

REFRIGERATION AND AIR CONDITIONING INDUSTRY

Evaporative Condenser

The evaporative condensers is a energy-saving, water-saving, high-efficiency and eco-friendly condensation device which uses evaporation and condensation as the main mode of heat exchange. The vapor to be condensed is circulated through a condensing coil, which is continually wetted on the outside by a recirculating water system. Air is pulled over the coil, causing a small portion of the recirculating water to evaporate. The evaporation removes heat from the vapor in the coil, causing it to condense. It takes up a small area and is easy to operate and maintain.

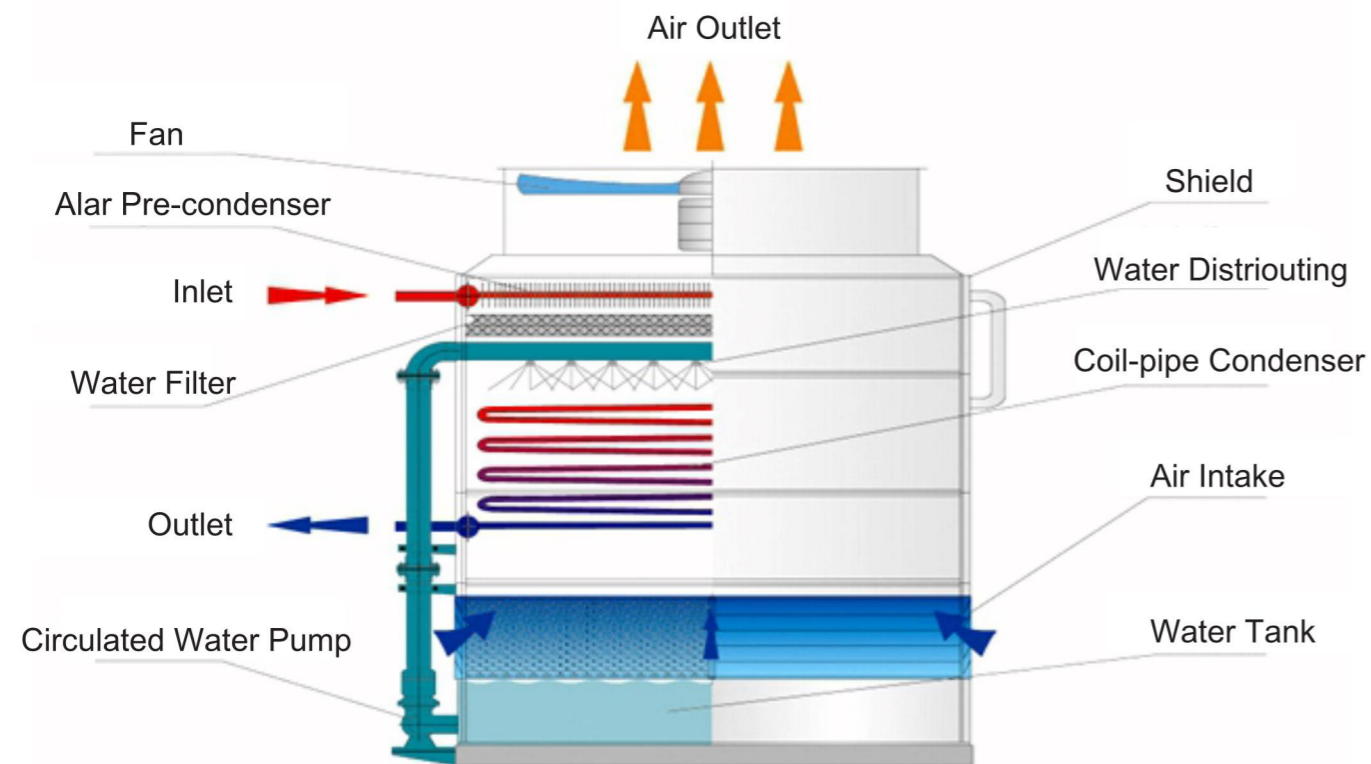


NZL Series Evaporative Condenser

NZL series evaporative condenser, the fresh air intakes from bottom air inlet, and will become saturated hot air mixed with spraying water as they flow in reverse direction. The heat will be exhausted out by fans, but the water will be collected to water basin for secondary spraying by its special designed drift eliminator. As no filling inside, NZL series combined flow evaporative condenser has much space to enlarge its coil unit heat rejection area, more compact structure and requires less footprint. It can be widely used in food freezing, refrigeration, coal chemical industry, petrochemical industry, etc.



