Automatic Pump

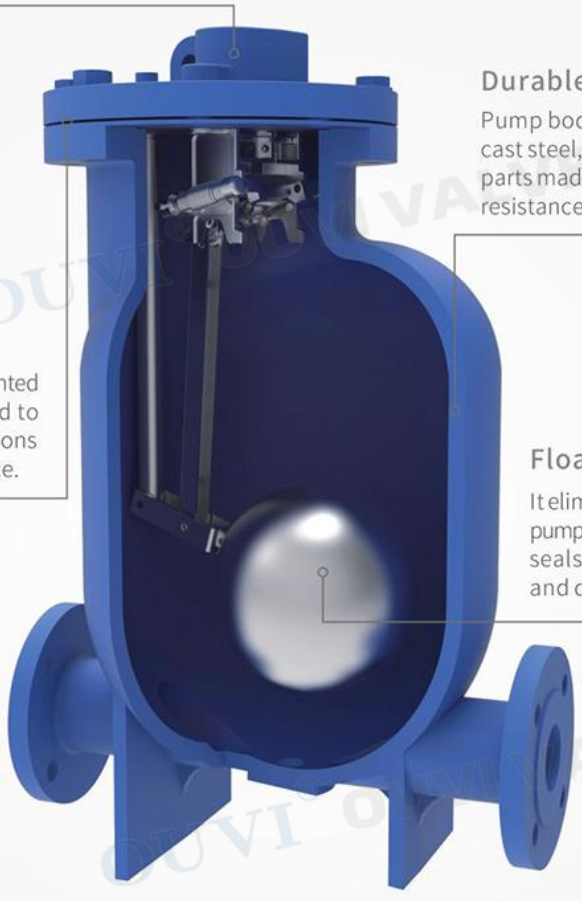
It is powered by steam, compressed air, or other gases, it transports condensate from low-pressure to high-pressure zones or from vacuum to atmospheric pressure.

- Removal and recovery of condensate improve production efficiency, save energy, reduce water treatment costs, and optimize steam usage.
- It prevents water hammer, protects equipment from damage, and increases reliability and safety.
- It recovers condensate up to 198°C without cavitation.

The automatic pump features automatic control, cavitation-free operation, easy maintenance, no electricity requirements, water-hammer resistance, high discharge capacity, explosion-proof design, and silent operation. The lift is determined by the driving steam (or gas) pressure, offering unique advantages unmatched by other pumps. Widely used for condensate in steam systems and for transferring low-viscosity, non-corrosive liquids.

No electricity needed (Suitable for explosion-proof areas)

It is powered by steam or compressed air, with easy on-site pipe connections; No power supply required, suitable for hazardous and damp environments.



Durable and Reliable

Pump body options include ductile iron, cast steel, or stainless steel, with internal parts made of stainless steel for corrosion resistance.

Easy replacement and maintenance

All internal components are mounted on the valve cover, so no need to disassemble pipeline connections for replacement or maintenance.

Float-Operated Mechanism

It eliminates inherent issues of electric pumps, such as cavitation and mechanical seals; It reduces maintenance costs and downtime

High Discharge Capacity

Automatic control, with output adjusted based on input volume. When the condensate volume increases, the operating frequency accelerates; when it decreases, the frequency reduces; if there's no condensate, it stops working.

MFT14 automatic pump offers flange or threaded connections, with internal valve components and float mechanism made entirely of stainless steel. A stainless steel disc check valve is installed at the condensate inlet and outlet. The power medium (steam or gas) inlet and exhaust ports are threaded.

When combined with a float-type steam trap, it can effectively remove condensate from temperature-controlled heat exchangers under any operating condition, including vacuum.

