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Official Website

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LINGYU Energy Equipment Co., Ltd. reserves the right to modify the design and specifications without prior notice.  
Please refer to the actual product.



ENERGY-EFFICIENT. PURE AIR.

**PROFESSIONAL SERVICE PROVIDER  
FOR COMPRESSED AIR PURIFICATION AND SEPARATION**

Professional service provider in the field of compressed air purification and separation

# ABOUT US

Guangdong Lingyu Energy Equipment Co., Ltd.



Note: The above images show the head office, factory, and R&D center.



Established in **2009** in Guangdong Province, China.



National High-Tech Enterprise, National Specialized and Sophisticated "Little Giant" Enterprise, Guangdong Provincial Specialized and Sophisticated SME, and a qualified supplier for state-owned enterprises.



Industry benchmark enterprise, member of multiple industry associations, with **30+** patented technologies.



Achieved annual sales exceeding RMB **100 million** in 2021, maintaining an average annual growth rate of over **25%** for three consecutive years.



A professional manufacturer integrating R&D, production, sales, and after-sales service for compressed air purification systems.



Jointly established Industry-University-Research Laboratories with South China University of Technology and Xi'an Jiaotong University.



Governing member of the Compressed Air Purification Equipment Branch of China General Machinery Industry Association.



Manufacturing base covering **40,000 m<sup>2</sup>**, with a workforce of more than **300** employees.



Comprehensive domestic and international sales network, supported by dedicated domestic sales, overseas sales, and after-sales service teams, with **40+** sales and service centers nationwide.

## LINGYU CORE VALUES



SUSTAINABILITY



WIN-WIN  
COOPERATION



INTEGRITY



INNOVATION

# DEVELOPMENT MILESTONES



## 2022-PRESENT | STRATEGIC EXPANSION

1. Joined the Foshan Hydrogen Energy Industrial Park and established the Hydrogen Energy Equipment Manufacturing Base.
2. Jointly founded the Hydrogen Energy Equipment Research Institute with Xi'an Jiaotong University.
3. Collaborated with South China University of Technology to establish the Hydrogen Energy Integrated Laboratory.
4. Recognized as a National Specialized and Sophisticated "Little Giant" Enterprise.
5. Awarded the Third Prize of the Guangdong Provincial Machinery Industry Science & Technology Award.
6. Received the Third Prize of Guangdong Manufacturing Innovation & Entrepreneurship Competition ("Maker Guangdong").
7. New manufacturing facility covering 40,000 m<sup>2</sup> officially commenced operation, significantly expanding production capacity.



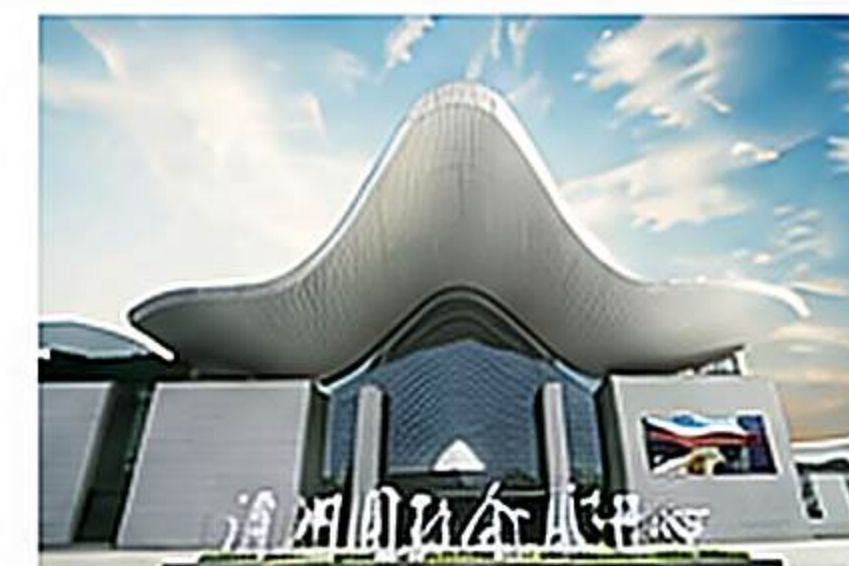
## 2019-2021 | QUALITY EXCELLENCE

1. Increased investment in R&D and accelerated market expansion.
2. Certified as a Guangdong Provincial Specialized and Sophisticated SME.
3. Annual sales exceeded RMB 100 million in 2021.
4. Featured on CCTV's "Brand Power" Program.
5. Air dryers and filters successfully passed Quality & Safety Certification.
6. Comprehensive implementation of the ERP management system.



