

# Peritek

## 普瑞泰

### 杭州普瑞除湿设备有限公司

HANGZHOU PERITECH DEHUMIDIFYING EQUIPMENT CO.,LTD

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- Edition CE

### 杭州普瑞除湿设备有限公司

HANGZHOU PERITECH DEHUMIDIFYING EQUIPMENT CO.,LTD

## CORPORATE CULTURE

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### Enterprise vision

Be the first brand of dehumidification equipment in China.

### Enterprise value

Quality and innovation

### Enterprise spirit

Integrity, professionalism, unity and innovation.

### Business philosophy

Create products professionally, explore market honestly.

### Service concept

All our efforts are for customers' satisfaction.

Mainly participate in the development of China's first desiccant rotor dehumidifier.

Research and development dehumidifier for China's military.

Responsible for drafting the national military standard and industry standard of dehumidification equipment.

China's space industry partners.

Operators of systematic solutions to humidity problems



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# COMPANY PROFILE



Hangzhou Peritek Dehumidifying Equipment Co., Ltd was established in January 2004 with the registered trademark "peritek". Peritek specializes in research and development, manufacturing and servicing of air dehumidification equipment and systems. Users are widely in lithium battery, chemical, pharmaceutical, food, bioengineering, electronics, glass, rubber and shipbuilding, nuclear power plants, aviation, aerospace, military and other industries, and products are also exported for foreign markets in batches.

Peritek is one of the largest industrial dehumidifier manufacturers in China, covering an area of more than 10,000 square meters and a factory building of more than 10,000 square meters, with a complete and advanced product production line and quality performance testing device. Peritek's technicians account for 30% of the total number of employees, and have decades of experience in the dehumidifier industry. We have been responsible for national dehumidifier development projects and passed the appraisal; we have won the provincial and ministerial science and technology progress award of dehumidifier development project, and

also been responsible for a number of China and foreign large-scale projects such as dehumidification and drying projects for large-scale satellite launch centers, fighter aircraft drying maintenance projects, large-scale lithium power plant dehumidification and drying projects, and get praise from users. Peritek holds a number of national patents for dehumidifiers. It is also responsible for drafting the industry standards for desiccant rotor dehumidifiers and drafting the only national military standard for dehumidifiers in China.

Based on a deep understanding of the air dehumidification and drying mechanism and rich experience in the manufacture of machinery and equipment, Peritek has strong development design, production, engineering installation and high-quality and efficient after-sales service capabilities. It can be specially designed and customized according to the actual needs of users. Peritek specializes in dehumidifiers. By now, Peritek has developed series of dehumidifiers, including: ZL series rotor dehumidifiers, ZHL series low-dew point dehumidifiers for lithium battery production environments, ZRB series heat pump dehumidifi-

ers, and ZDW low-temperature dehumidifiers for lithium battery glove boxes, PRI series special dehumidifiers for lithium battery workshop environmental modification, ZLI closed cycle rotary dehumidifier, ZLLY series four-season type dehumidifier. According to the different needs of users, the dry air supply temperature after processed is 5 ~ 120 °C, the dew point of normal pressure supply air can reach ≤ -80 °C, and the relative humidity at ambient temperature can be controlled below 0.5%.

Peritek's dehumidifier products have passed ISO9001:2008 quality management system certification; Peritek has been rated as a science and technology enterprise in Zhejiang Province and a high-tech enterprise in Hangzhou; after years of development and efforts, the company's products are in the forefront of the national peers in terms of technology and quality. Peritek is committed to the research, development, production and sales of dehumidification equipment with the concept of "Manufacture products professionally, explore market honestly", and strives to provide first-class products and high-quality services for various industries.



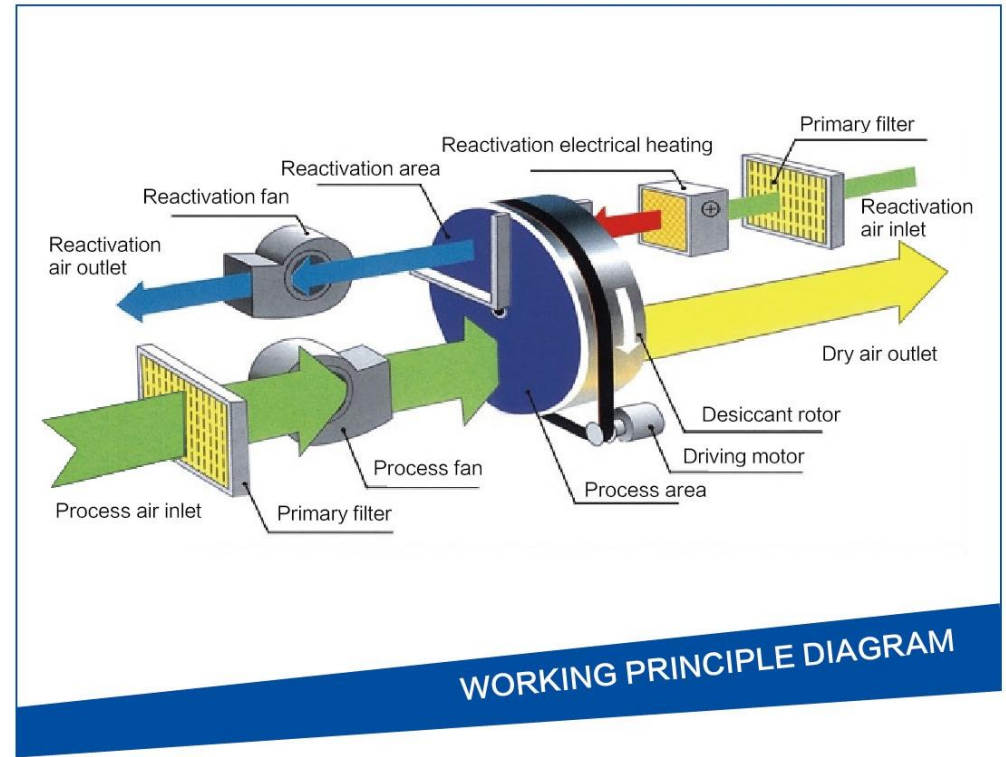


# DEHUMIDIFICATION METHOD AND APPLICATION

LTEM	DEHUMIDIFY PRINCIPLE	CHARACTERS	APPLICATION
Atmospheric cooling dehumidification	Cool atmospheric air to below dew point temperature and remove it after condensation.	<ol style="list-style-type: none"> <li>1. General dew point is above 6 ~ 10 °C.</li> <li>2. If the surface of the cooling coil is at 0 °C, the condensed water freezes on the surface, reducing the dehumidification efficiency, and the humidity of the processing air is unstable.</li> <li>3. Complex equipment and high maintenance costs.</li> </ol>	Dew point requirements are not strict, more than 6 ~ 10 °C, mostly used for comfort dehumidification.
Compression cooling dehumidification.	The air is compressed and then cooled, and the water vapor in the air is condensed into water and removed.	<ol style="list-style-type: none"> <li>1. Suitable for small air volume dehumidification.</li> <li>2. Compressed power is expensive.</li> </ol>	Dehumidification of compressed air with small air volume such as instruments and controls.
Liquid absorption	Dehumidify the air by spraying with a water-absorbing agent solution.	<ol style="list-style-type: none"> <li>1. Dew point can reach -20 °C.</li> <li>2. Large equipment.</li> <li>3. Need to change the absorption liquid.</li> <li>4. The absorption liquid is easily taken away from the device and adversely affects the use occasion.</li> </ol>	Occasions need a large airflow with dew point higher than -20°C.
Desiccant rotor dehumidification	Dehumidify the air with a large-area rotor containing adsorbent material.	<ol style="list-style-type: none"> <li>1. Can get low humidity air with dew point below -70 °C.</li> <li>2. Obtain stable low-humidity air.</li> <li>3. Easy to control humidity.</li> <li>4. Easy maintenance.</li> </ol>	Particularly suitable for occasions that require dehumidification at low temperature and low humidity and stable humidity. Combined with cooling and dehumidification, it can be applied to any occasion with practical needs

Peritek 普瑞泰  
PRODUCT SERIES

# WORK PRINCIPLE AND TECHNIQUE



WORKING PRINCIPLE DIAGRAM

The core part of the dehumidifier is a desiccant rotor with dense honeycomb holes rotating at 8-16 revolutions per hour. There are high-sealing silicone rubbers on both sides of the rotor, dividing the entire surface into two parts, 270 ° process zone and 90 ° reactivation zone.

When the humid process air enters the process zone, the moisture in the air is absorbed by the desiccant rotor and becomes dry air. The dry air is sent to the place where it needs to be dried or the production process by the processing fan .

In the process of moisture absorption, the desiccant rotor gradually loses its ability to absorb moisture.

In order to maintain a constant moisture absorption capacity, the rotor needs to be reactivation. For this reason,

the rotor that tends to saturate is slowly turned into the reactivation zone under the drive of the transmission motor, the reactivation air heated to 100-140°C enters the reactivation zone in the opposite direction of the processing air, and adsorbs the moisture in the rotor and is taken away by the reactivation fan to the outside. The desiccant rotor restores the moisture absorption ability, and is driven into the processing zone to re-adsorb the moisture in the processing air under the driving of the transmission motor.

The desiccant rotor is continuously rotated, and the dehumidification and reactivation process is continuously performed, thereby continuously outputting dry air with constant humidity.

