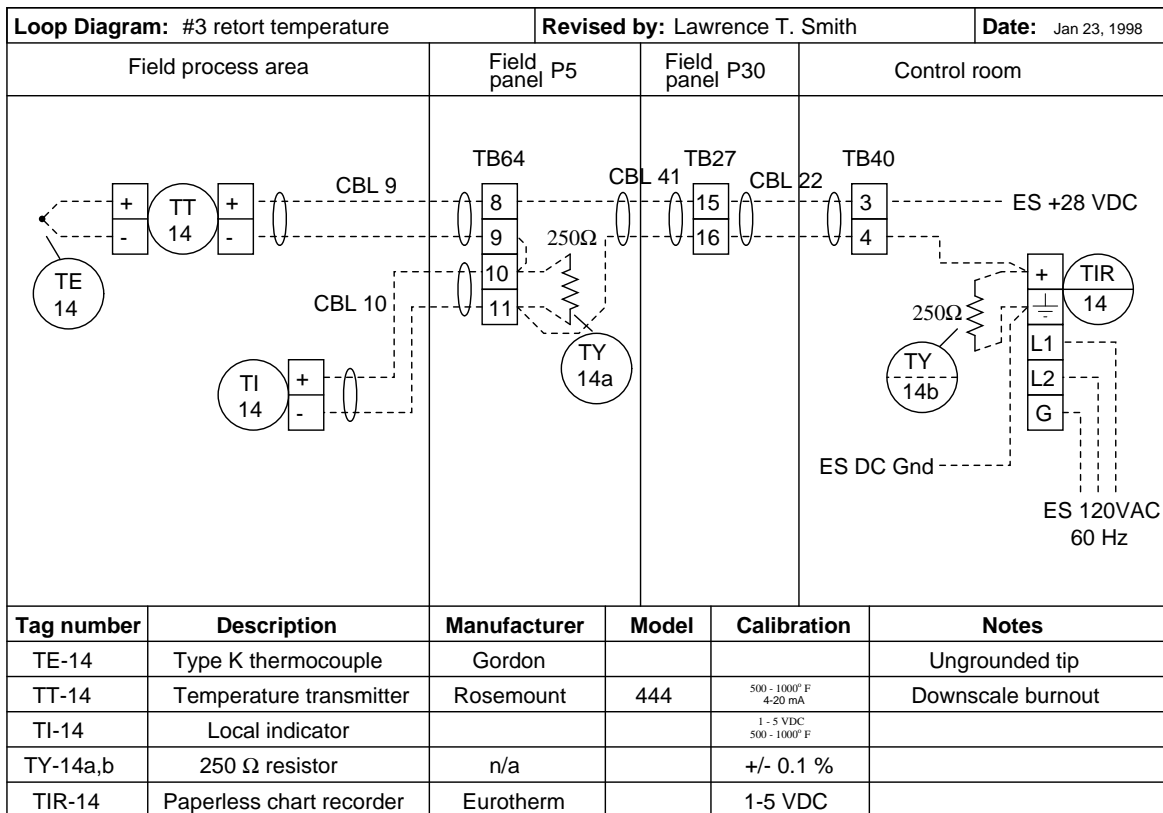
Reactor temperature control



[file i0010r](#)