## 2016-2018 | TRANSFORMATION & UPGRADING

1. Successfully developed the industry's first energy-efficient compressed air purification technology.
2. Products were featured by CCTV's "Craftsmanship" Program.
3. Expanded product portfolio with over 20 proprietary technologies.
4. Refrigerated air dryers received Guangdong High-Tech Product Certification.
5. Established an independent Sales & Service Center.



## 2013-2015 | RAPID GROWTH

1. Refrigerated air dryers obtained National Industrial Product Production License.
2. Became one of the earliest domestic manufacturers specializing in refrigerated air dryers.
3. Established a strategic market position for compressed air purification equipment.
4. Positioned the company as an "Artisan Enterprise" with a focus on premium quality.
5. Enhanced employee engagement through a comprehensive corporate culture program.



## 2009-2012 | EARLY DEVELOPMENT

1. Obtained the National Industrial Product Manufacturing License.
2. Phase I manufacturing facility completed and put into operation.
3. Developed multiple proprietary technologies and obtained patents.
4. Established the company's first standardized management team.
5. Successfully certified to the ISO 9001 Quality Management System.

BRAND VISION

Creating a World-Renowned Brand



# CORPORATE HONORS

Recognized Quality, Proven Excellence



High-Tech Enterprise



Specialized and Sophisticated Enterprise



Credit Rating AAA Enterprise



AAA Quality Service Enterprise



Invention Patent Certificate



Utility Model Patent Certificate



Design Patent Certificate



Software Copyright Registration Certificate

Accumulated 30+ Patent Certificates



ISO 14001  
Environmental Management  
System Certification



ISO 9001  
Quality Management  
System Certification



ISO 45001  
Occupational Health and Safety  
Management System Certification



ISO 45001  
Occupational Health and Safety  
Management System Certification



GCCA Product Quality  
Safety Certificate  
(Refrigerated Air Dryer)



GCCA Product Quality  
Safety Certificate  
(Adsorption Air Dryer)



ADSORPTION COMPRESSED  
AIR DRYER CE CERTIFICATE



REFRIGERATED COMPRESSED  
AIR DRYER CE CERTIFICATE



COMBINED COMPRESSED  
AIR DRYER CE CERTIFICATE



## OUR MISSION

To provide professional, comprehensive, and competitive solutions for compressed air purification and gas separation.



## OUR VISION

To be a leading enterprise and a world-renowned brand.



## OUR PHILOSOPHY

Technology-driven, value-oriented.



## OUR VALUES

Professionalism, Stability, and Service Excellence.



## MARKETING STRATEGY

Deliver high-quality products and professional services to create value for our customers.



