

Shell and Tube Experiment

ver 6.04

Startup:

1. Ensure that there is water in the tank; if there isn't any water open the valve and begin to fill it up.
2. Once you've reached an appropriate water level, turn on the mixer.
3. Make sure that these two valves connected to the tank are open.



4. Do NOT turn the steam on yet.
5. Go over to a Bailey console and access the shell and tube group.
(Click [here](#) to learn how to run Bailey)
6. Highlight the pump (press "g") and turn it on.
7. There are three control panels on the upper half of the screen. The

water flow (left) and the water level (middle) should both be in auto mode and the outlet temperature (right) should be in manual.

8. Set the outlet temperature set point.
9. You can now go over to the steam valve and turn it on.



Shut Down:

1. Turn off the steam and let the equipment run for a few minutes to cool down.
2. Turn off both the pump and the inlet water.

More information:

Characteristics of the Shell & Tube Heat Exchanger

Manufacturer	
Model Number	
Tube Side	Water
Shell Side	Steam
# of passes	One with 1.5" baffles
# of tubes	56
Tube Material	316 Stainless steel
Tube Diameter	1/4" 24 gauge