Question 12

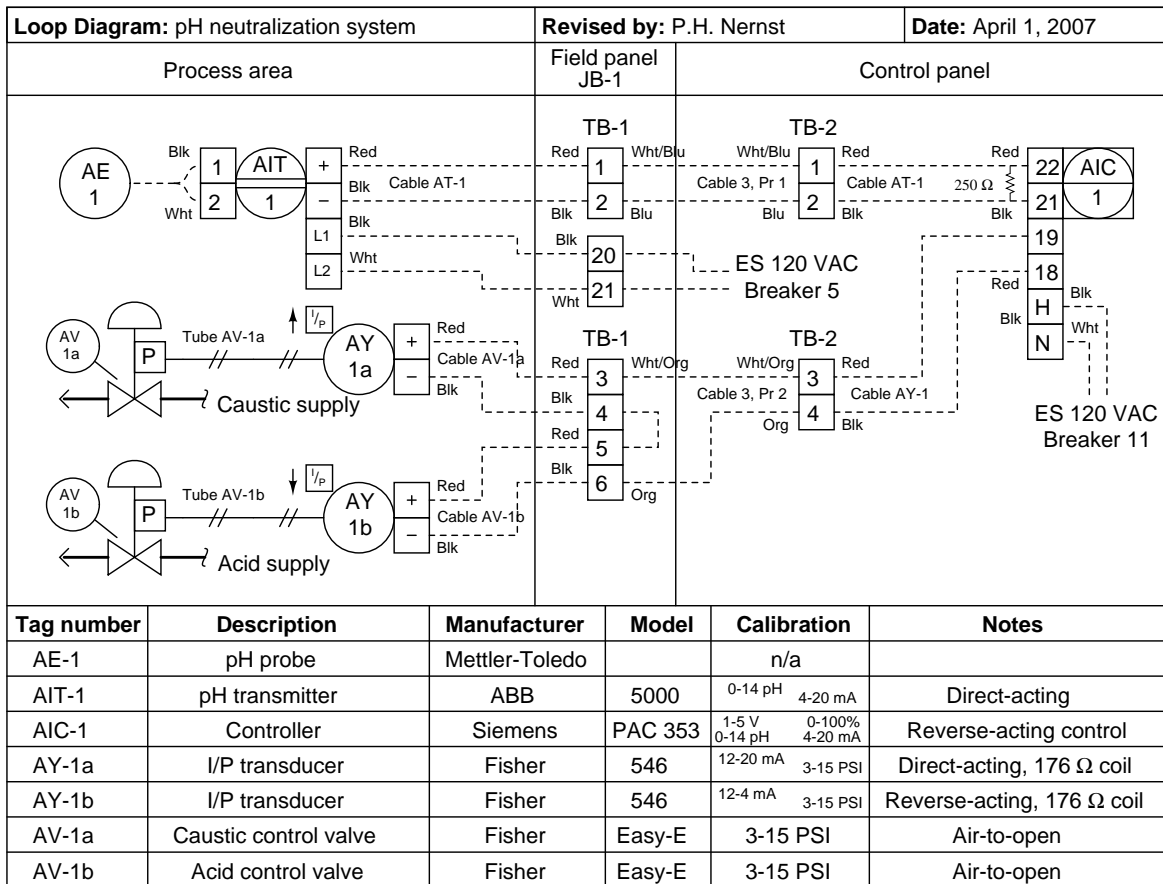
Retort temperature monitoring



file i0011r

Question 13

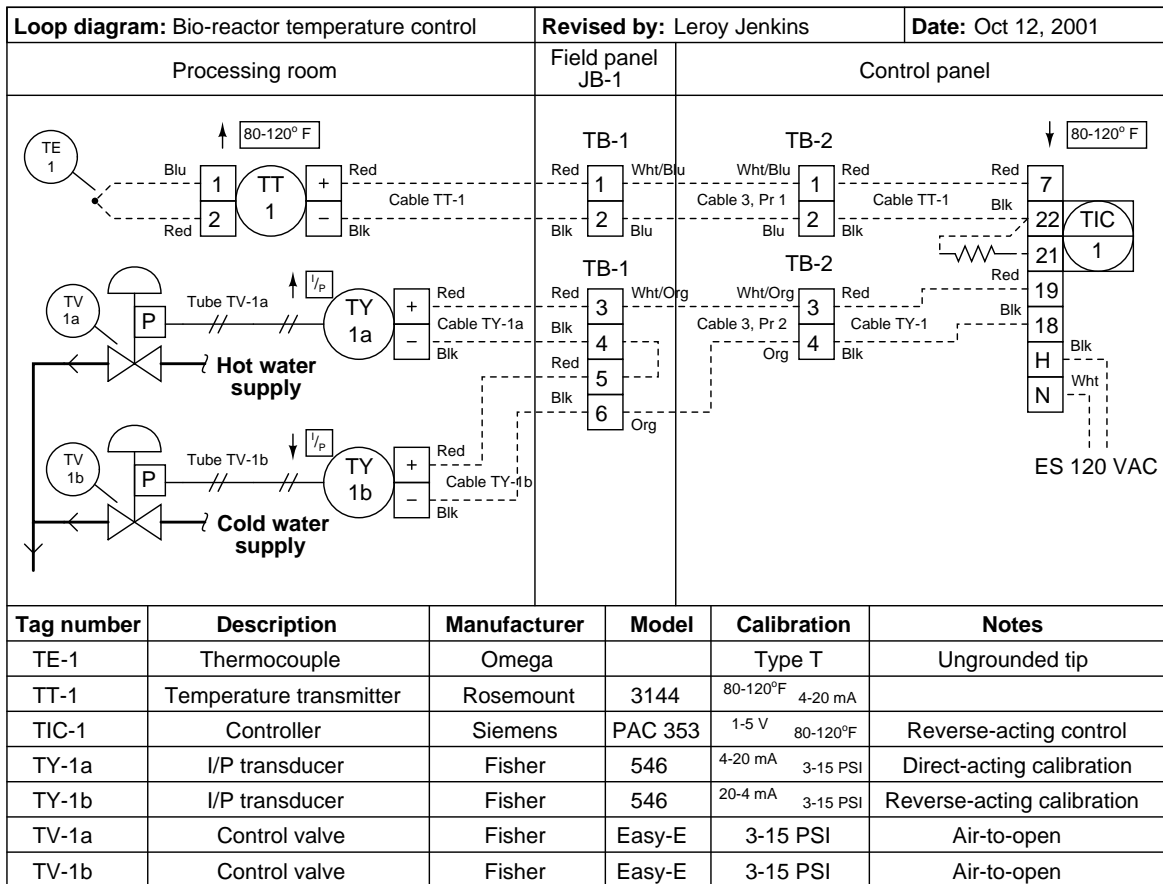
pH neutralization system with split-ranged control valves