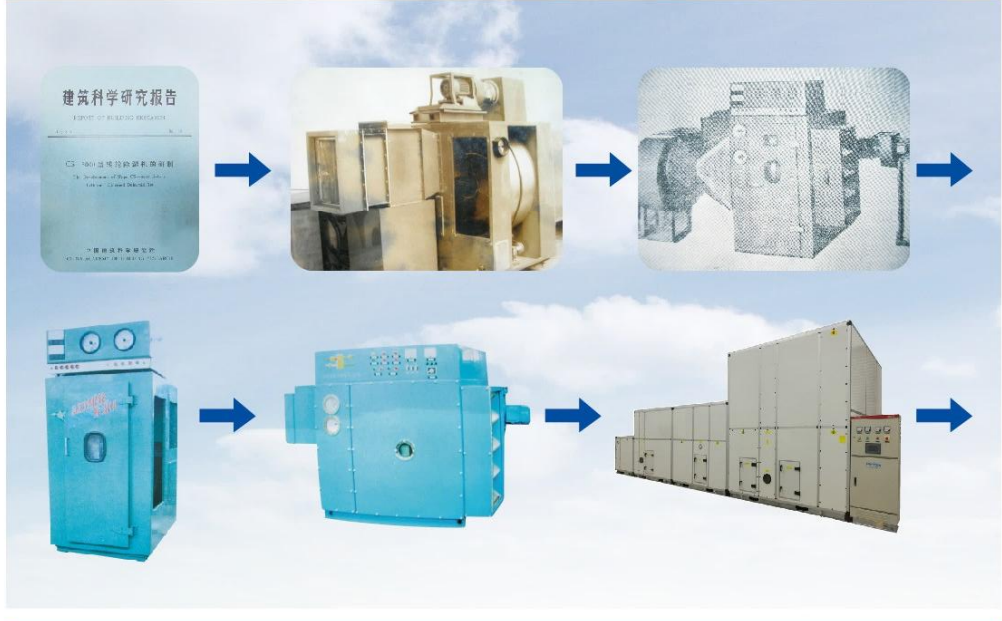




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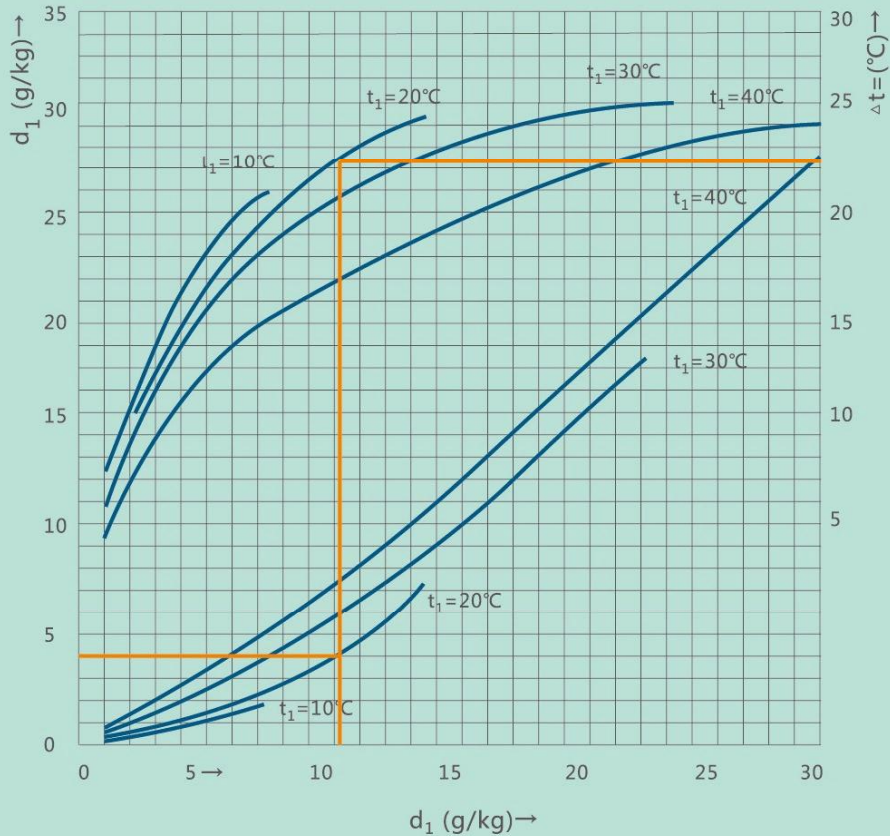
# CHARACTERISTICS OF PERITEK DEHUMIDIFIER

- ### PRODUCT CHARACTERISTICS
- The cabinet of the dehumidifier adopts a double-layer structure separated by thermal insulation materials, high-pressure polyurethane foam, high strength, and good anti-cold bridge effect.
  - Super silica gel / molecular sieve rotor with excellent performance, high dehumidification efficiency, can reach more than 80%.
  - The key structure adopts the self-lubricating balance rotor seal technology independently developed by Peritek, which improves the performance of the rotor, and the minimum dew point after special processed can reach below  $-80\text{ }^{\circ}\text{C}$ .
  - Using Peritek's patented technology and independently developed advanced dehumidification process and PID control technology, the equipment has good energy saving effect and low production cost.
  - Serialization, standardization, refined production and more than 30 years of professional experience make Peritek's products have higher stability and reliability.
  - Peritek provides users with system solutions for humidity problems.



Starting from the research and development of the first rotor dehumidifier in China, after decades of hard work, Peritek has become one of the most advanced and largest suppliers in the industry.





EXAMPLE

**Known:** Temperature of air inlet  $t_1=20^\circ\text{C}$ , relative humidity  $RH_1=70\%$ , moisture content  $d_1=10.35\text{g/kg}$ , ask for the air condition after processing.

**Solve:** According to the chart,  $d_1=10.35\text{g/kg}$ , through dehumidification curve  $t_1=20^\circ\text{C}$ , we can find out the moisture content of the processed air outlet  $d_2=4\text{g/kg}$ , and then go up through  $t_1 = 20^\circ\text{C}$  temperature rise curve to find the temperature rise  $\Delta t = 22.3^\circ\text{C}$ , then processed air temperature  $t_2 = 42.3^\circ\text{C}$ , the processed air  $RH = 8\%$  can be found on the id chart.

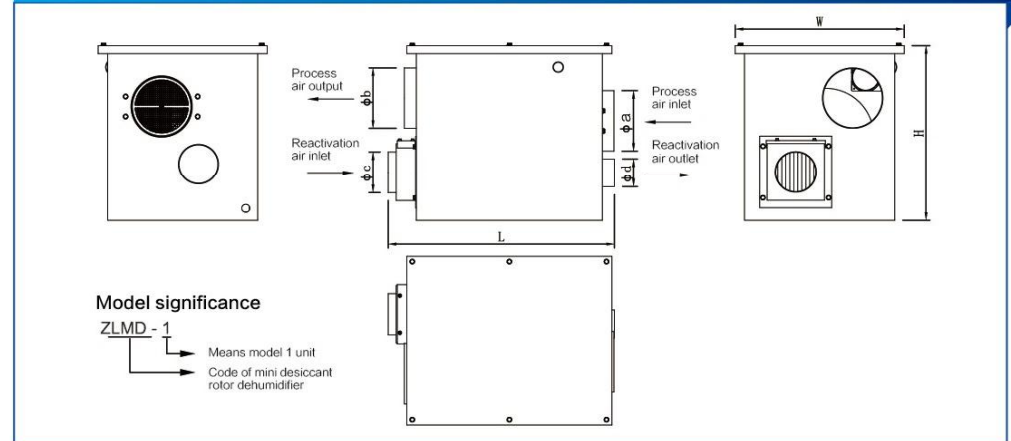
For more detailed specification, please contact with us.

Product Characteristics

- Adopt dry dehumidification, environmental protection.
- Small and exquisite body, easy to carry.
- Equipped with microcomputer control or button control for customers to choose.
- PTC heating for regeneration, safer and more reliable.
- Using  $80^\circ\text{C} \pm 10^\circ\text{C}$  low temperature regeneration technology to save energy.
- Suitable for all places with humidity  $<40\%$ , it can be used with one or multiple sets.



ZLMD Outline Dimension Drawing



ZLMD Technical Parameters Table

Data Model	Process airflow	React. airflow	Process air inlet( Φa)	Process air outlet( Φb)	Reactivation air inlet( Φc)	Reactivation air outlet( Φd)	Power supply	Installed power	Approx size (L*W*H)	Approx weight
ZLMD-1	120 CMH	40 CMH	Φ 151	Φ 151	Φ103	Φ 70	220V/50Hz	1.21 kW	525×172×382	30 kg
ZLMD-2	300CMH	100CMH	Φ 151	Φ 151	Φ 103	Φ 103	220V/50Hz	2.22 kW	565×512×438	40kg

Note: 1. The above parameters are for reference only, please refer to the unit nameplate.  
 2. The power supply can be customized according to customer requirements.







# ZLB SERIES COMBINED DEHUMIDIFIER

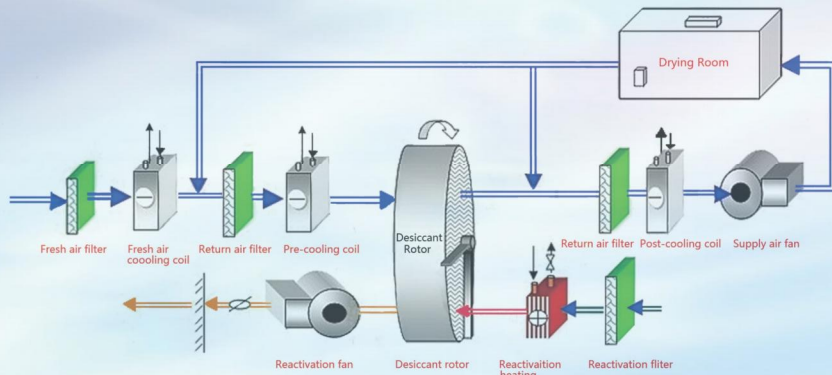
ZLB Series Combined Dehumidifiers



### PRODUCT CHARACTERISTICS

- Using the combination dehumidification method of freezing dehumidification and desiccant rotor deep dehumidification to output dry air with constant temperature and humidity. It is especially suitable for occasions where the environment or production process has double requirements on temperature and humidity.
- Inlet bag filter, cooling coil for fresh air, super silicone rotor, high efficiency centrifugal fan, pre and post cooling coil.
- New type aluminum alloy structure frame, high-pressure polyurethane foam double-layer color steel plate cabinet, cold-proof bridge treatment.
- PLC automatic control, multiple electrical protection, stable operation and good safety performance.
- It can realize host computer joint control or remote control.