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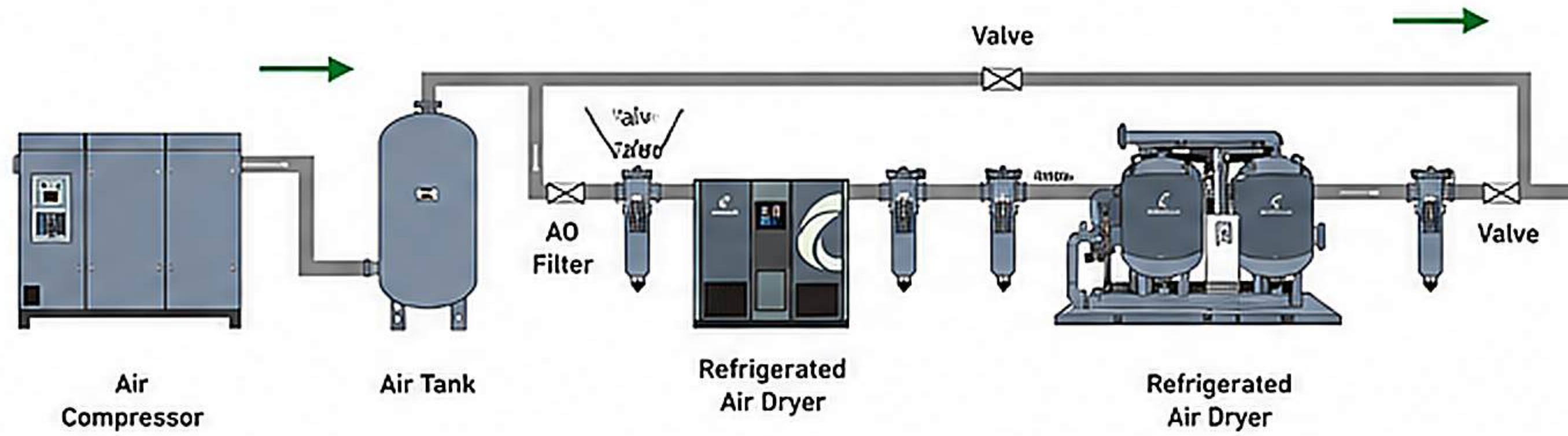
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# 01 COMPRESSED AIR PURIFICATION SYSTEM

Compressed air purification system

The compressed air used in industrial fields undergoes various operations and processes, making it inevitable that oil, moisture, dust, and other impurities are generated during the production process. If the compressed air is not properly purified, dried, and filtered, it will not only affect the performance and service life of equipment and pneumatic tools, but may also lead to product quality defects, production line interruptions, and even serious safety accidents.

TYPICAL INSTALLATION DIAGRAM OF  
COMPRESSED AIR PURIFICATION SYSTEM



Note: The above is a typical configuration. The actual system may vary depending on user requirements.

## QUESTION 1: COMPRESSED AIR MOISTURE

Purification solutions: Refrigerated air dryer, desiccant air dryer, adsorption dryer

