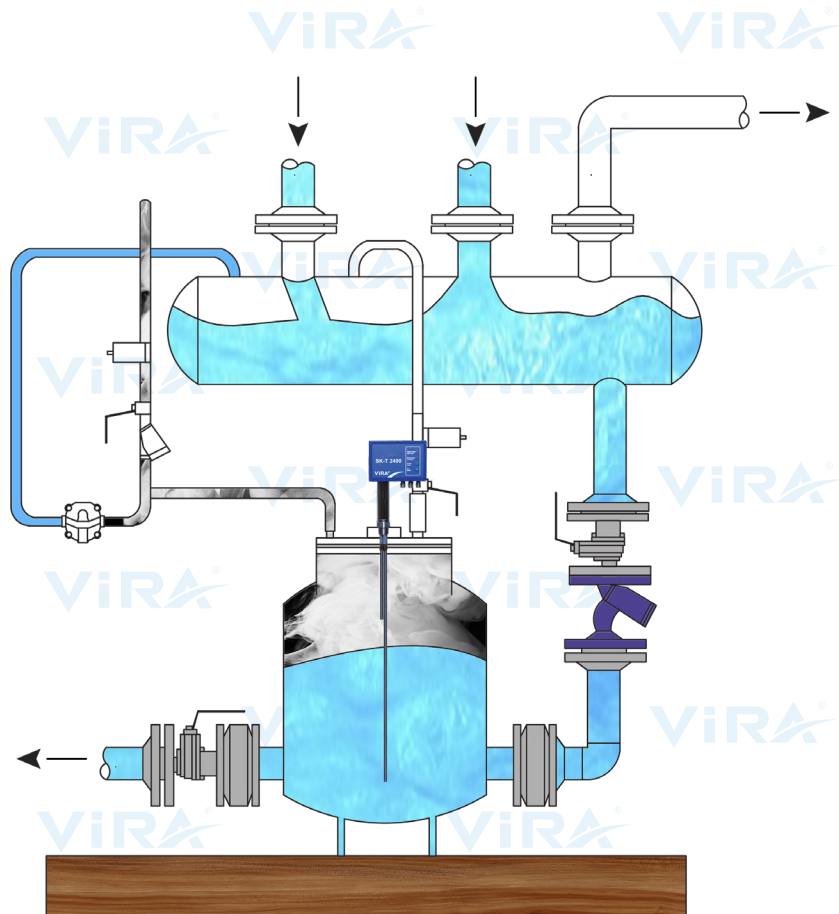


CONDENSATE PUMP

The condensate needs to be recovered considering the energy it contains. Increasing the boiler feed water temperature is essential. Every 6 ° C increase in feedwater can save approximately 1% energy. Besides, at high condensate temperatures, flash steam generated on the suction side of the electric pumps will cause cavitation. Condensate pumps should be used where electrical pumps are not suitable for returning the condensate. Vira float free condensate pumps, pump high-temperature liquids-condensate by using steam or compressed air.

Advantages;

- Increasing the feed water temperature every 6 ° C can save approximately 1% energy.
- Water treatment chemicals are saved.
- Water is saved with return.
- Fuel and water savings are achieved by reducing blowdowns
- Energy saving is provided when used instead of an electric pump.
- The condensate pump will not have these malfunctions as electric pumps will often deteriorate the couplings due to high temperature.
- The cavitation in electrical pumps and related failures are prevented.
- There is no need to increase the pipe diameter as it is in the electrical pumps, which brings an additional cost for the condensate to be pumped properly
- In some cases, no additional circulation pump (pressurization pump) is required on the suction side to overcome the counter-pressure.



As the temperature control valve is used in the heat exchanger systems, "condensate lock" or "stall" can be seen when the steam pressure after the control valve is equal to or less than the counter-pressure after the trap. In systems with condensate lock, a Vira float free condensate pump must be used to deliver condensate to the desired tank or back to the condensate line.

To size Vira float free condensate pump the following informations must be known;

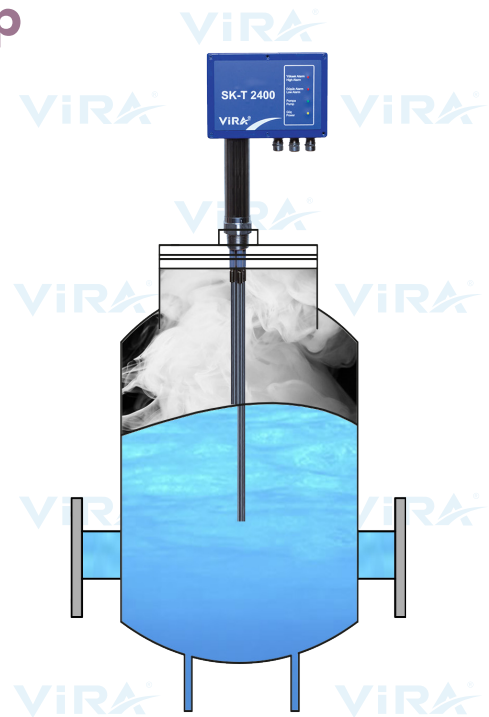
- The maximum condensate flowrate reaching the collector.
- The motive pressure of steam or air available to drive the pump.
- The selection of steam or air will depend on the application and site circumstances.
- The filling head available between the receiver and pump.
- The total delivery head of the condensate system.