ZLB Series Process Flow Chart



Model significance: ZLB-D-3000-Z  
 ZLB: Basic code of combined dehumidifier  
 D: Rotor regeneration type. D for electricity, Z for steam.  
 3000: Rated process airflow m3/h  
 Z: Indicates the position where the air enters, Z is left, Y is right.

# ZLB SERIES COMBINED DEHUMIDIFIER

ZLB Series Combined Dehumidifier Performance Parameters Table

Item	Model	ZLB-D-2	ZLB-D-3	ZLB-D-4	ZLB-D-5	ZLB-D-6	ZLB-D-7	ZLB-D-8	ZLB-D-9	ZLB-D-10	ZLB-D-11	ZLB-D-12	ZLB-D-13	ZLB-D-14	ZLB-D-15	ZLB-D-16	ZLB-D-17	ZLB-D-18	ZLB-D-19	ZLB-D-20	ZLB-D-21	ZLB-D-22	ZLB-D-23	ZLB-D-24	ZLB-D-25	ZLB-D-26	ZLB-D-27	ZLB-D-28	ZLB-D-29	ZLB-D-30	ZLB-D-31	ZLB-D-32	ZLB-D-33	ZLB-D-34	ZLB-D-35	ZLB-D-36	ZLB-D-37	ZLB-D-38	ZLB-D-39	ZLB-D-40	ZLB-D-41	ZLB-D-42	ZLB-D-43	ZLB-D-44	ZLB-D-45	ZLB-D-46	ZLB-D-47	ZLB-D-48	ZLB-D-49	ZLB-D-50	ZLB-D-51	ZLB-D-52	ZLB-D-53	ZLB-D-54	ZLB-D-55	ZLB-D-56	ZLB-D-57	ZLB-D-58	ZLB-D-59	ZLB-D-60	ZLB-D-61	ZLB-D-62	ZLB-D-63	ZLB-D-64	ZLB-D-65	ZLB-D-66	ZLB-D-67	ZLB-D-68	ZLB-D-69	ZLB-D-70	ZLB-D-71	ZLB-D-72	ZLB-D-73	ZLB-D-74	ZLB-D-75	ZLB-D-76	ZLB-D-77	ZLB-D-78	ZLB-D-79	ZLB-D-80	ZLB-D-81	ZLB-D-82	ZLB-D-83	ZLB-D-84	ZLB-D-85	ZLB-D-86	ZLB-D-87	ZLB-D-88	ZLB-D-89	ZLB-D-90	ZLB-D-91	ZLB-D-92	ZLB-D-93	ZLB-D-94	ZLB-D-95	ZLB-D-96	ZLB-D-97	ZLB-D-98	ZLB-D-99	ZLB-D-100
		Process airflow (m3/h)	External static pressure(Pa)	Return air data	React. airflow(m3/h)	Steam mode (kg/h)	Steam mode (kg/h)	React. energy consumption (kWh)	Chilled water temperature (°C)	Chilled water volume(m3)	Process fan power(kW)	React. Fan power(kW)	Rotor driving power (kW)	Installed power (kW)	Elec. mode power (kW)	Approx. weight (kg)																																																																																				
110	2000	≥700	110	7	1.8	0.04	1.8	1.8	1.1	0.04	0.04	4.14	11.34	1500																																																																																						
170	3000	≥700	170	10	2.8	0.04	2.8	2.8	1.1	0.04	0.04	5.14	17.14	1800																																																																																						
220	4000	≥700	220	13	3.7	0.06	3.7	3.7	1.1	0.06	0.06	6.26	20.66	2000																																																																																						
280	5000	≥700	280	16	4.6	0.06	4.6	4.6	1.1	0.06	0.06	7.76	25.76	2500																																																																																						
340	6000	≥700	340	20	5.5	0.06	5.5	5.5	1.1	0.06	0.06	9.79	31.79	3000																																																																																						
390	7000	≥700	390	23	6.5	0.09	6.5	6.5	1.1	0.09	0.09	11.79	38.79	3500																																																																																						
450	8000	≥700	450	26	7.3	0.09	7.3	7.3	1.1	0.09	0.09	13.32	42.32	4000																																																																																						
500	9000	≥700	500	29	8.2	0.12	8.2	8.2	1.1	0.12	0.12	15.32	48.32	4500																																																																																						
560	10000	≥800	560	32	9.2	0.12	9.2	9.2	1.1	0.12	0.12	17.32	54.32	5000																																																																																						
620	11000	≥800	620	36	10.1	0.12	10.1	10.1	1.1	0.12	0.12	19.32	60.32	5500																																																																																						
670	12000	≥800	670	39	11.1	0.12	11.1	11.1	1.1	0.12	0.12	21.32	66.32	6000																																																																																						
730	13000	≥800	730	42	11.9	0.12	11.9	11.9	1.1	0.12	0.12	23.32	72.32	6500																																																																																						
790	14000	≥800	790	45	12.8	0.12	12.8	12.8	1.1	0.12	0.12	25.32	78.32	7000																																																																																						
850	15000	≥800	850	50	13.7	0.12	13.7	13.7	1.1	0.12	0.12	27.32	84.32	7500																																																																																						
910	17500	≥800	910	54	15	0.12	15	15	1.1	0.12	0.12	31.32	94.32	8500																																																																																						
940	15000	≥800	940	54	15	0.12	15	15	1.1	0.12	0.12	31.32	94.32	8500																																																																																						
980	20000	≥800	980	64	16	0.12	16	16	1.1	0.12	0.12	36.32	104.32	9500																																																																																						
1120	25000	≥800	1120	80	18.3	0.12	18.3	18.3	1.1	0.12	0.12	42.32	114.32	11000																																																																																						
1400	30000	≥800	1400	96	22.9	0.12	22.9	22.9	1.1	0.12	0.12	50.32	130.32	13500																																																																																						
1680	35000	≥800	1680	112	27.5	0.12	27.5	27.5	1.1	0.12	0.12	58.32	146.32	16000																																																																																						
1960	40000	≥800	1960	128	32	0.12	32	32	1.1	0.12	0.12	66.32	162.32	18500																																																																																						
2240	45000	≥800	2240	144	36.6	0.12	36.6	36.6	1.1	0.12	0.12	74.32	178.32	21000																																																																																						
2520	50000	≥800	2520	160	41.2	0.12	41.2	41.2	1.1	0.12	0.12	82.32	194.32	23500																																																																																						
2800	50000	≥800	2800	160	45.8	0.12	45.8	45.8	1.1	0.12	0.12	90.32	210.32	26000																																																																																						







# ZHL SERIES LOW DEW POINT DEHUMIDIFIERS

ZHL Series Low Dew Point Dehumidifiers

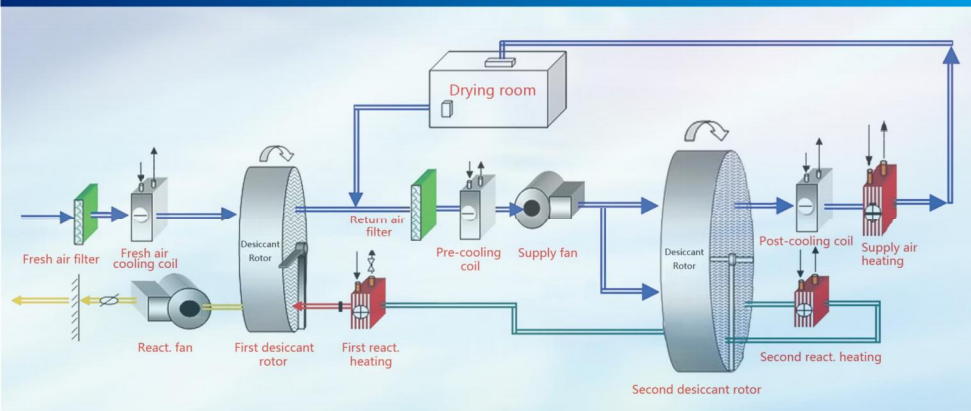


## PRODUCT CHARACTERISTICS

According to the working principle and process characteristics of various batteries, the production of some batteries must be completed in a very dry environment, such as lithium batteries, lithium-ion batteries, thermal batteries and lithium materials. Therefore, low dew point dehumidify equipment is indispensable in the production of the above batteries and materials, and its dehumidification and drying effects directly affect the electrical performance and safety of the battery. The ZHL series low dew point dehumidifier has been used in the above production processes for many years and has been proved to meet the needs of these production processes. It has been widely used in the lithium battery industry and various occasions with low dew point requirements.

ZHL series dehumidifier is mainly composed of compression and condensation unit (or centralized cooling water supply), direct evaporative heat exchanger or water-cooled heat exchanger, super silica gel or molecular sieve runner group, microcomputer control system, etc.

ZHL Series Process Flow Chart



Model significance : ZHL-D-3000-Z  
 ZHL: Basic code of low dew point dehumidifier  
 D: Rotor regeneration type, D for electricity, Z for steam.  
 3000: Rated process air flow (m<sup>3</sup>/h)  
 Z: Indicates the position where the air enters, Z is left, Y is right.