### FORM OF CONTAMINATION

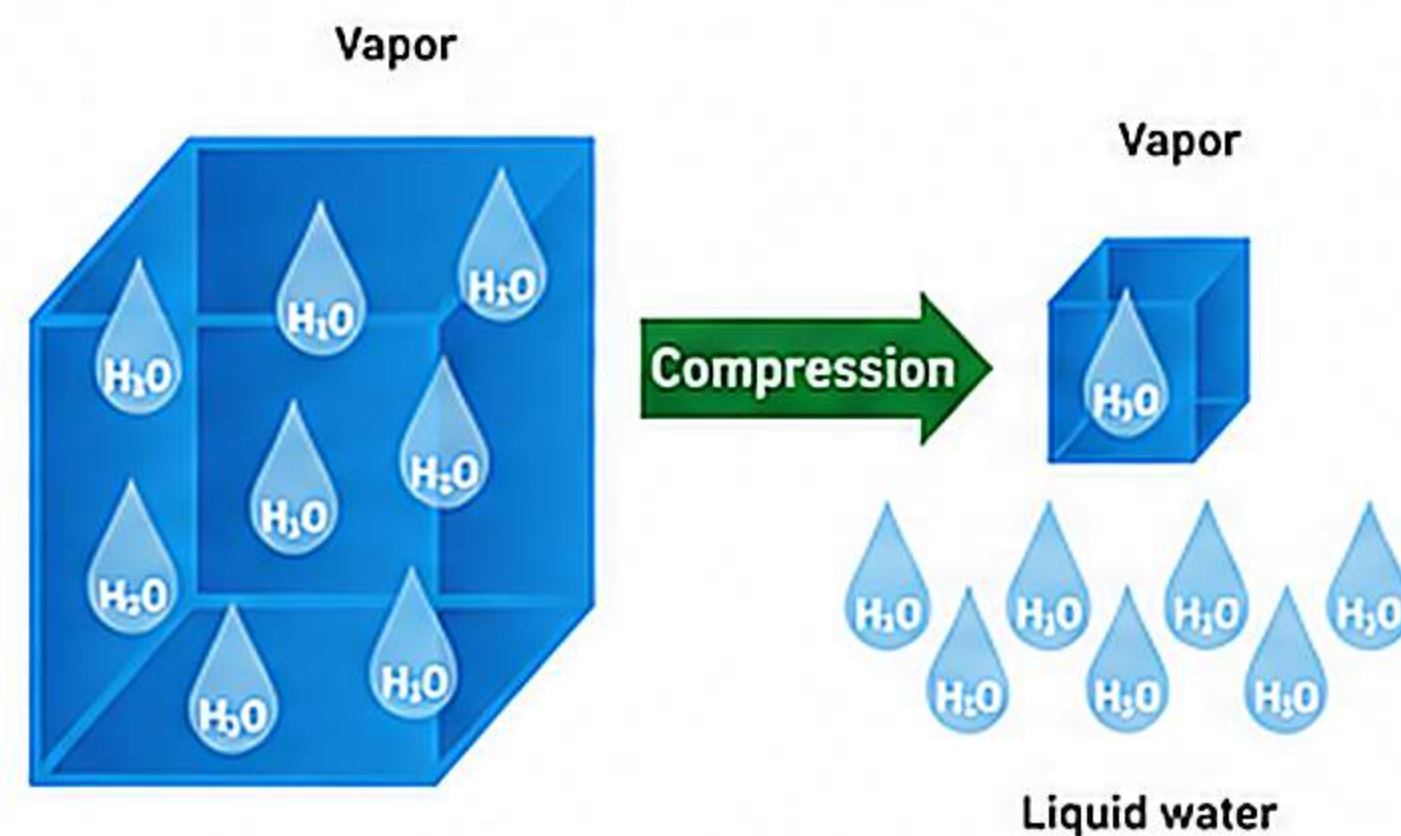
Water vapor, liquid water

### HOW ARE CONTAMINANTS FORMED?

Moisture is naturally present in the air we breathe. When air is compressed, the amount