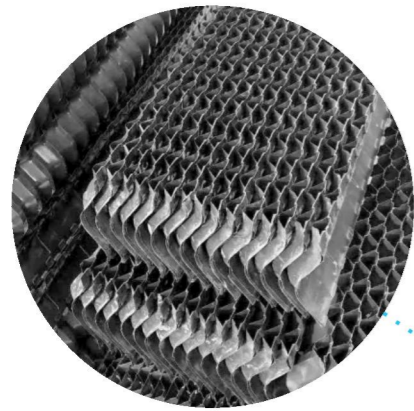
Working Process



Technical Data

NZL Series Evaporative Condenser											
Item	Model No.	Heat Output KW	Fan		Spray Pump		Weight		Height mm	Connection Size	
			Power KW	Air Volume m ³ /h	Power KW	Flow m ³ /h	Net KG	Operation KG		Inlet	Outlet
1	NZL100	118	1.1	15000	0.75	25	1460	2110	3506	DN80	DN80
2	NZL170	174	1.1	15000	0.75	25	1710	2460	3756	DN80	DN80
3	NZL230	232	1.5	18500	0.75	25	1920	2670	4006	DN80	DN80
4	NZL300	301	1.1×2	15000×2	1.1	35	2320	3850	3506	DN80	DN80
5	NZL400	405	1.1×2	15000×2	1.1	35	2669	4369	3756	DN80	DN80
6	NZL430	439	1.5×2	18500×2	1.1	35	2673	4373	3756	DN80	DN80
7	NZL460	463	2.2×2	26000×2	1.1	35	2783	4483	3936	DN80	DN80
8	NZL510	518	1.5×2	18500×2	2.2	60	3064	4764	4006	DN80	DN80
9	NZL570	577	2.2×2	26000×2	2.2	60	3125	4825	4086	DN80	DN80
10	NZL660	669	4.0	55000	2.2	60	4372	7695	3861	2-DN80	2-DN80
11	NZL690	690	5.5	78000	2.2	60	4426	7749	3861	2-DN80	2-DN80
12	NZL860	865	5.5	78000	2.2	60	5106	8451	4111	2-DN80	2-DN80
13	NZL920	923	5.5	90000	2.2	60	5124	8468	4111	2-DN80	2-DN80
14	NZL1000	1014	5.5	90000	3.0	87	5803	9169	4361	2-DN80	2-DN80
15	NZL1090	1098	7.5	100000	3.0	87	5823	9189	4361	2-DN80	2-DN80
16	NZL1050	1056	5.5	90000	3.0	87	6482	9869	4611	2-DN80	2-DN80
17	NZL1240	1244	7.5	100000	3.0	87	6502	9889	4611	2-DN80	2-DN80
18	NZL1270	1271	7.5	100000	4.0	120	6840	10840	4361	2-DN100	2-DN80
19	NZL1360	1360	11.0	125000	4.0	120	6864	10860	4486	2-DN100	2-DN80
20	NZL1380	1386	7.5	100000	4.0	120	7669	11669	4611	2-DN100	2-DN80
21	NZL1530	1530	11.0	125000	4.0	120	7692	11692	4736	2-DN100	2-DN80
22	NZL1600	1613	5.5×2	75000×2	5.5	135	8605	12505	4361	2-DN125	2-DN100
23	NZL1670	1673	7.5×2	85000×2	5.5	135	8655	12555	4361	2-DN125	2-DN100
24	NZL1840	1843	5.5×2	75000×2	5.5	135	9698	13598	4611	2-DN125	2-DN100
25	NZL1900	1902	7.5×2	85000×2	5.5	135	9748	13648	4611	2-DN125	2-DN100
26	NZL1950	1958	5.5×2	78000×2	7.5	172	10581	15681	4361	3-DN100	3-DN80
27	NZL2070	2074	7.5×2	90000×2	7.5	172	10631	15731	4361	3-DN100	3-DN80
28	NZL2190	2190	5.5×2	78000×2	7.5	172	11832	16932	4351	3-DN100	3-DN80
29	NZL2300	2301	7.5×2	90000×2	7.5	172	11882	16982	4651	3-DN100	3-DN80
30	NZL2470	2475	4.0×4	55000×4	4.0×2	120×2	12451	19152	4381	3-DN125	3-DN100
31	NZL2640	2646	5.5×4	75000×4	4.0×2	120×2	12522	19222	4381	3-DN125	3-DN100
32	NZL2850	2855	4.0×4	55000×4	4.0×2	120×2	13921	20621	4631	3-DN125	3-DN100
33	NZL2990	2995	5.5×4	75000×4	4.0×2	120×2	14100	20800	4631	3-DN125	3-DN100
34	NZL3200	3224	5.5×3	90000×3	5.5×2	135×2	16559	25431	4412	5-DN100	5-DN80
35	NZL3400	3409	7.5×3	100000×3	5.5×2	135×2	16634	25506	4412	5-DN100	5-DN80
36	NZL3560	3568	5.5×3	90000×3	5.5×2	135×2	19468	27390	4662	5-DN100	5-DN80
37	NZL3790	3798	7.5×3	100000×3	5.5×2	135×2	18543	27465	4662	5-DN100	5-DN80
38	NZL3900	3915	5.5×4	78000×4	5.5×2	135×2	19230	30178	4452	6-DN100	6-DN80
39	NZL4146	4146	7.5×4	90000×4	5.5×2	135×2	19400	30278	4452	6-DN100	6-DN80
40	NZL4370	4371	5.5×4	78000×4	5.5×2	135×2	21642	32595	4702	6-DN100	6-DN80
41	NZL4600	4605	7.5×4	90000×4	5.5×2	135×2	21742	32695	4702	6-DN100	6-DN80

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.



Axial Fan

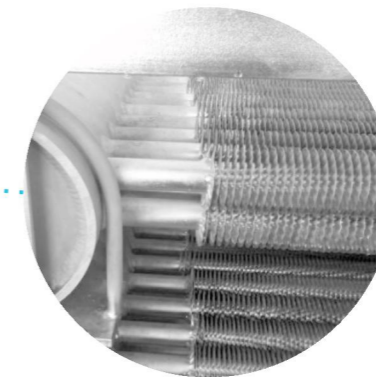
Axial flow fan adopts hollow aluminum alloy impeller (standard configuration) dedicated for evaporation and condensation, with forward-tilted structure design of the blade, low wind resistance, large air volume, low noise, good performance, high efficiency, and direct connection, reducing transmission 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.



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 °C, 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)



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



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.



Air Intake

Steel shutters, Electrostatic spray, Anti-corrosion