# ZHL SERIES LOW DEW POINT DEHUMIDIFIERS

ZHL Series Low Dew Point Dehumidifier Technical Parameters Table

Item	Model	ZHL-D/Z-1500	ZHL-D/Z-1700	ZHL-D/Z-2000	ZHL-D/Z-2500	ZHL-D/Z-3100	ZHL-D/Z-3800	ZHL-D/Z-4700	ZHL-D/Z-6000	ZHL-D/Z-7900	ZHL-D/Z-10000	ZHL-D/Z-13200	ZHL-D/Z-16600	ZHL-D/Z-21200	ZHL-D/Z-26200	ZHL-D/Z-33200	ZHL-D/Z-37000	ZHL-D/Z-41000	
Process airflow (m <sup>3</sup> /h)		1500	1700	2000	2500	3100	3800	4700	6000	7900	10000	13200	16600	21200	26200	33200	37000	41000	
External static pressure (Pa)		≥600	≥600	≥600	≥600	≥600	≥600	≥600	≥600	≥600	≥800	≥800	≥800	≥800	≥800	≥800	≥800	≥800	
Supply air data		Temperature = 16 ° C, dew point temperature = -65 ° C (based on 35 ° C, 80% fresh air parameters, fresh air cooling temperature 14 ° C, dry room return air 90%, return air temperature 23 ° C, return air dew point < -32 ° C)																	
React. Airflow (m <sup>3</sup> /h)		150	170	200	250	310	380	470	600	790	1000	1320	1660	2120	2620	3320	3700	4100	
React. energy consumption	Steam reqd. (kg/h)	14	15	17	21	26	32	39	50	65	82	109	136	174	215	271	302	335	
	First steam pipe diameter	DN15	DN15	DN15	DN15	DN20	DN20	DN20	DN20	DN20	DN25	DN25	DN25	DN32	DN32	DN40	DN40	DN40	
	Second steam pipe diameter	DN15	DN15	DN15	DN15	DN20	DN20	DN20	DN20	DN20	DN25	DN25	DN32	DN32	DN32	DN40	DN40	DN40	
	Summary steam pipe diameter	DN20	DN20	DN20	DN20	DN20	DN20	DN25	DN25	DN25	DN32	DN32	DN40	DN40	DN50	DN50	DN50	DN50	
	Electric heating react. power (kW)	8.4	9.6	10.8	13.2	16.8	20.4	23.6	32	40	52	66	82	106	130	164	182	202	
Chilled water	Temperature (°C)	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7	
	Water volume (t/h)	3.1	3.5	4.1	5.1	6.4	7.8	9.7	12.4	16.3	20.6	27.2	34.2	43.7	54	68.4	76.2	84.4	
	Fresh air cooling coil diameter	DN20	DN20	DN20	DN20	DN25	DN32	DN32	DN40	DN40	DN50	DN50	DN65	DN65	DN80	DN80	DN80	DN80	
	Mixed air cooling coil diameter	DN20	DN20	DN25	DN25	DN32	DN32	DN40	DN50	DN50	DN50	DN65	DN65	DN80	DN80	DN80	DN100	DN100	
	Supply air cooling coil diameter	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN25	DN32	DN32	DN40	DN40	DN50	DN50	DN50	DN50	DN50	
Summary pipe diameter	DN32	DN32	DN32	DN40	DN40	DN50	DN50	DN50	DN65	DN65	DN80	DN80	DN100	DN100	DN125	DN125	DN125		
Process fan power (kW)		2.20	3.00	3.00	3.75	4	4	5.5	7.5	11	11	15	18.5	30	30	37	45	45	
React. Fan power (kW)		0.25	0.25	0.37	0.37	0.55	0.75	0.75	1.1	1.1	1.1	1.1	1.5	2.2	2.2	3	3	3	
Rotor driving power (kW)		0.065	0.065	0.085	0.115	0.15	0.16	0.24	0.24	0.26	0.29	0.29	0.52	0.6	0.6	0.6	0.6	0.6	
Installed power	Steam mode (kW)	2.365	3.065	3.205	4.235	4.7	4.91	6.49	8.84	12.36	12.39	16.39	20.52	32.8	32.8	40.6	48.6	48.6	
	Elec. mode (kW)	10.765	12.665	14.005	17.435	21.5	25.31	30.09	40.84	52.36	64.39	82.39	102.52	138.8	162.8	204.6	230.6	250.6	
Approx. Weight (kg)		2000	2000	2300	2300	2500	2500	3000	3000	3500	3500	4000	4500	4500	5500	6500	7500	8000	



# ZHL SERIES LOW DEW POINT DEHUMIDIFIERS

ZHL series low dew point dehumidifier interface and outline drawing

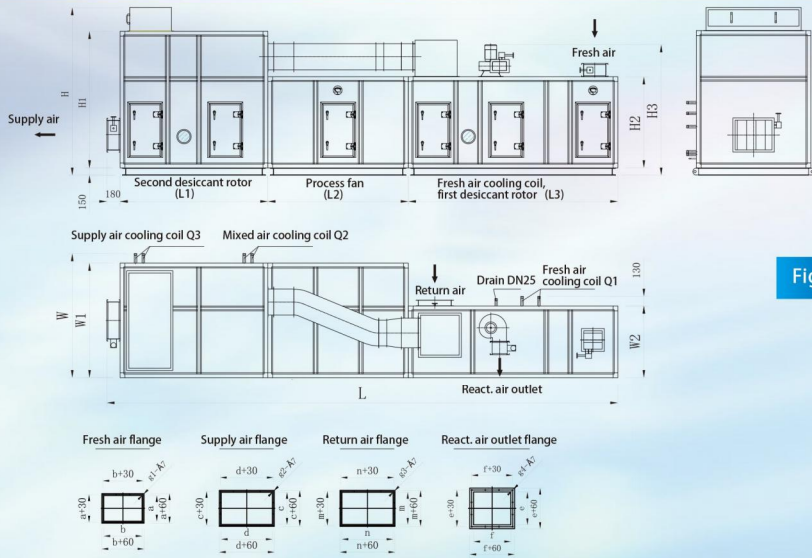


Figure 1

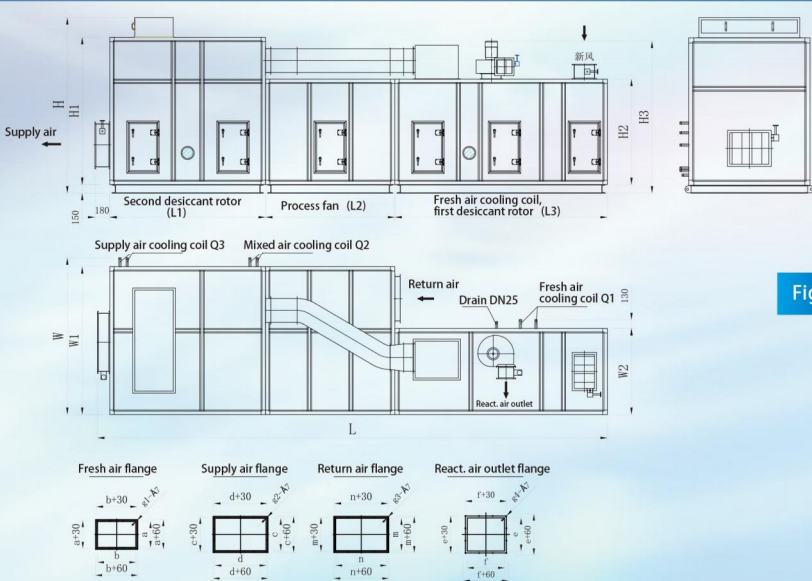


Figure 2

# ZHL SERIES LOW DEW POINT DEHUMIDIFIERS

ZHL Series Low Dew Point Dehumidifier Dimension Table

Data Model	W	H	L1	L2	L3	W1	W2	H1	H2	H3	a	b	c	d	m	n	e	f	g1	g2	g3	g4	Q1	Q2	Q3	
ZHL-1500	6770	1100	1980	1723	1913	2851	972	1552	972	1455	150	200	350	200	350	300	72	52	4	6	6	4	DN20	DN20	DN20	
ZHL-1700	6670	1100	1980	1723	1913	2851	972	1552	972	1455	150	250	350	200	350	300	72	52	4	6	6	4	DN20	DN20	DN20	
ZHL-2000	6670	1390	1980	1723	1913	2851	1262	1552	972	1455	150	300	350	200	300	300	100	52	4	8	8	4	DN20	DN25	DN20	
ZHL-2500	6670	1390	1980	1723	1913	2851	1262	1552	972	1455	150	200	300	350	300	350	100	52	4	8	8	4	DN20	DN25	DN20	
ZHL-3100	6345	1390	1980	1723	1588	2851	1262	1552	972	1465	200	200	350	400	300	400	72	75	4	8	8	4	DN25	DN32	DN20	
ZHL-3800	6345	1390	1980	1723	1588	2851	1262	1552	972	1490	200	250	400	400	350	450	100	75	4	8	8	4	DN32	DN32	DN20	
ZHL-4700	6960	1680	2300	2013	1913	2851	1552	1878	1262	1780	250	250	400	500	400	450	100	75	4	10	10	4	DN32	DN40	DN20	
ZHL-6000	6960	1680	2300	2013	1913	2851	1552	1878	1262	1800	250	300	400	630	450	500	120	190	6	10	10	4	DN32	DN40	DN20	
ZHL-7900	7250	2010	2300	2013	1913	3141	1878	1262	1878	1262	1860	300	300	500	700	630	120	190	8	10	10	4	DN40	DN50	DN25	
ZHL-10000	7250	2010	2300	2013	1913	3141	1878	1262	1878	1262	1860	300	400	500	800	550	700	120	190	8	12	4	DN40	DN50	DN32	
ZHL-13200	7540	2300	2615	2303	1913	3141	2168	1262	2168	1552	2190	300	500	630	850	700	120	190	8	14	12	4	DN50	DN50	DN32	
ZHL-16600	8150	2590	3360	2303	2203	3141	2458	1262	2783	1878	2630	400	500	630	1000	630	1000	200	227	10	16	16	12	DN50	DN65	DN40
ZHL-21200	8150	2880	3360	2303	2203	3141	2748	1552	2783	1878	2630	400	600	630	1200	700	1000	228	260	10	18	16	12	DN65	DN65	DN40
ZHL-26200	9030	2915	3400	2303	3108	3431	2783	1552	2783	1878	2630	450	630	700	1300	700	1200	228	260	10	22	18	12	DN65	DN80	DN50
ZHL-33200	9680	3530	4100	2593	3108	3431	3400	1878	3400	2170	2860	450	800	900	1300	1000	1100	256	291	12	22	20	12	DN80	DN80	DN50
ZHL-37000	9680	3530	4100	2593	3108	3431	3400	1878	3400	2170	2860	450	800	1000	1300	1100	1100	256	291	12	24	20	12	DN80	DN100	DN50
ZHL-41000	9680	3820	4350	2593	3108	3431	3690	1878	3690	2170	2860	550	800	1000	1400	1100	1200	256	291	14	24	22	12	DN80	DN100	DN50

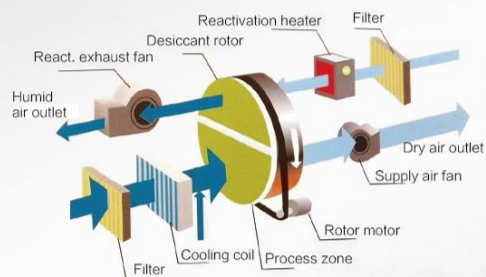
1. The height H of the unit in the parameter table is the height of the unit that is reactivation heated for electric heating, and the height of the unit that is heated by steam is increased by about 350mm.
2. The width W is the unit width when cold water is the cold source, and the width is decreased by 130mm when refrigerant is the cold source.
3. The dimensions in the table do not include the size of the control cabinet. For units with processing air volume < 13200m<sup>3</sup>/h, refer to Figure 1; and for units with processing air volume > 16600m<sup>3</sup>/h, refer to Figure 2.
4. Without notice if above-mentioned specifications changed.