[file i0012r](#)

Question 14

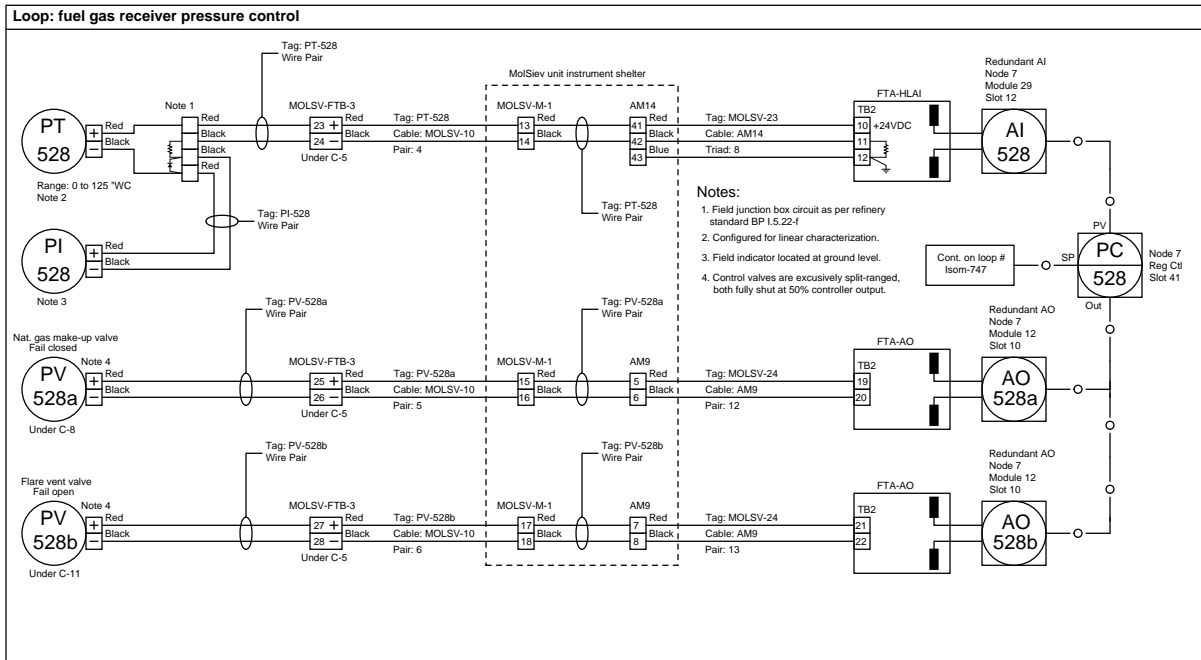
Temperature control system with split-ranged control valves



[file i0013r](#)

