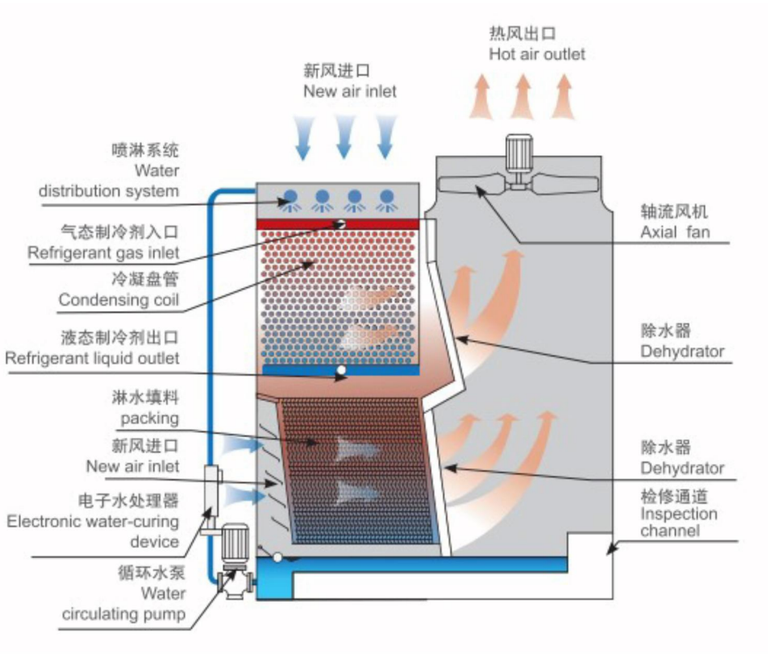
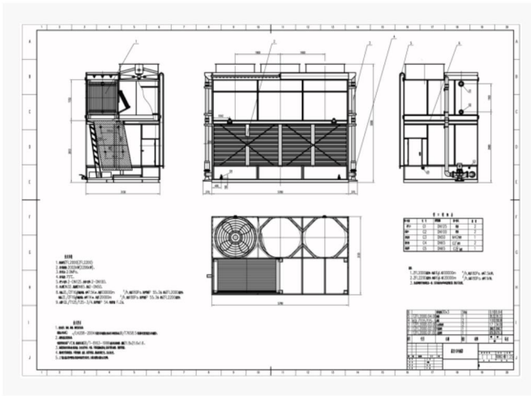
SZL Series Evaporative Condenser

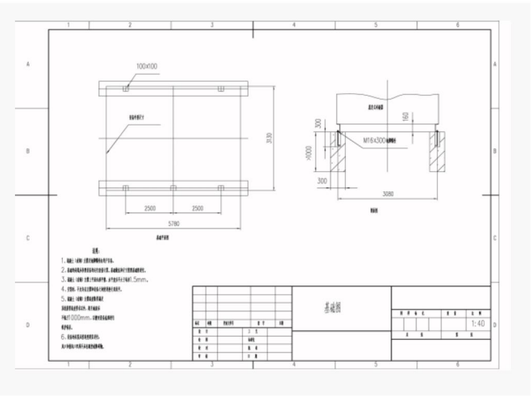
SZL series evaporative condenser uses heat exchange tube bundles and PVC fins for compound heat exchange, which increases the spray water cooling process, suitable for operating in clean air environment, and is widely used in food freezing and refrigeration, central air conditioning and other systems.

SZL series evaporative condenser belongs to induced draft cross-flow condenser. During working operation, the dry cool air inlet through wide louvers on one side of the condenser, passes through the spray water, cooling coil and the filler, becomes hot and humid air, and is finally discharged into atmosphere by the fan on the top. During this process, a part of heat from the fluids inside the closed loop is transferred efficiently, and removed continuously. The cooling medium is not in contact with the outside during the cooling process, ensuring the cleanliness of the cooling medium and greatly improving the service life of the cooled host device.

