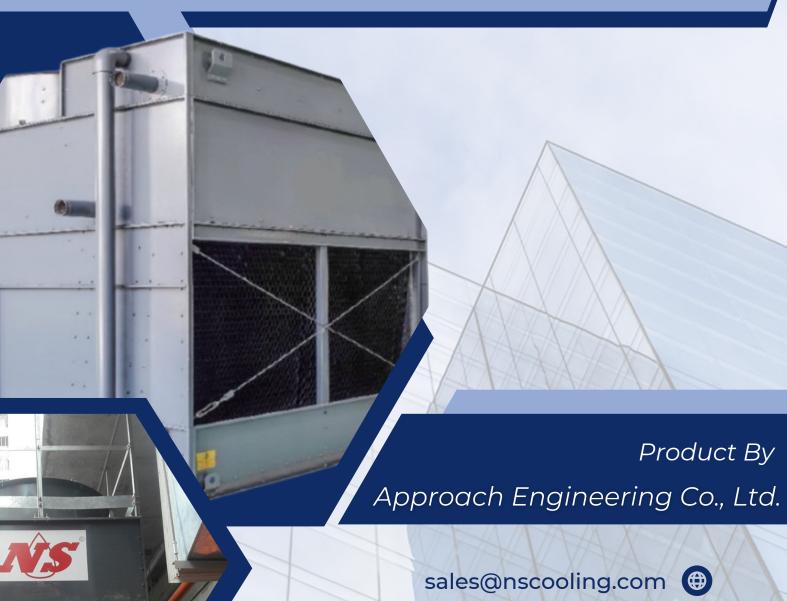


NS FBF SERIES

HIGH EFFICIENCY & LOW NOISE





508/132 Sukontasawat Rd., Ladphrao, Ladphrao, Bangkok Thailand 10230 Tel. 02-553-2638-9,41





CLOSED CIRCUIT COMBINED FLOW COOLING TOWER

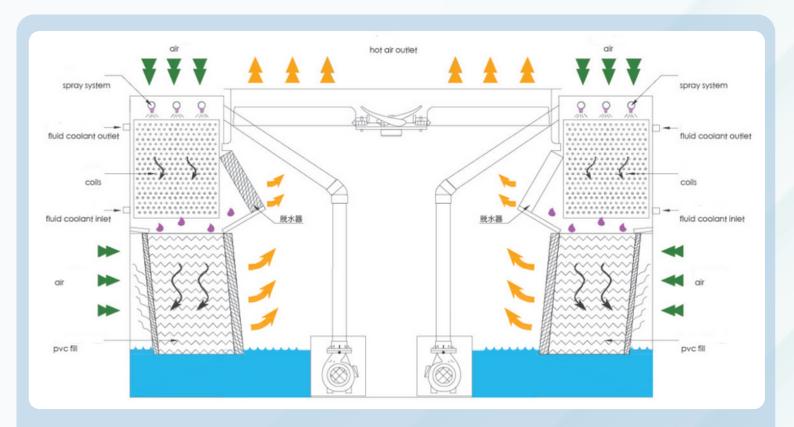
Cooling Tower Overview & Features



- 1. Apply combined flow type cooling way with high-efficiency dewatered and low drift water rate.
- 2. Cooling medium circulates closely with no impurities entering, ensuring the pureness of the medium.
- 3. The circulating water applies soft water, which won't scale or block pipeline.
- 4. Spray the outer wall of the condenser wet completely with spray water, avoiding forming scale at dry points and improving the system efficiency to the highest degree.
- 5. Cover a little area and can be moved and laid according to requirement, maintenance cost is low.
- 6. Composite flow type cooling tower is energy-saving type cooling tower of which the water in the condenser can flow back to the water tank to ensure the equipment won't be freezen off when the equipment doesn't operate in lower temperature in northern area.
- 7. Automatic digital vision temperature control, saving energy and protecting environment



Combined Flow Technology



The closed cooling tower cools down fluid with the principle of water evaporation absorbing heat. Spray water (cooling water) is stored at the bottom of the cooling tower and working fluid (softened water or other fluid) circulates in the radiator coil of the closed cooling tower.

Spray water is sprayed onto coil pipe surface through water distribution system and spray nozzle with spray system pump, where some water is evaporated and heat is absorbed, so the temperature of working fluid in pipe is reduced.

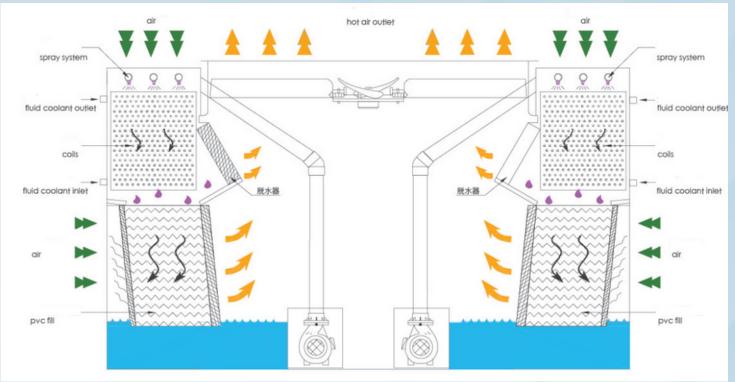
Water in hot air and unevaporated water is stopped by a manger and flows through PVC heat exchange layer where the water is cooled down by flowed water and falls in water pond at the bottom. Then the water is recyclingd to the water distribution system with the water pump and returns to spray on coil pipes. Circulating cooling is conducted repeated in such way.