Question 15

Fuel gas receiver pressure control loop

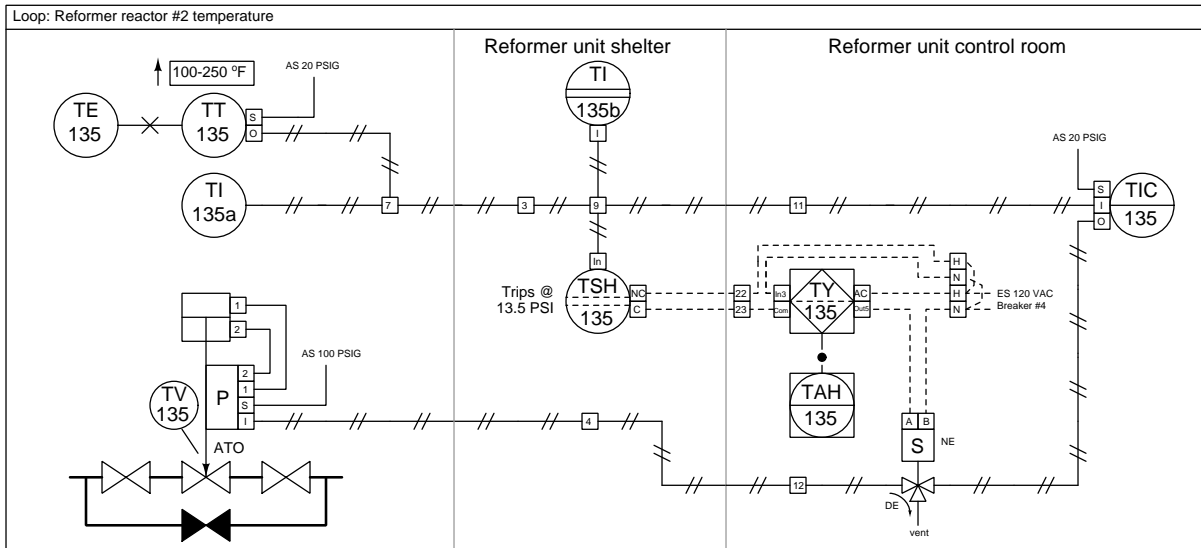


file i0014r



Question 16

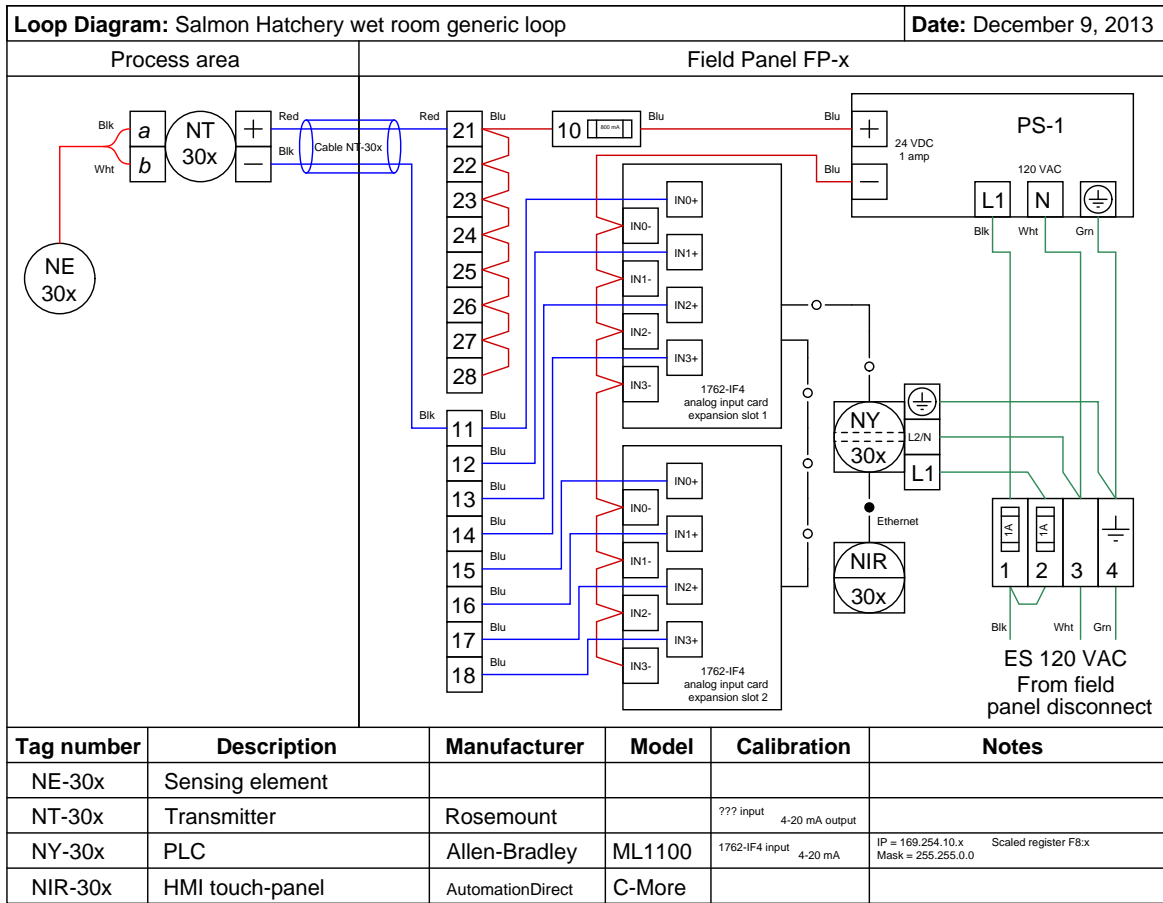
Reactor temperature control loop



file i0016r

Question 17

Generic loop diagram for Perry Center salmon hatchery wet lab field panels



[file i0017r](#)

## Answers

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Answer 1

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Answer 2

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Answer 3

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Answer 4

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Answer 5

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Answer 6

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Answer 7

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Answer 8

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Answer 9

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Answer 10

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Answer 11

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Answer 12

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Answer 13

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Answer 14

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Answer 15

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Answer 16

AT-310 loop diagram for Perry Center salmon hatchery wet lab pH measurement