Note:



## ZDW SERIES LOW TEMPERATURE REGENERATION DEHUMIDIFIERS

ZDW Series Low Temperature Regeneration Dehumidifiers



### PRODUCT CHARACTERISTICS

ZDW series low-temperature reactivation dehumidifier uses the waste heat of steam condensate as the reactivation heat source. The reactivation temperature is between 45 ~ 75 °C, which is much lower than the reactivation temperature of ordinary desiccant rotor dehumidifier. Under such low-temperature reactivation conditions, it can still make the humidity in the place of use is between 20 and 60%, meeting the requirements of environmental control and production processes. The use of waste heat significantly reduces production costs.

ZDW Series Low Temperature Regeneration Dehumidifier Technical Parameters Table

Data Model	Rated process airflow, m <sup>3</sup> /h	React. airflow, m <sup>3</sup> /h	Process fan power, kW	React. fan power, kW	React. heating power, kW	Steam condensate flow, t/h
ZDW-3000	3000	3000	3.0	1.5	35	2.2
ZDW-5000	5000	5000	4.0	2.2	58	3.6
ZDW-7500	7500	7500	7.5	4.0	88	5.5
ZDW-10000	10000	10000	11.0	5.5	116	6.7
ZDW-15000	15000	15000	15.0	7.5	175	11

Note: It can be professionally designed and produced according to the actual situation where waste heat can be provided.

## ZHL-RB SERIES LOW DEW POINT DEHUMIDIFIERS

ZHL-RB Series Low Dew Point Dehumidifiers



### PRODUCT CHARACTERISTICS

ZHL-RB series low dew point dehumidifier is a new type of energy-saving dehumidifier. It uses low-temperature regeneration heat pump technology to regenerate the rotor, making full use of energy, and cooperating with the new advanced rotor technology. Under normal temperature, the air supply dew point of the equipment can reach  $\leq -65$  °C, which can fully meet the requirements of the lithium battery industry for low dew point environments. ZHL-RB series low dew point dehumidifier has a good energy saving effect, which is 20 ~ 40% less energy than ordinary low dew point dehumidifier, no need for supporting refrigeration system and no chilled water, the system is simple and convenient to install.

ZHL-RB Series Low Dew Point Dehumidifier Technical Parameters Table

Data Model	Rated process airflow, m <sup>3</sup> /h	External static pressure, Pa	Supply air temperature, °C	Supply air dew-point, °C	Return air temperature, °C	Return air dew-point, °C	Installed power, kW
ZHL-RB-3000	3000	700	16~18	$\leq -65$	21~25	$\leq -32$	26
ZHL-RB-5000	6000	750	16~18	$\leq -65$	21~25	$\leq -32$	57
ZHL-RB-10000	10000	800	16~18	$\leq -65$	21~25	$\leq -32$	90
ZHL-RB-15000	15000	800	16~18	$\leq -65$	21~25	$\leq -32$	135
ZHL-RB-20000	20000	800	16~18	$\leq -65$	21~25	$\leq -32$	190

Note: It can be designed and customized according to the actual needs of users, and the installed power is the power including refrigeration.



## ZLF SERIES CLOSED-CYCLE ROTOR DEHUMIDIFIERS



ZLF Series Closed-cycle Rotor Dehumidifiers

This unit has the characteristics of compact structure, stable and reliable performance, convenient operation, easy maintenance, easy to move, no CFC problems and so on. The unit can use conventional electrical control or advanced microcomputer control technology. Perfect safety protection, and can be connected with the humidity measurement and control instrument to achieve automatic control of the constant temperature of the controlled space.

### PRODUCT CHARACTERISTICS

ZLF series closed-cycle rotor dehumidifier is a convenient and efficient air dehumidifier. The key component is a special honey-comb-shaped rotor loaded with a hygroscopic agent. The moisture exchange effect is good and the dehumidification ability is strong. Closed cycle is used to cool the water vapor in the regeneration air by using the natural air in the room, so that it becomes condensed water to separate out. which solves the trouble that the common unit needs to lead the regeneration air inlet and outlet pipes out of the room.

ZLF Series Closed-cycle Rotor Dehumidifiers Technical Parameters Table

Item	ZLF200	ZLF400	ZLF600	ZLF1000
Rated process airflow	m3/h 200	400	600	1000
Rated react.airflow	m3/h 70	135	200	340
Process fan power	kW 0.08	0.2	0.25	0.37
React. heating power	kW 2.4	4.8	7.2	10.8
React. heating temperature	℃ 120	120	120	120
Dehumidify capacity	kg/h 0.8	1.6	2.4	4
Process air pressure drop	Pa 180	185	190	200
Installed power	kW 2.62	5.57	8.25	12.2
Power supply	220V 50Hz	220V 50Hz	220V 50Hz	220V 50Hz
Size (L×W×H)	mm 500 × 450 × 850	600 × 500 × 1250	650 × 550 × 1350	700 × 600 × 1750
Approx. weight	kg 60	100	220	300

Note: 380V/ 50Hz power supply is optional.

## PRI-1 MODULAR DEHUMIDIFIER

The PRI-1 modular dehumidifier is designed and developed using our company's patented technology. It is a combined rotor dehumidifier specially developed for the workshop which has already been operated and needs to increase the humidity control function. The machine can be used without a foundation or air duct. It is light in weight and easy to move. It can be used on the ground, which greatly facilitates the technical transformation of users and saves investment.

### Product characteristics

1. It completely breaks the process and structural mode of the traditional rotor dehumidifiers, with advanced technology and good dehumidification performance. Each module dehumidifier can be used in a drying room with a height of 2.6m and a size of about 25m<sup>2</sup>, controlling the temperature and humidity parameters within 25℃ and within 20%RH. It can meet the temperature and humidity requirements of most production processes.
2. It is convenient to combine, if the drying room area increases, multiple units can be used to quickly expand the dehumidification capacity. When the area of the drying room is unchanged, increasing the number of dehumidifiers can further reduce the drying room parameters, which can be as low as 25℃ and within 10%RH. Therefore, it is widely used in various environmental control with low humidity process requirements.

### PRI-1 Modular Dehumidifiers Technical Parameters Table

Model	PRI-1	
Supply airflow	m3/h	1000
Supply air temperature	℃	18-26
Relative humidity	%	15-24
React. temperature	℃	100±10
Process fan power	kW	0.38
React. Fan power	kW	0.16
Refrigeration unit power	kW	3.57
Rotor motor power	kW	0.025
React. PTC power	kW	2
Condensate drain pump power	kW	0.045
Cooling water circulating pump	kW	0.37
Cooling tower fan power	kW	0.12
Installed power	kW	6.67
Overall dimensions	mm	803×667×1650
Approx. weight	kg	200

3. Low energy consumption, the rated power of the modular dehumidifier is 6.5kW, and the actual operating power after stable operation is 4kW, which is 1/2 of the similar dehumidifiers.
4. Compact structure and cover a small area, modular dehumidifier adopts advanced technology and technology design, each unit occupies an area 0.5 m<sup>2</sup>, does not affect the original layout of the workshop, easy to implement.
5. There is no need to arrange air ducts in the drying room, which can save a lot of engineering support.
6. The regeneration of the rotor is heated by a new PTC heater, which is highly efficient, safety and long service life.





# ZLLY SERIES MOBILE FOUR SEASONS DEHUMIDIFIERS

ZLLY Series Mobile Four Seasons Dehumidifiers



## PRODUCT CHARACTERISTICS

ZLLY series mobile four seasons dehumidifier adopts the combination of freezing and honeycomb rotor dehumidification method. It is suitable for special coating operations in temporary locations in four seasons. In summer, freeze dehumidification is the main, and rotor dehumidification is the supplement, mixed dehumidification in transition season, dehumidification by rotor in winter or electric heating adjustment. The refrigeration system of this dehumidifier adopts air-cooled condensing refrigeration unit. The processing air is first dehumidified by cooling coil, and then further dehumidified by a rotor according to the working conditions. Desiccant rotor, the key part of the unit is made through the special process to make the adsorbing material silica gel build-in the isotopic carries of

inorganic fiber paper, and processed by corrugated molding, this structure has a considerable moisture absorption area, which greatly improves the dehumidifying capacity. This dehumidifier can reach the technical index of temperature 20-32 °C and relative humidity ≤ 45% under the air inlet condition of temperature - 5-40 °C and relative humidity 50-99%. The condenser of the unit adopts air-cooled steel tube aluminum fins, and the evaporator adopts direct evaporation type steel tube aluminum sheet. The unit provides four working states for the user to choose, which are full refrigeration, refrigeration and rotor mixing, full rotor and rotor mixed with heating. The dehumidifier has 4 ~ 8 air outlets, which are connected with air supply pipes respectively.