of moisture increases. As the temperature of the compressed air cools down in the system, the moisture condenses into liquid water.

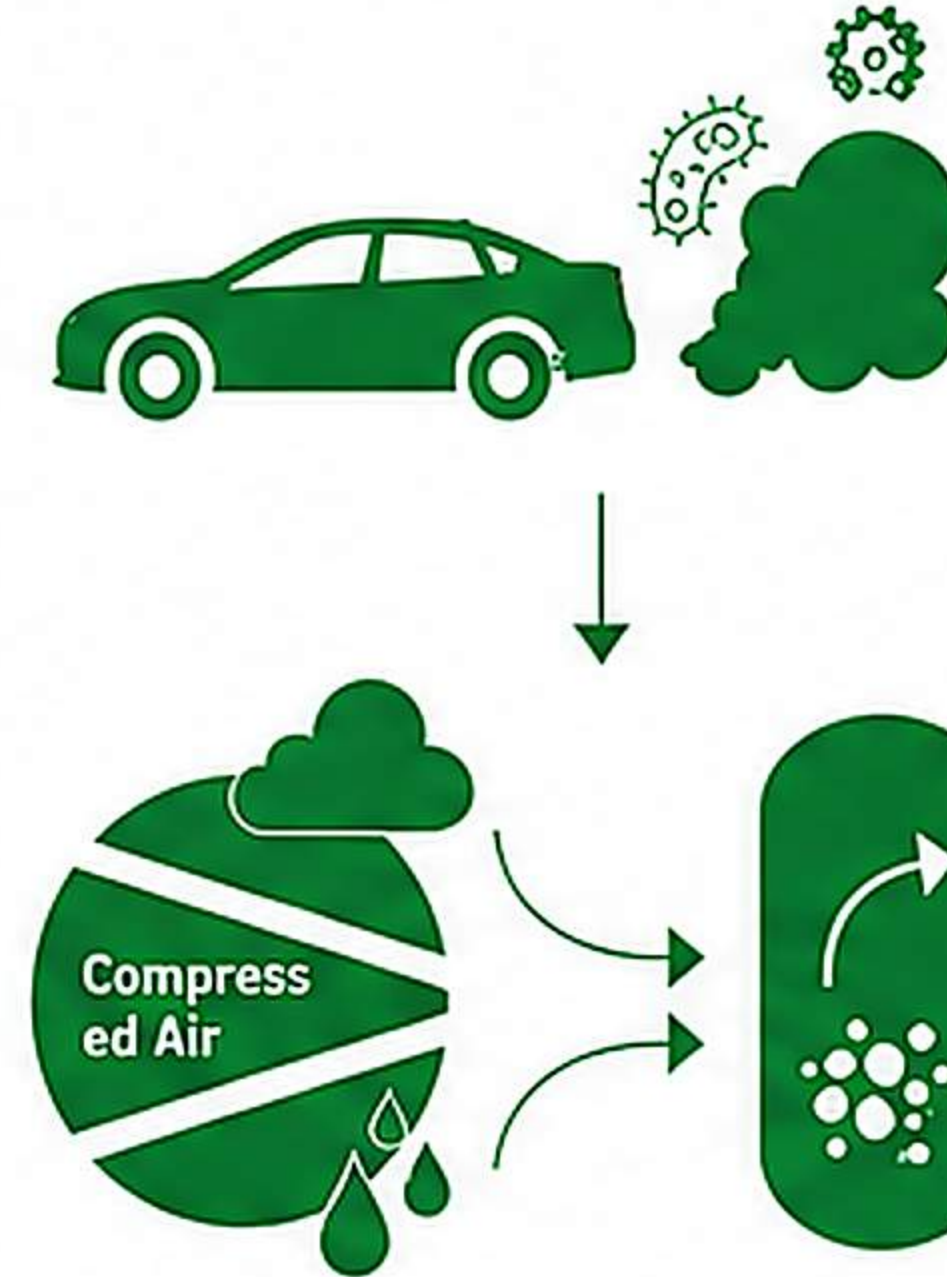
### WHAT PROBLEMS CAN CONTAMINANTS CAUSE?

