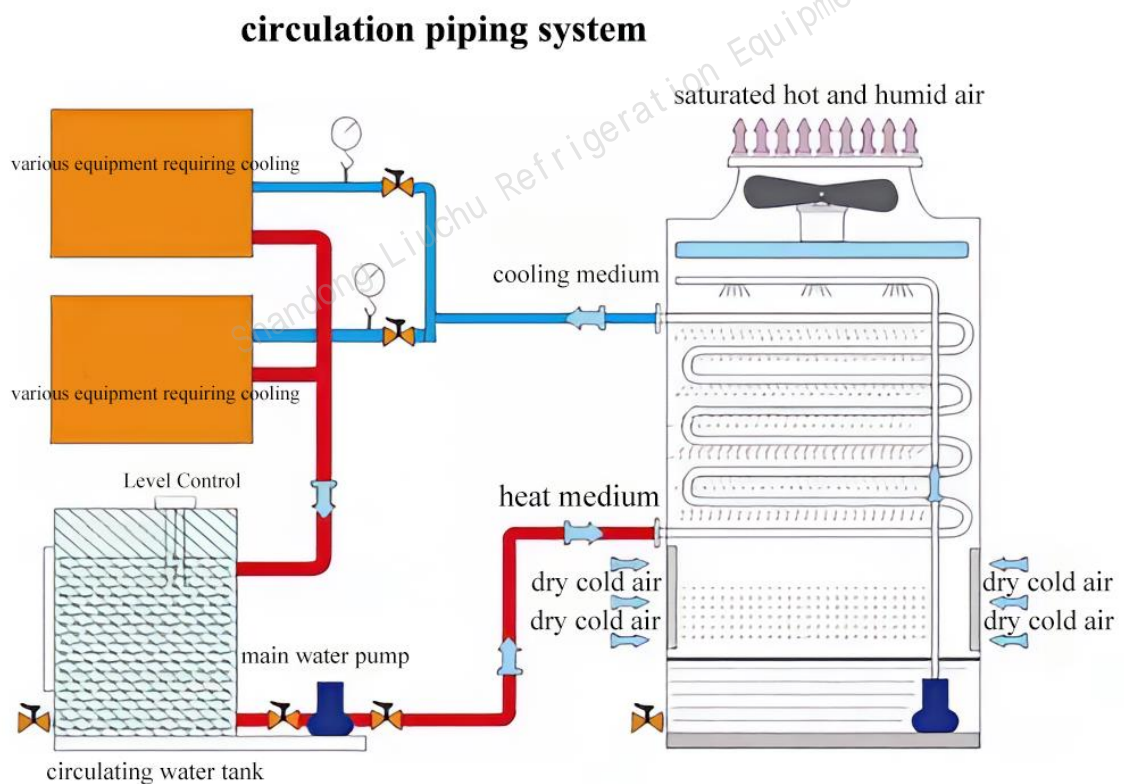
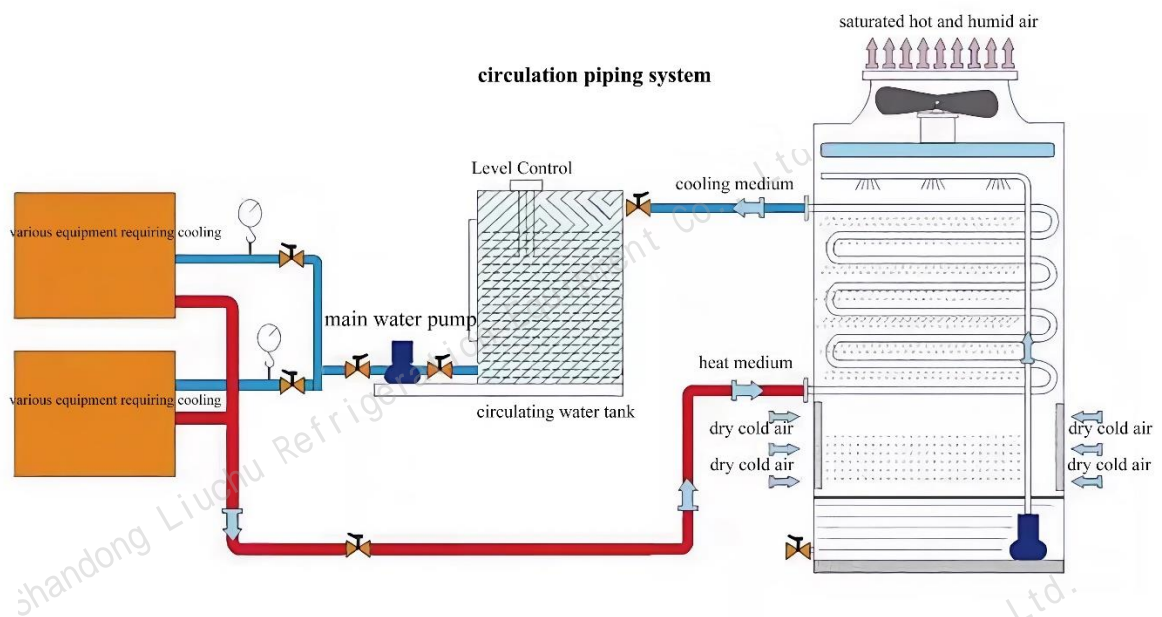