ZLLY Series Four Seasons Mobile Dehumidifiers Technical Parameters Table

Model	ZLLY Series Four Seasons Mobile Dehumidifiers Technical Parameters Table						
	ZLLY8000	ZLLY10000	ZLLY12000	ZLLY14000	ZLLY17000	ZLLY21000	ZLLY24000
Rated process airflow	m3/h 8000	10000	12000	14000	17000	21000	24000
Compressor power	kW 40	50	60	75	90	104	120
Elect. Heating power	kW 116	148	192	228	265	332	388
Installed power	kW 169.26	211.06	281.06	336.06	422.06	481.06	567.06
Cooling capacity	kcal/h 10.2 × 104	12.8 × 104	15.3 × 104	19.2 × 104	23.0 × 104	26.6 × 104	30.7 × 104
Dimensions (L × W × H)	mm 430 × 210 × 260	450 × 210 × 260	485 × 220 × 270	485 × 220 × 280	580 × 230 × 275	600 × 240 × 300	600 × 240 × 320
Inlet air data	Temperature -5-40°C, RH 50-99%						
Outlet air data	Temperature 20-32°C, RH ≤ 45%						
Power supply	3phase, 380V, 50Hz						

Note: Larger dehumidifiers can be customized according to user needs.

# GLOVE BOX DEDICATED DEHUMIDIFIERS

Glove Box Dedicated Dehumidifiers



## PRODUCT CHARACTERISTICS

The dehumidifier adopts the R-DD optimized design technology independently developed by our company. The ambient temperature and humidity can be set. When the humidity index is reached, the equipment enters the keep running state and automatically adjusts the energy to achieve the purpose of energy saving. This dehumidifier is composed of two parts: a dehumidifier main unit and a refrigerator, which are connected into a complete system by pipeline valves. The supply and return air of the dehumidifier are connected to the glove box through hoses or PVC pipes.

Glove Box Dedicated Dehumidifiers Technical Parameters Table

Model	Process air		React. fan power, kW	React. heating power, kW	Supply elect. heating power, kW	Rotor motor power, kW	Installed power, kW	Cooling capacity, kW	Dimensions			Approx. weight, kg	Working station
	Airflow, m3/h	Fan power, kW							L, mm	W, mm	H, mm		
ZHD - D - 180	180	0.74	0.18	1.8	0.6	0.03	3.35	2.5	1900	780	1500	200	6-8
ZHD - D - 360	360	1.12	0.18	3.0	0.6	0.04	4.94	4.9	1900	780	1500	250	12-16
ZHD - D - 500	500	1.12	0.18	3.6	1.2	0.04	6.14	6.9	2100	1030	1650	300	16-22
ZHD - D - 750	750	1.47	0.18	6.0	1.2	0.06	8.91	10.3	2100	1030	1650	350	20-30
ZHD - D - 1000	1000	1.65	0.18	7.2	1.8	0.06	10.89	13.7	2300	1180	1800	400	24-36
ZHD - D - 1500	1500	2.25	0.25	10.8	3.0	0.09	16.39	20.6	2300	1180	1800	500	32-44

Note: The dew point temperature in the glove box can be ≤ -40 ~ -50 °C, according to the different configurations of the system.



# GLOVE BOX DEDICATED FRESH AIR DEHUMIDIFIERS

## Glove Box Dedicated Fresh Air Dehumidifiers



### PRODUCT CHARACTERISTICS

For the glove box specially used for liquid injection, due to the concentration of the organic solvent gas volatilized by the electrolyte is too large, when the return air is not allowed, a full exhaust or fresh air process is used. At this time, a full fresh air dehumidifier for glove box is selected.

This dehumidifier is composed of two parts: the dehumidifier main unit and the refrigerator. They are connected by pipelines and valves to form a complete system.

### Technical Parameters Table

Model	Process air		React fan power, kW	React. heating power, kW	Supply elect. heating power, kW	Rotor motor power, kW	Installed power, kW	Cooling capacity, kW	Dimensions			Approx. weight, kg	Working station
	Airflow, m3/h	Fan power, kW							L, mm	W, mm	H, mm		
ZHX-D-100	100	0.55	0.18	1.8	0.6	0.03	3.16	4.8	1800	910	1400	200	1"2
ZHX-D-200	200	0.55	0.18	3.6	0.6	0.50	5.43	9.7	2000	1010	1535	250	6"8
ZHX-D-300	300	0.75	0.18	5.4	1.2	0.50	8.03	14.5	2000	1010	1535	300	12"16
ZHX-D-500	500	1.10	0.25	8.4	1.8	0.80	12.35	24.2	2200	1200	1750	400	16"22
ZHX-D-800	800	1.10	0.37	13.8	3.0	1.00	19.27	38.7	2500	1350	1900	500	20"30
ZHX D 1000	1000	1.10	0.37	16.2	3.6	1.20	22.47	48.3	2500	1350	1900	550	24"36
ZHX-D-1500	1500	2.20	0.75	24.0	5.4	1.50	33.85	72.5	2700	1500	2100	600	32"44

Note: The dew point temperature in the glove box can be  $\leq -40 \sim -50$  °C, according to the different configurations of the system.

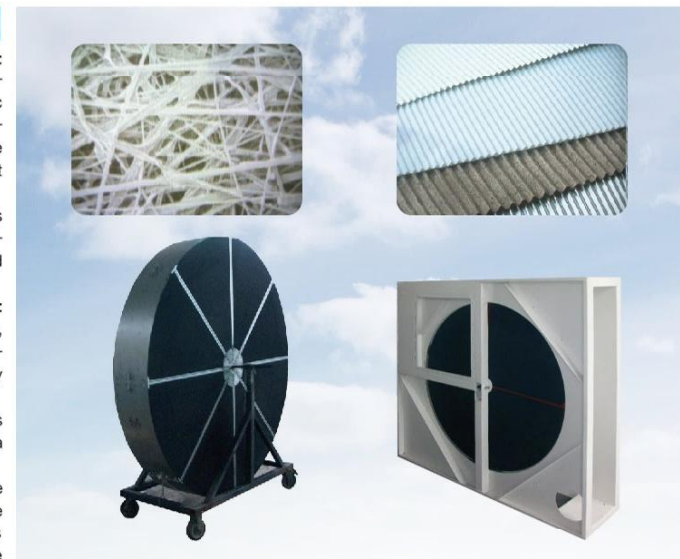
# PERITEK DESICCANT ROTOR

## Desiccant rotor

The dehumidifying desiccant rotor is a key component of the dehumidifier. It is mainly made of a hygroscopic carrier with corrugated pores and a hygroscopic agent through a special process. Peritek use world-class super silicone/composite molecular sieve rotor, this rotor has the following advantages:

### Advantages

- (1). High gluing rate of hygroscopic agent: The rotor contains up to 82% of hygroscopic agent, which has strong hygroscopic ability under low humidity and low temperature environment, and can be used in the dehumidifying field where the dew point temperature is as low as  $-65$  °C
- (2). Excellent fire performance: The rotor is tested by the E-84 standard of the authoritative testing organization (ASTME), and the smoke index is 0.
- (3). Excellent moisture absorption capacity: the dry weight of the rotor is 240 kg / m<sup>3</sup>, and the moisture absorption in a humid environment can reach about 40% of its dry weight.
- (4). The rotor is cleanable: when the rotor is used for some time, it can be cleaned with a special solution.
- (5). Good medium strength: the carrier of the rotor is ceramic fiber, and the compressive strength of the rotor surface exceeds 200kPa, so the strength is good and the service life is long.



### Main Specifications of The Desiccant Rotor

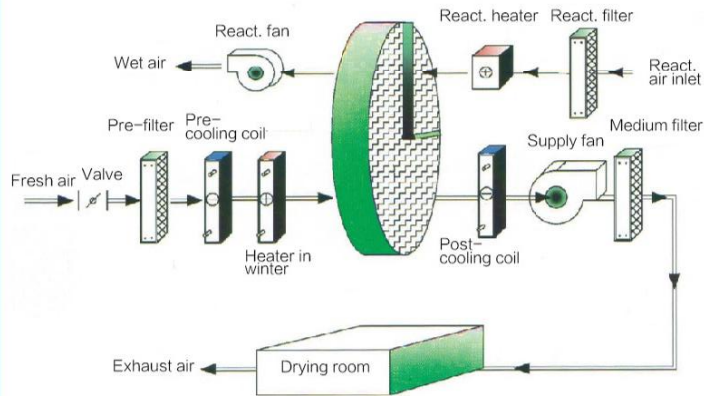
Model	Diameter, (mm)	Thickness, (mm)	Model	Diameter, (mm)	Thickness, (mm)
$\phi$ 200 × 200	200	200	$\phi$ 1000 × 300	1000	300
$\phi$ 250 × 200	250	200	$\phi$ 1050 × 400	1000	400
$\phi$ 300 × 200	300	200	$\phi$ 1200 × 300	1200	300
$\phi$ 500 × 200	500	200	$\phi$ 1200 × 400	1200	400
$\phi$ 500 × 300	500	300	$\phi$ 1370 × 300	1370	300
$\phi$ 600 × 300	600	300	$\phi$ 1370 × 400	1370	400
$\phi$ 600 × 400	600	400	$\phi$ 1500 × 300	1500	300
$\phi$ 800 × 300	800	300	$\phi$ 1500 × 400	1500	400
$\phi$ 800 × 400	800	400	$\phi$ 1800 × 300	1800	300
			$\phi$ 1000 × 400	1000	400

Note: It can be customized according to the special requirements of users.