- Equipment corrosion
- Pipeline blockage
- Reduced product quality
- Pipeline
- Control system failure
- Leakage



## QUESTION 2: COMPRESSED AIR CARRYOVER OIL

Purification solutions: Refrigerated air dryer, coalescing filter, oil removal filter, oil-water separator, high-efficiency oil removal filter, etc.



### FORM OF CONTAMINATION

Liquid oil, oil mist, vapor

### WHAT PROBLEMS CAN CONTAMINANTS CAUSE?

- Damages equipment, causing malfunctions and increased maintenance costs
- Reduced efficiency and unstable operation of pneumatic systems
- Product contamination
- Increased maintenance costs

### HOW ARE CONTAMINANTS FORMED?

Lubricating oil is used in compressors. When compressed air flows through the systems and tools, the oil is carried along as mist and vapor and enters the downstream equipment and end users.

## QUESTION 3: SOLID PARTICLES IN COMPRESSED AIR

Purification solutions: Particulate filter, automatic drain

### FORM OF CONTAMINATION

Dust, particles, scale

### HOW ARE CONTAMINANTS FORMED?

Dust and particles enter the system with the intake air. They are generated when compressed air flows through piping, dryers, and tools, or caused by rust and scale from the pipeline.

### WHAT PROBLEMS CAN CONTAMINANTS CAUSE?

- Damages equipment, causing malfunctions and increased maintenance costs



# 01 COMPRESSED AIR PURIFICATION SYSTEM

Compressed air purification system

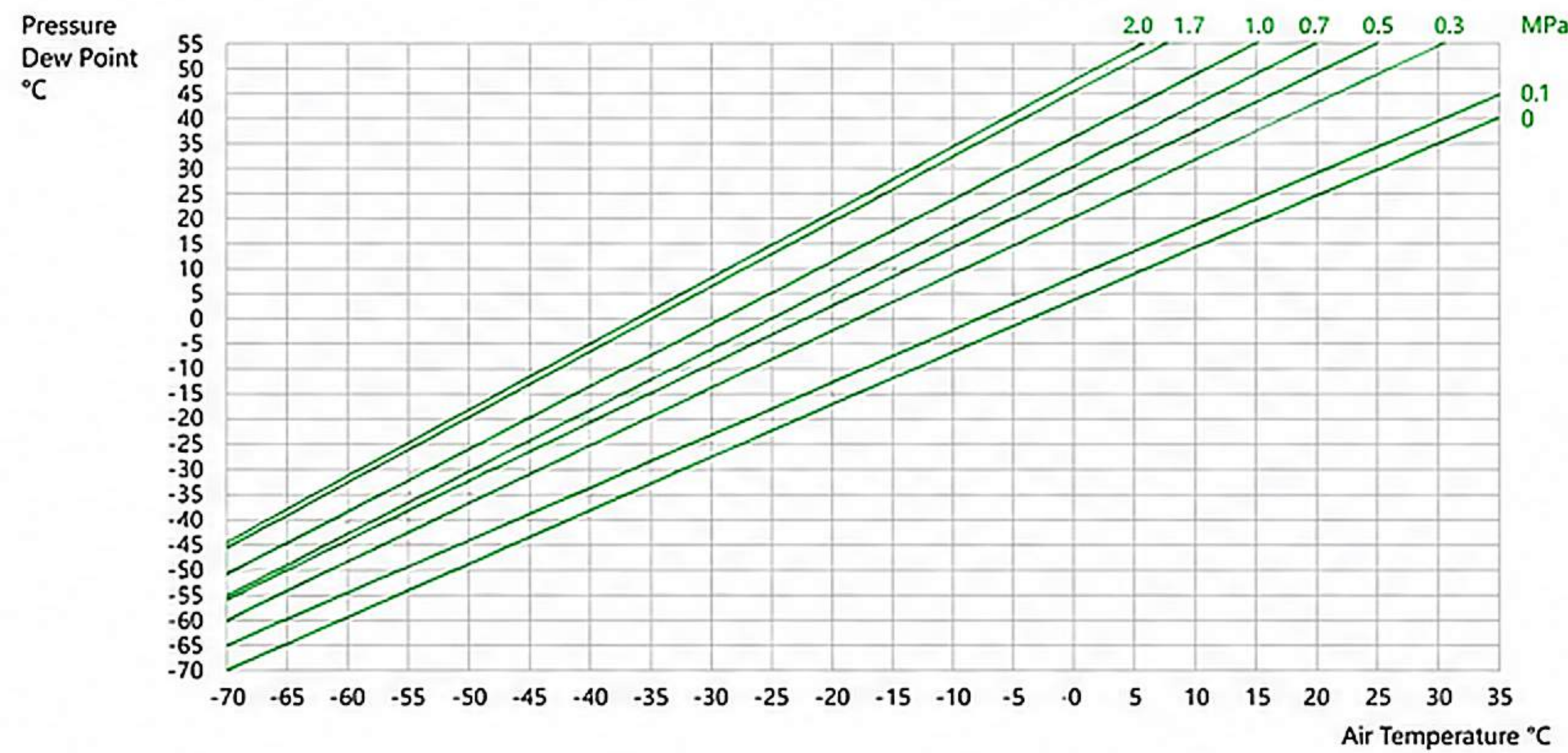
## What is humid compressed air?

Under certain temperature and pressure conditions, the air contains a certain amount of water vapor (in other words, the moisture content). When the temperature decreases, the water vapor in the air reaches saturation. At this point, any further decrease in temperature will cause some of the water vapor to condense into liquid water.

## Dew point explanation:

At a certain pressure, as the temperature of the compressed air decreases, the water vapor in the air reaches saturation and begins to condense into liquid. The temperature at which this condensation begins is called the pressure dew point. The pressure dew point is related to the amount of water vapor in the air—the higher the moisture content, the higher the pressure dew point; the lower the moisture content, the lower the pressure dew point.