**Precautions for test machine:**

1. The power incoming wires of the electric control box are 3 live wires and 1 neutral wire.
2. Connect 3 live wires and 1 ground wire to the fan. Do not connect the 2 white wires to ensure that the fan blows air upward.
3. After wiring the water pumps, make sure that all water pumps are running forward (the flow rate is small or the water pumps have abnormal noise when running reversely)
4. When selecting a backup pump, be sure to close the butterfly valve of the backup pump when turning on the main pump to prevent water from flowing back.
5. When connecting the pipeline, it is best to add a one-way check valve to the water outlet of the pump (after adding the check valve, the butterfly valves at the front of the main pump and backup pump can be normally open)
6. The temperature control wiring section of the electric control box is connected to the thermocouple at the cooling tower outlet.

The following two connection methods are for reference:



## **Daily maintenance:**

### **1. Spray system maintenance**

1. If the spray water appears as follows: yellow, thick, sticky, and feels greasy when squeezed by hand, it means that the quality of the spray water is too poor. Please replace it with new spray water in time.
2. If there is no water coming out of the sprinkler system, you need to check whether the pipeline is blocked and remove impurities in time.
3. Check whether the water curtain water spray inside the closed cooling tower is even and sufficient, and whether it is consistent from front to back and left to right.
4. Check whether there are any blockages when the spray water enters the equipment. Common ones are leaves, silk threads, plastic bags, silt, etc.
5. Clean the dirt and residue in the water collection tank and clean it regularly every week.
6. Check the water supply float valve of the closed cooling tower and replace it if damaged.

### **2. Appearance inspection**

1. Check whether all fasteners of the closed cooling tower are loose, and tighten any loose parts in time.
2. Is there any leakage, leakage or water leakage around?
3. Is there any corrosion or deformation around?
4. Whether there are branches and debris blocking the fan blades.
5. Whether the indicated value of the water pressure gauge is normal, the fluctuation size, and whether there is air accumulation.

### **3. Electrical inspection**

1. Check the sealing condition of the control cabinet and keep the door closed at all times to prevent dust, metal, and foreign objects from entering and causing short circuit or electric shock accidents.
2. Check the current of each motor for any abnormalities.
3. Check whether the heat dissipation of the motor housing and the fan are normal.

#### **4. Maintenance of condenser**

1. When subzero weather occurs, the circulating water should be replaced with antifreeze in time; in high temperature weather, it is best to replace it with pure water or desalted water.
2. To prevent scaling on the outside of the condenser, pay attention to the replacement or descaling of the spray water, and descale the condenser in time.

#### **Descaling method:**

1. Chemical cleaning: select appropriate chemicals according to the materials of the condenser, shell, and internal frame, and clean and descale them according to their usage methods.
2. Disassemble it and handle it thoroughly with physical methods. Common methods are to dry it and then knock and remove metal objects. However, the middle part of the condenser cannot be cleaned.
3. If it still cannot be completely removed and the heat exchange effect cannot meet the process requirements, the condenser can only be replaced.