# APPLICATION TECHNOLOGY OF PERITEK DEHUMIDIFIERS

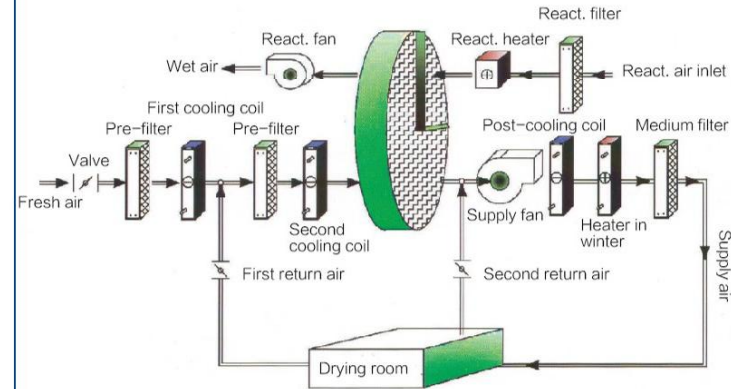
## Full fresh air system



This system is used in places where temperature and humidity are required, but return air is not allowed, such as the injection section of some lithium power plants, chemical plants, spray booths, laboratory detox cabinets, etc.

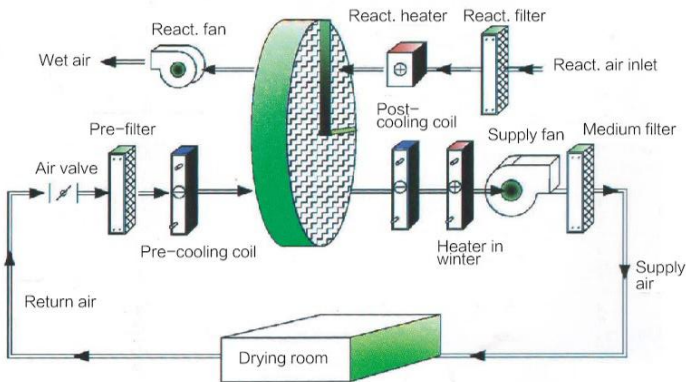
# APPLICATION TECHNOLOGY OF PERITEK DEHUMIDIFIERS

## Mixed system of fresh air and return air



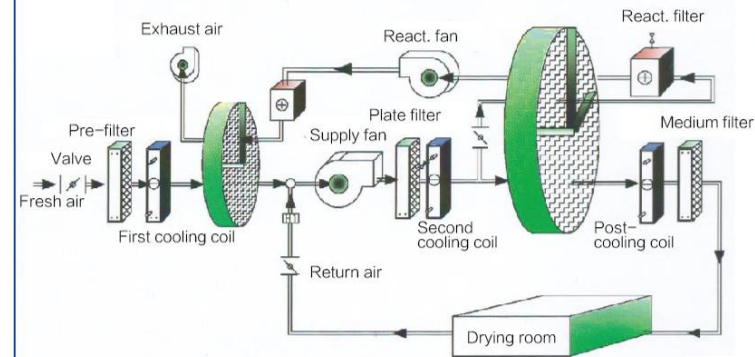
In order to save energy and reduce the operating cost of the system, a fresh air and return air mixing system, such as food, pharmaceutical, electronics, lithium battery production workshops, etc., is adopted on the premise of ensuring the proportion of fresh air, room positive pressure and process air exhaust requirements.

## Full return air system



The full return air system is used for closed-loop indoor dehumidification and occasions where fresh air is not required, such as warehouses, machine rooms, material drying, and moisture-proof treatment.

## Low dew point return air system



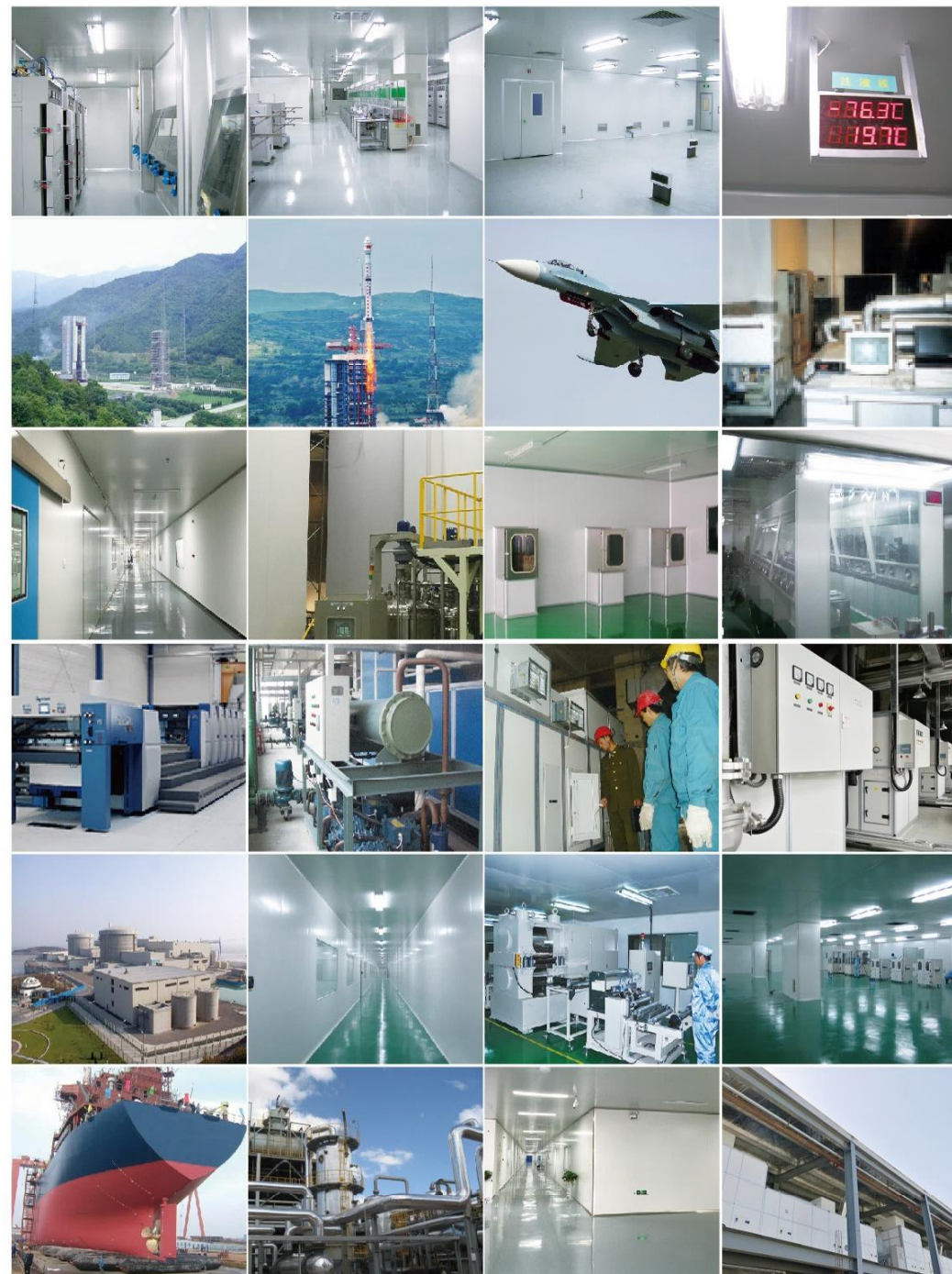
In occasions where the environmental humidity is very strict, such as some sections of lithium battery production and high-end laboratory systems, Peritek low dew point dehumidifiers always use low dew point return air systems.



# PARTS OF APPLICATION CASES



Peritek has a professional installation team, especially has accumulated rich experience in dehumidifier installation, we can undertake dehumidification and drying projects in various industries, and provide customers with a series of comprehensive services such as design, manufacturing, installation, commissioning, maintenance, and undertake "turnkey" projects.





## FDH SERIES FREEZING TYPE HOUSEHOLD DEHUMIDIFIER

### Product characteristics

#### FDH Series Freezing Type Household Dehumidifier

- Quality compressors, the quality of the machine is guaranteed.
- R134 environmental refrigerant without fluorine, meet international export requirements.
- Two air speed, adjustable air outlet.
- Independent air purification function, purify indoor air.
- Switch automatic, dry and dry humidity three control, convenient and practical.
- Automatic shutdown protection when the water tank is full.
- Ultra-quiet design, blue transparent water tank, gray panel, luxurious and beautiful.
- Set timer to automatically turns off after 2, 4, 8 hours.
- Adopts the combined mode of top-outlet and side-outlet, can be used for drying clothes.



FDH Technical Parameters Table

Model	Dehumidify capacity	Power supply	Input power,W	Size,mm	Weight,kg	Applied size,m <sup>2</sup>
FDH - 218BC	18L/D	220V/50Hz	320	582 × 378 × 185	15	15 - 25
FDH - 252BC	25L/D	220V/50Hz	360	572 × 390 × 286	18	25 - 35
FDH - 235BC	35L/D	220V/50Hz	850	450 × 350 × 620	35	40 - 55
FDH - 250BC	50L/D	220V/50Hz	950	450 × 350 × 620	45	55 - 70