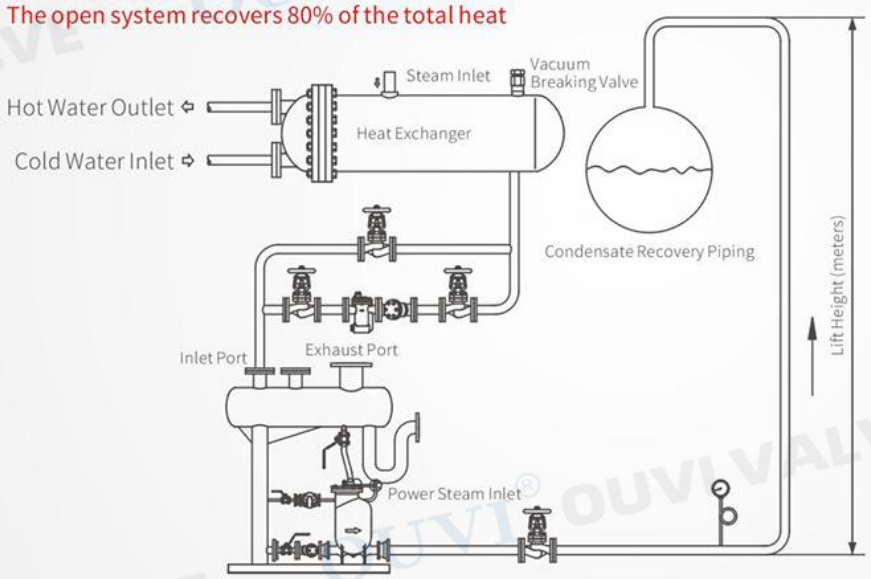
Condensate discharge and recovery

The mechanical steam condensate recovery unit is used in situations where condensate needs to be transferred from a low to a high position without electrical power. Its primary application is to transport condensate from process systems or condensate collection areas to the condensate recovery system.

Open Condensate Recovery System

In an open system, condensate discharged from traps in steam-using equipment flows into an open collection tank. After separating as flash steam and condensate in the tank, the condensate is pressurized and transferred through a condensate recovery pump to the condensate recovery piping system.

The open system recovers 80% of the total heat



Advantages:

- It allows condensate recovery from multiple devices
- It can use air or steam as the power source
- The system is relatively simple

Defects:

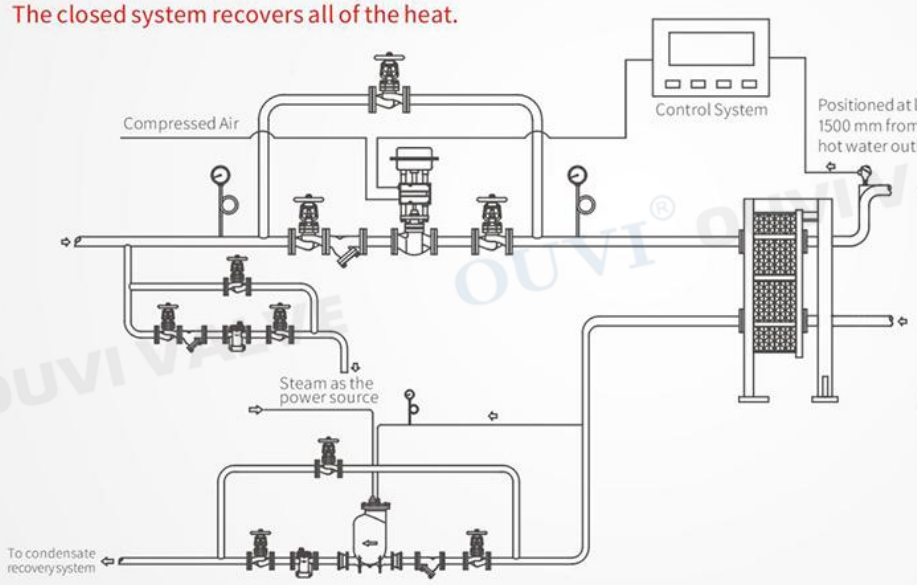
- It loses valuable flash steam
- It requires a vent line to the atmosphere

Closed Condensate Recovery System

In a closed system, the condensate recovery pump is installed directly after the steam-using equipment without a trap.

*Depending on usage conditions, a trap may be installed after the condensate recovery pump, or an APT-type trap pump may be used.

The closed system recovers all of the heat.



Advantages:

- No flash steam wastage; allows recovery of high-temperature condensate (≤198°C)
- No need to install costly long vent pipes

Defects:

- System is relatively complex
- Air cannot be used as the power source