CLOSED CIRCUIT COMBINED FLOW COOLING TOWER

Cooling Tower Structure



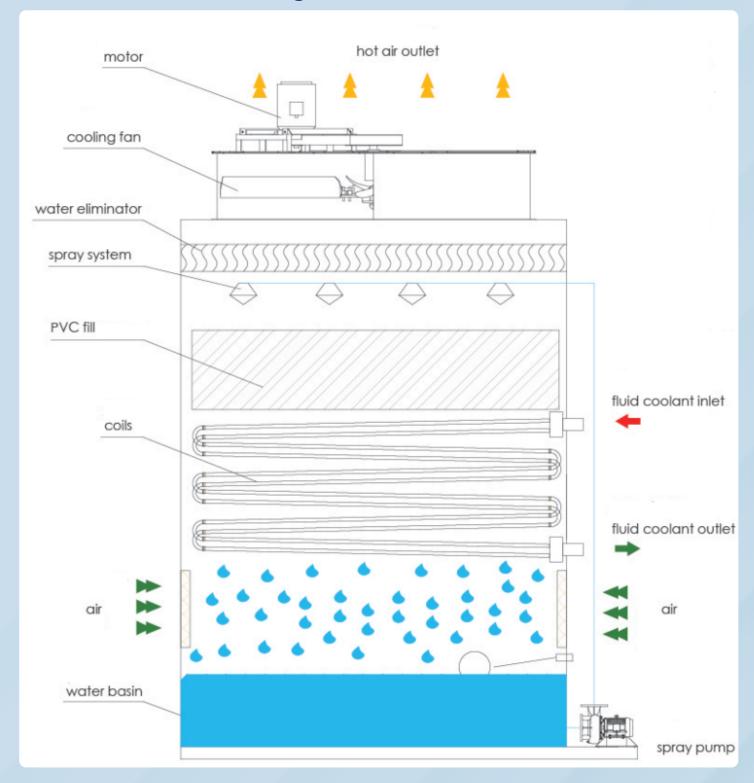


Double outlet



CLOSED CIRCUIT COMBINED FLOW COOLING TOWER

Cooling Tower Structure



Single outlet



Cooling Tower Structure

1. Access door is convenient for daily maintenance

The access door is equipped at the side of the cooling tower. Convenient for care and maintenance during application.

2. Exhaust system

Aluminum alloy three-proofing air blower;
Fully-enclosed electric monotone service life;
Wind deflector is installed between air blowers,
so if one air blower breaks down, other air blowers
won't be influenced.

3. TEFC pump motor

Conducive to long-term trouble-free operation.

4. Filling Use high-quality PVC, corrosion resisting and biological erosion resisting; has extremely high water collection efficiency and low air resistance.



Cooling Fan

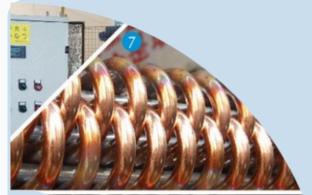


PVC water eliminator





Cooling Tower Structure





5. Circulating system

Manufactured with 304 stainless steel plate, with a good-looking appearance; equipped with a liquid meter and entrance liquid level alarm.

6.304 stainless steel coils

The connection between the tubes and elbow is adopted orbital (Germany) welding technology to make sure welding joints in accordance with the original, and testing pressure, 1.0 MPa.

7. High-efficiency heat-sinking capability cooler

TP2Y deacidifying red copper tube, having fewer welding spots and weld with silver-based welding rod.

8. Control system

Electrical apparatus element applies domestic famous brand and can choose an imported brand. PLC primary control program conducts intelligent variable frequency control to the electric mote of the equipment