Working Process



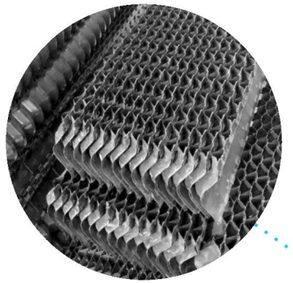




Technical Data

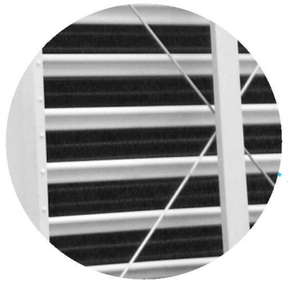
SZL Series Evaporative Condenser									
Item	Model No.	Heat Output KW	Fan		Spray Pump		Weight		Height mm
			Power KW	Air Volume m^3/h	Power KW	Flow m^3/h	Net KG	Operation KG	
1	SZL420	425	4	55000	1.1	50	2693	4132	4364
2	SZL460	460	5	60000	1.1	50	2703	4142	4364
3	SZL510	517	5.5	60000	1.1	50	2960	4405	4614
4	SZL570	575	7.5	75000	1.1	50	2970	4415	4614
5	SZL660	667	4.0×2	55000×2	2.2	100	3707	5889	4364
6	SZL730	736	5.5×2	60000×2	2.2	100	3727	5909	4364
7	SZL850	851	5.5×2	60000×2	2.2	100	4093	6283	4614
8	SZL950	954	7.5×2	65000×2	2.2	100	4113	6303	4614
9	SZL1170	1173	5.5×2	78000×2	2.2×2	100×2	5698	9184	5088
10	SZL1260	1265	7.5×2	90000×2	2.2×2	100×2	5738	9224	5088
11	SZL1420	1426	5.5×2	78000×2	2.2×2	100×2	6237	9739	5338
12	SZL1520	1529	7.5×2	90000×2	2.2×2	100×2	6277	9779	5338
13	SZL1600	1610	7.5×2	90000×2	2.2×2	100×2	6833	10351	5588
14	SZL1770	1771	5.5×3	90000×3	3×2	120×2	8597	14281	5088
15	SZL2000	2001	7.5×3	100000×3	3×2	120×2	9697	14341	5088
16	SZL2300	2300	7.5×3	100000×3	3×2	120×2	9620	15329	5338
17	SZL2500	2530	11×3	120000×3	3×2	120×2	9695	15404	5338
18	SZL2720	2725	7.5×3	100000×3	3×2	120×2	10354	16537	5338
19	SZL2870	2875	11×3	120000×3	3×2	120×2	10429	16612	5338
20	SZL3100	3105	11×3	120000×3	3×2	120×2	11481	17692	5588
21	SZL3450	3450	5.5×4	90000×4	4×2	120×2	13015	21152	5338
22	SZL3680	3680	7.5×4	100000×4	4×2	120×2	13095	21232	5338
23	SZL4140	4140	7.5×4	100000×4	4×2	120×2	14328	22502	5588
24	SZL4340	4347	11×4	120000×4	4×2	120×2	14423	22597	5588

Above data is for reference



Drift Eliminator

The use of high-quality PVC material, unique multi-empty and multi-curved structure, can effectively and evenly collect the moisture in the humid air, so that the flow rate of water is less than 0.001%, and it is anti-aging, light weight, easy to clean and maintain.



Air Intake

Steel shutters,
Electrostatic spray,
Anti-corrosion

Condensation Coil

The condensing coil is the key part of the unit. In order to improve the heat transfer coefficient inside and outside the tube, the condensing coil adopts elliptical high conductivity tube (standard product configuration) or circular internal and external thread high-efficiency heat exchange tube (patented product, optional configuration), and through the overall high-temperature hot-dip zinc at 487 ℃, to ensure the overall anti-corrosion ability. The design pressure of the coil is 2.0MPa. After three times of pressure test (2.5MPa) and the last 24 hours of pressure maintenance, the air tightness and strength of the coil are guaranteed. Each process pipeline is inclined at a certain angle along the flow direction, which facilitates the outflow of liquid refrigerant and ensures minimum flow resistance. The coil is fixed on the frame for easy maintenance.

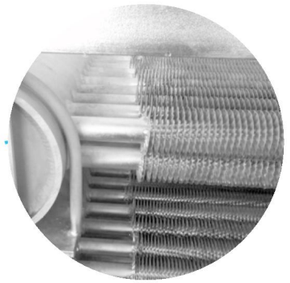
(According to customer needs, stainless steel corrugated tube can be used for condensing coil)

Circulating Water Pump

The circulating water pump adopts a large flow, low head, low power evaporative cooling special pump, and the shaft seal adopts a special mechanical seal ring produced by German Bergmann forced circulation without restriction of steering, without leakage and long life. And choose dust-proof, splash-proof motor, has the advantages of low power, large flow, low noise and so on.

Axial Fan

Axial flow fan adopts hollow aluminum alloy impeller (standard configuration) dedicated for evaporation and condensation, with forward-tilted structure design of the blade, low wind resistance, large air volume, low noise, good performance, high efficiency, and direct connection, reducing transmission Components, the motor uses a fully enclosed self-cooled motor, protection grade IP55, the shell is sprayed with static electricity, acid and alkali resistance, corrosion resistance.

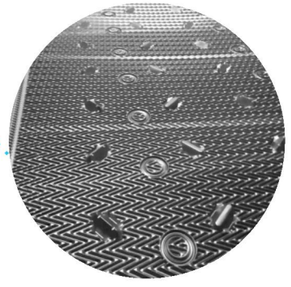


Dry Fin Cooling Coil

Copper tube structure with aluminum fins can improve cooling capacity and reduce or eliminate white mist

Water Distribution System

The nozzle has the characteristics of large flow rate, uniform spraying, no clogging, and easy cleaning, which makes the cooling water film wrap the outer wall of the coil to the maximum extent, eliminating the "dry point" of the water film on the condensation tube wall, increasing water vaporization and improving Heat transfer coefficient. The nozzle and the spray branch pipe are connected by a thread, which is convenient for disassembling and flushing the nozzle and the entire branch pipe



PVC Filling

PVC heat exchange layer adopts the overall cross-flow structure. Its unique design makes the water flow form a large area of flowing water film on the surface of the filler, and prolongs the residence time of water in the filler, so that the air can quickly remove the heat in the water and improve the cooling effect. At the same time, the filler has the advantages of high temperature resistance, good flame retardance, small wind resistance coefficient, anti-aging, anti-ultraviolet, and not easy to deform.