Vira Float Free Condensate Pump

Vira float free condensate pumps are designed to remove and recover condensate under all operating conditions and provide opportunity to solve all condensate handling problems.

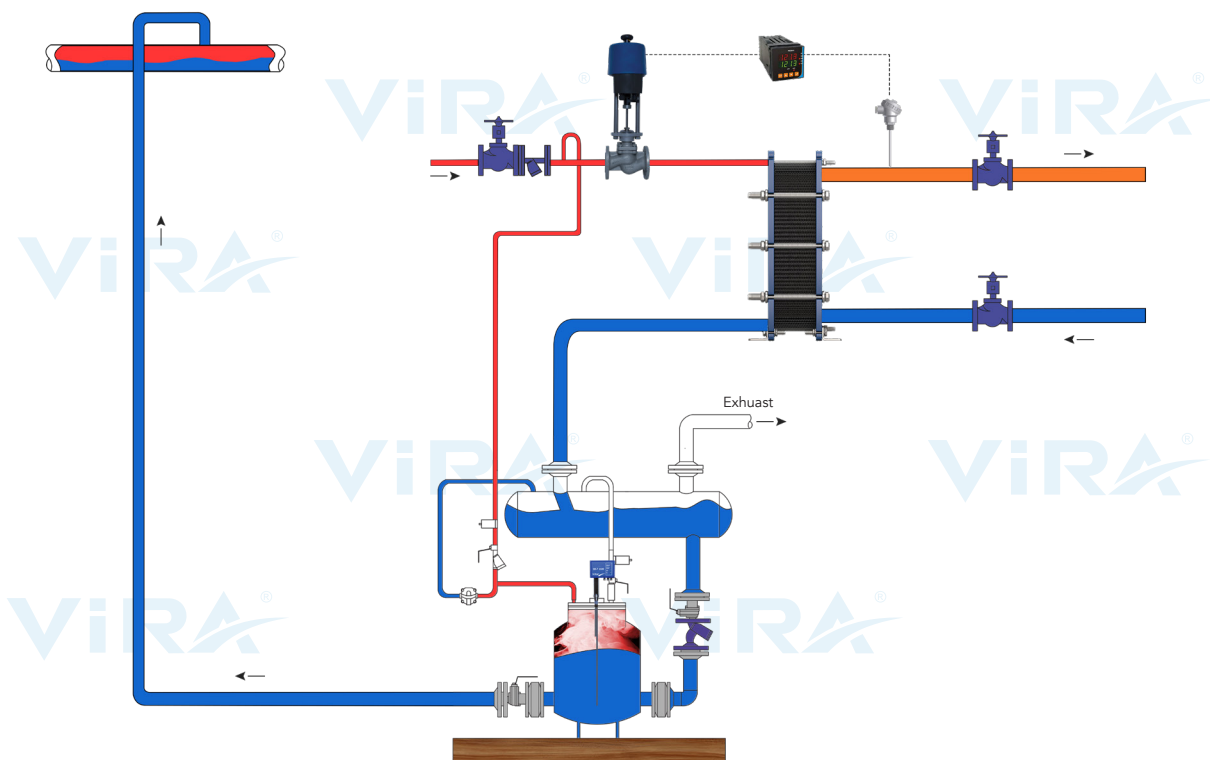
Vira condensate pumps are steam pressure driven pumps that return condensate back to the boiler room; normally using steam pressure as the motive force. Vira float free condensate pumps can be supplied as individual pump units – which include a pump tank and compact level control unit - or as a complete packaged system which also includes the steam valves, steam collector, steam traps, piping, solenoid valves , and ball valves.

There are no moving parts in Vira float free condensate pumps. This helps to reduce plant maintenance problems. It provides no leakage, no cavitation, no spare part need and provides easy installation. The pump can also be monitored, and get alarm remotely by the Compact Level control unit.



Model	Steam Inlet	Condensate Outlet	Body Material	Collector Inlet	Pressure Class	Collector Vent	Pump Exhaust
KP-14	DN 15	DN 25	ST 37 Carbon Steel	DN 50 x 2	PN 16	DN 50	DN 15
KP-16	DN 15	DN 40		DN 50 x 2		DN 50	DN 15
KP-18	DN 15	DN 50		DN 80 x 2		DN 80	DN 15
KP-20	DN 15	DN 80		DN 80 x 2		DN 80	DN 15

Note: It can be customized according to different system needs.



Condensate Recovery System