## FDH SERIES FREEZING TYPE INDUSTRIAL DEHUMIDIFIERS

### Product characteristics

#### FDH Series Freezing Type Industrial Dehumidifiers

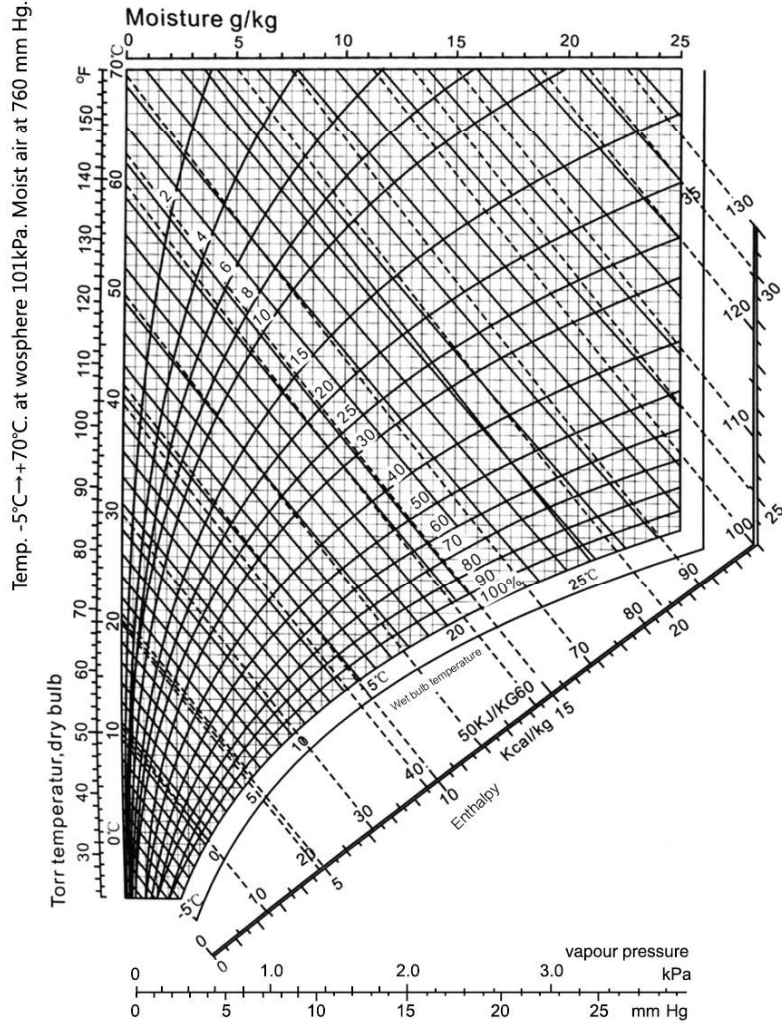
- Adopts imported famous brand compressor
- Digital humidity display, free setting and control
- Free start-up time set (1-24h)
- More powerful dehumidification of turbine blades
- Four universal wheel, convenient for moving
- Failure indication and alarming, easy to operate



FDH Technical Parameters Table

Model	Dehumidify capacity	Power supply	Input power, W	Size, mm	Weight, kg	Applied size, m <sup>2</sup>
FDH - 290BC	90L/D	220V/50Hz	1650	542 × 642 × 1017	60	80 - 120
FDH - 2138BC	138L/D	220V/50Hz	1850	542 × 462 × 1117	70	120 - 160
FDH - 2168BC	168L/D	380V/50H	3600	620 × 420 × 1650	120	150 - 200
FDH - 2200BC	200L/D	380V/50H	4200	760 × 520 × 1650	150	200 - 250
FDH - 2400BC	240L/D	380V/50H	5000	760 × 520 × 1650	180	250 - 300





Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Food Process	Sugar storage	27	35
	Caramel cooling	16	40
	Frosting sugar	27	35
	Macaroni	21-27	38
	Cheese	10-21	35-40
	Dessert raw material storage	-1-4.5	80-85
	Pie drying	18	20
	Biscuits, shortbread packaging	16-18	50
	Potato chips	24-27	20
	Food drying oven	32-35	2 gr/ft
	Chocolate coating	32	13
	Chocolate sugar cooling tunnel	5-7	Below 40
	Chocolate sugar packaging	18	55
	Chocolate storage	16-24	40-50
	Hard candy production	24-27	30-40
	Hard candy mix	24-27	40-50
	Hard candy cooling tunnel	13	Below 55
	Hard candy package	18	55
	Concentrate molasses		Below 25
	Candy store	18-24	45-50
	Candy dry storage	10-13	50
	Honey		Below 25
	Coffee powder packaging	27	20
	Orange essence packaging	27	15
	Flour packaging	18-24	50-65
	Flour storage	18-27	50-65
	Chewing gum cooling	15-22	50
	Chewing gum manufacturing	25	33
	Chewing gum rolling	20	63
	Chewing gum slice	22	53
	Gum material stirred	23	47
	Cereal packaging	24-27	45-50
	Shell storage	16	13 below
	Seed drying and storage	10	30

Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Pharmaceuticals Industry	Powder pre-processing storage	21-21	30-35
	Storage of powder after processing	24-27	15-35
	Powder grinding	27	35
	Dry powder	54-71	20
	Antibiotic packing room	26-28	5-15
	Liver essence taking room	21-27	20-30
	Tableting room	21-27	40
	Tablet coating room	27	35
	Subcutaneous injection	24-27	30
	Micro analysis	24-27	50
	Serum	23-26	50
	Glass bottle manufacture	37	35
	Foaming agent	32	15
	Stimulants	32	15
	Colloid	21	35
	Cough syrup	27	40
	Gland refining agent	26-27	5-10
	Liver refining agent	20-27	20-30
Animal capsule	26	40	
Capsule storage	24	35-40	
Soft capsules drying	23	≤35	
Penicillin packaging	27	5-15	
Antitussive tablets	21	30	
Biological cultivate room	27	35	
Glass injection	27	35	

Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Plywood industry	Paper processing	27	20
	Paper or fibre model	27	20
	Printing and binding	32	30
	Color printing	24-27	46-48
	Color printed base paper storage	23-27	49-51

Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Wood Industry	Wood drying	35-52	6-8
	Low temperature drying of wood can prevent deformation, discoloration and cracking.		
Plywood industry	Process of cold pressure joint	32	15-30



Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Electrical Electronic Industry	Special battery manufacturing	20-25	2 below
	Lithium battery drying room	20-25	1 below
	Electronic parts assembly	20-30	40-45
	Photoelectric tube vacuum tube assembly	20	40
	Instrument manufacturing and correction	21	50-55
	Elect. appliances (beal storage)	22	15
	Lightning arresters	16	20
	Electrical control appliances	20	20-40
	Hygrothermostat	24	50-55
	Precision Instruments	22	40-45
	Instrument correction	23-24	60-63
	Fuse link chain	23	50
	Capacitor manufacturing	23	50
	Super capacitor manufacturing	23	1
	Insulation paper storage	23	50
	Solar light stabilizer	20	20-40
	NFB switch group testing	25	30-60
	Rectifier manufacturing	23	30-40%
High voltage wire and cable manufacturing	27	1	

Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Arms Industry	Ammunition stockpiles	2-24	10-50
	Internal rocket clearance	2	35
	Rocket installation	27	25
	Gunpowder storage	16-17	50
Match Industry	Manufacturing	22-23	50
	Dry drying	21-24	40
	Storage	16-17	50
	Fuse storage	21	40

Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Rubber Industry	Dip products		25-30
	Adhesive products		25-30
	Vulcanization		25-30
	Tyre line storage		7
	Steel spindle room		35
	Storage of rubber raw materials		40-50
	ASIM of product testing		50
Plastic Industry	Constant temperature blending process	27	25-30
	Plastic nylon molding machine	80-110	-30°C DP
	Raw material drying and storage	27	3-15
	Plastic heating molding room	27	25-30
	Plastic sheet processing	21	20

Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Refrigerator manufacturing	Refrigerant control	24	40
	Such as solenoid valves, expansion valves, etc.		
	Compressor combination	21-24	20-45
	Wine hops storage	-1-0	60
	Grain (beer) storage	27	60
	Distiller's yeast (Lester) storage	0-2	75
	Beer short storage	0-2	75
	Barley wine	5-7	75
	Hops storage	2	60
	Fermented wine cellar - beer	5-7	75
	Barley wine	13	75
	Shelf type wine cellar	0-2	75
	Wheat (wine) storage	16	35-40
	Distiller's yeast storage	0-2	
	Brewery process	16-24	45-60
	Repeat distillation	18-22	50-65
	Cigars, cigarette manufacturing	20-22	55-65
	Fur Industry	Fur storage	5-10
Leather storage			40-60
Photography Equipment Industry	Paper drying	-6-52	40-80
	Paper cutting and packing	18-24	40-70
	Storage of film, paper, etc.	21-24	40-65
	Storage of safe film	16-27	40-50
	Storage of nitrate film	7-10	40-50
	Parchment storage	21	35
	Coating and spray paint room	27	Below 50
	Fertilizer storage	Room temperature	40-50
	Chipmuck fodder	0-2	18-25
	Supply air from coke steel making furnace		40 grill
Other Industry	Mosquito incense drying	38	3
	Spray tanks	27	1
	Storage of ceramic clay	17-7	35-65
	Optical appliance room	45-50	45-50
	Melting chamber	24	45
	Glass lamination	20-25	15-20

Industries	Application process	Air conditions	
		Temperature °C	Relative humidity %
Precision Manufacturing Industry	Clock combination	24-27	35-40
	Precision grinding	24-27	45-50
	Industrial precision keyhole	24-27	35-45
	Gear machining & assembly	24-27	35-40
	Precision components	24	45-55
Precision Machinery Industry	General assembly	24-26	35-40
	Precision assembly	20-24	45-50
	General inspection room	20-24	45-50
	Precision inspection room	24	45-50

# INQUIRY OF PROJECT DESIGN

Company Name			
Address			
Department			
Contract Person			
E-mail		Mobile	
Size of new drying room(L × W × H),m <sup>3</sup>			
New drying room floor type:	Cement floor <input type="checkbox"/> Plastic floor <input type="checkbox"/> Self-flowing floor <input type="checkbox"/> Others <input type="checkbox"/>		
New dry room floor/ total floors	/		
Size of room to place dehumidifier (L × W × H)m <sup>3</sup>		Location floor	
Number of staff working in drying room			
Heat production of other equipments, kW			
Moisture production of other equipments, g/h			
Heat production of materials, kcal/h			
Moisture production of materials, g/h			
Temperature required in drying room, °C			
Humidity required in drying rooms, %			
Availability of steam sources	Yes <input type="checkbox"/>	Steam pressure,Mpa	
	No <input type="checkbox"/>		
Availability of chilled water	Yes <input type="checkbox"/>	Temperature,°C	
	No <input type="checkbox"/>		
Power supply			
Other special requirements:			