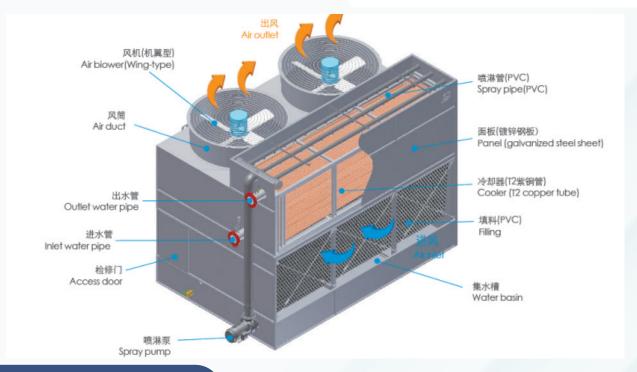


Water Tank



Float Valve

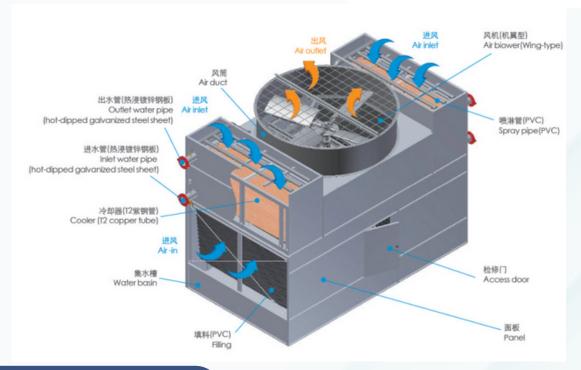




NS-FBF 10D-150D

	cooling capacity					cooling fan									
model			O.D.		spray pump				water pipe diameter				weight		
	water flow rate	thermal power	(L)	(W)	(H)		power	air capacity	power	water inlet/outlet	overflow pipe	discharge pipe	make up pipe	N.W.	operation weight
	m³/h	KW	mm	mm	mm		KW	m³/h	KW	mm		mm	mm	kg	kg
FBF-10D	10	58	1800	1500	2080	Ф700 Ф700	0.55 0.55	6400 6400	0.75	DN65	DN25	DN25	DN25	640	1730
FBF-15D	15	87	1800	1500	2300	Ф750 Ф750	0.75 0.75	9600 9600	0.75	DN65	DN25	DN25	DN25	710	1880
FBF-20D	20	116	1800	1500	2550	Ф800 Ф800	0.75 0.75	12800 12800	0.75	DN80	DN25	DN25	DN25	810	1920
FBF-30D	30	174	2000	1800	2680	Ф800 Ф800	1.5 1.5	19200 19200	0.75	DN80	DN25	DN25	DN25	920	2320
FBF-40D	40	232	2500	1800	2730	Ф1000 Ф1000	1.5 1.5	25600 25600	1.1	DN100	DN32	DN32	DN32	1200	2860
FBF-50D	50	290	2500	2000	2930	Ф1000 Ф1000	1.5 1.5	32000 32000	1.5	DN100	DN32	DN32	DN32	1380	3200
FBF-65D	65	378	2650	2300	2950	Ф1200 Ф1200	2.2 2.2	41600 41600	1.5	DN100	DN32	DN32	DN32	1620	3980
FBF-80D	80	465	3300	2300	3100	Ф1200 Ф1200	3 3	51200 51200	2.2	DN125	DN40	DN40	DN40	2280	5330
FBF-100D	100	581	4000	2600	3150	Ф1500 Ф1500	4 4	64000 64000	4	DN125	DN40	DN40	DN40	2800	7150
FBF-125D	125	727	4500	2700	3200	Ф1500 Ф1500	5.5 5.5	80000 80000	4	DN150	DN40	DN40	DN40	3290	7780
FBF-150D	150	872	5000	3200	3940	Ф1500 Ф1500 Ф1500	4 4 4	64000 64000 64000	5.5	DN150	DN40	DN40	DN40	3880	9800





NS-FBF 80S-300S

model	cooling capacity		O.D.		cooling fan			spray pump	,	water pip	weight				
	water flow rate	thermal power	(L)	(W)	(H)	Φ	power	air capacity	power	water inlet/outlet	overflow pipe	discharge pipe	make up pipe	N.W.	operation weight
	m³/h	KW	mm	mm	mm		KW	m³/h	KW	mm		mm	mm	kg	kg
FBF-80S	80	465	2300	4000	3120	Ф2200	5.5	102400	2.2	100×2 100×2	DN40	DN40	DN40	2340	5780
FBF-100S	100	581	2300	4200	3200	Ф2200	5.5	128000	4	100×2 100×2	DN40	DN40	DN40	2400	6300
FBF-125S	125	727	2600	4800	3230	Ф2500	7.5	160000	4	100×2 100×2	DN40	DN40	DN40	2780	7400
FBF-150S	150	872	2600	5000	3200	Ф2500	11	192000	5,5	125×2 125×2	DN40	DN40	DN40	3360	8450
FBF-175S	175	1017	3100	5500	3300	Ф3000	11	224000	5.5	125×2 125×2	DN40	DN40	DN40	3620	10400
FBF-200S	200	1163	3100	5700	3300	Ф3000	15	256000	4×2	125×2 125×2	DN40	DN40	DN40	3930	11200
FBF-225S	225	1308	3300	6200	3300	Ф3200	15	288000	4×2	150×2 150×2	DN40	DN40	DN40	4340	12900
FBF-250S	250	1453	3300	6800	4300	Ф3200	18,5	320000	4×2	150×2 150×2	DN50	DN50	DN50	6500	14500
FBF-300S	300	1744	3600	7500	5000	Ф3500	22	384000	5.5×2	150×2 150×2	DN50	DN50	DN50	9000	21800

Approach Engineering Co., Ltd.

sales@nscooling.com

508/132 Sukontasawat Rd., Ladphrao, Ladphrao, Bangkok Thailand 10230

Tel. 02-553-2638-9,41