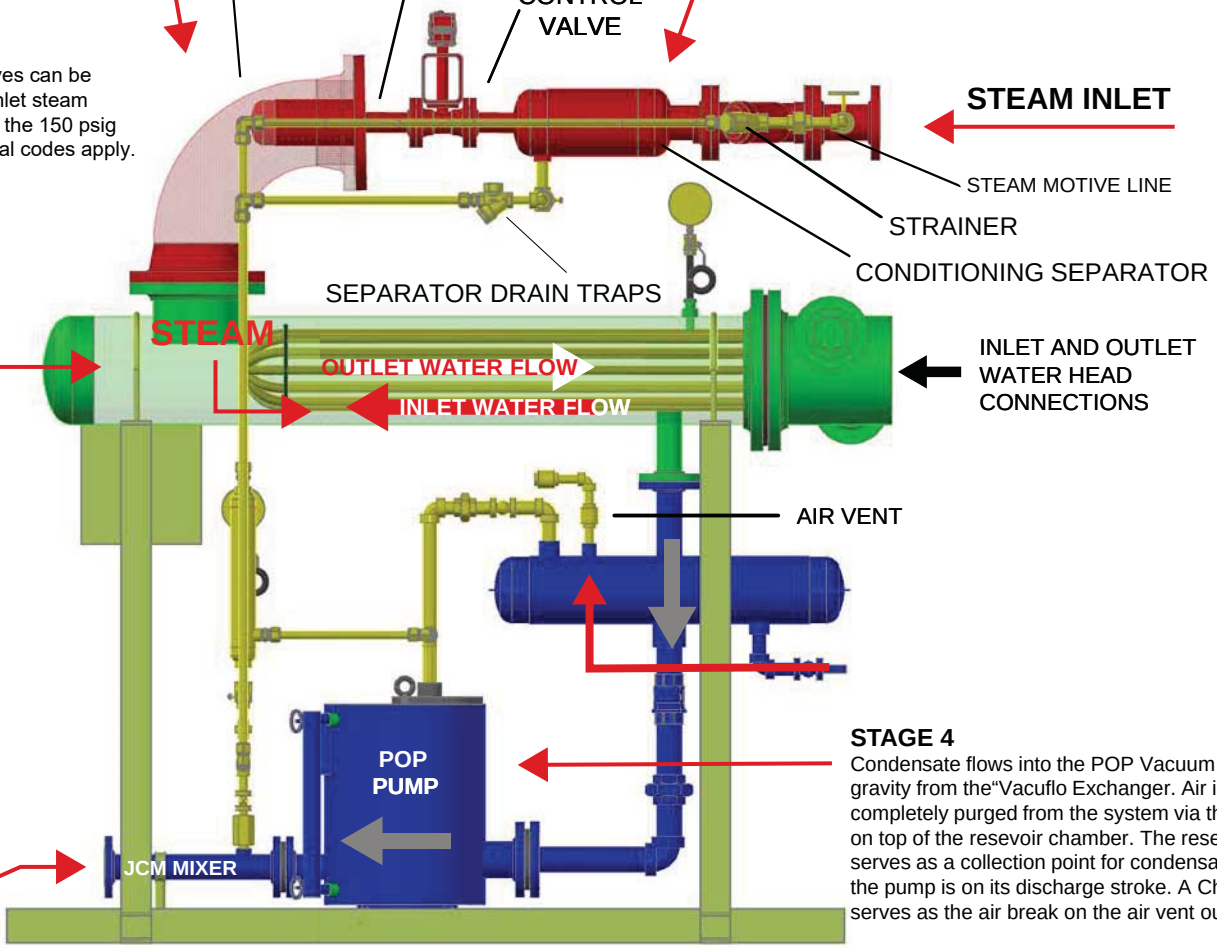
Vacuflo Diagram

HOW VACUFLO WORKS

STAGE 2
The conditioned steam flows through the BVV Steam Control Valve into the inlet diffuser nozzle.
The BVV Value controls the steam pressure into the shell using a unique vacuum pilot, and the outlet water (fluid) with the electronic pilot.
The steam flows through the small orifices in the diffuser reducing noise and velocity into the inlet expansion chamber where the vacuum steam state begins. The BVV Control Valve system senses the pressure in the expansion nozzle and precisely modulates the steam flow to meet temperature demand and vacuum pressure.

STAGE 1
Steam enters the steam conditioning section where it passes through the inlet strainer and into the steam conditioning separator where all entrained condensate and moisture are removed and condensate is discharged to the return system.

Note:
Steam Safety valves can be added when the inlet steam pressure exceeds the 150 psig rating or when local codes apply.



STAGE 3
Vacuum Steam enters the rear non impingement nozzle of the "Vacuflo" Exchanger where it is condensed through the baffles in the inner counter flow tube bundle.

STAGE 4
Condensate flows into the POP Vacuum Pump by gravity from the"Vacuflo Exchanger. Air is completely purged from the system via the vent on top of the resevoir chamber. The reservoir serves as a collection point for condensate when the pump is on its discharge stroke. A Check valve serves as the air break on the air vent outlet.

STAGE 5
All condensate from the higher pressure traps is piped to the JCM Condensate Mixer where it is condensed below flash before discharge eliminating thermal hammer.

NOTE: JCM Mixers eliminate flash steam hammer in the condensate system.