Pressure Dew Point – Pressure Relation Chart



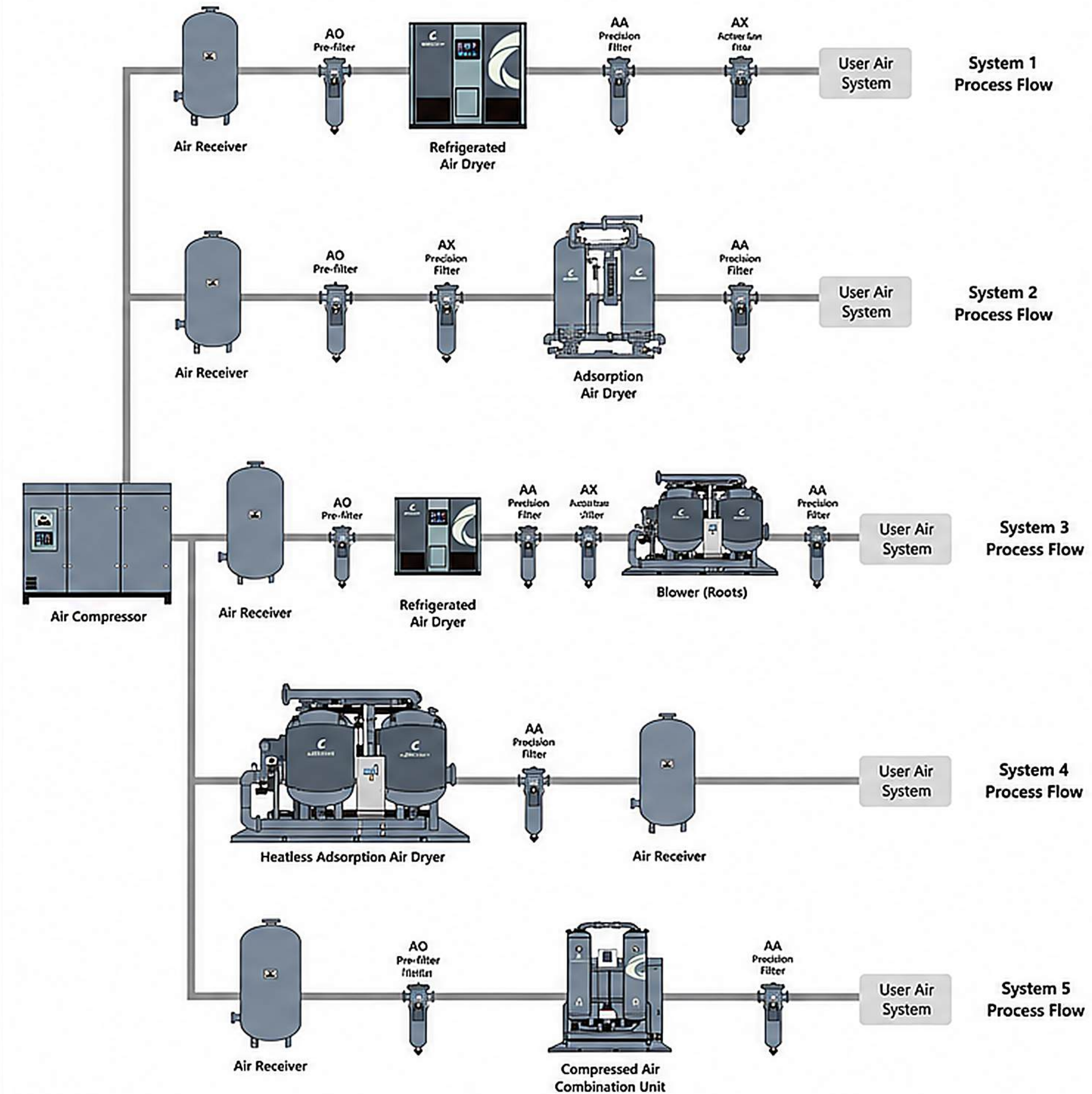
Pressure Dew Point – Moisture Content Reference Table

| Dew Point (°C) | Water Content g/m <sup>3</sup> | Dew Point (°C) | Water Content g/m <sup>3</sup> | Dew Point (°C) | Water Content g/m <sup>3</sup> | Dew Point (°C) | Water Content g/m <sup>3</sup> | Dew Point (°C) | Water Content g/m <sup>3</sup> |
|----------------|--------------------------------|----------------|--------------------------------|----------------|--------------------------------|----------------|--------------------------------|----------------|--------------------------------|
| 14             | 12.070                         | 1              | 5.192                          | -12            | 2.0060                         | -25            | 2.7074                         | -38            | 0.2141                         |
| 13             | 11.350                         | 0              | 4.847                          | -13            | 1.8760                         | -26            | 0.6463                         | -39            | 0.1940                         |
| 12             | 10.660                         | -1             | 4.523                          | -14            | 1.7360                         | -27            | 0.5922                         | -40            | 0.1757                         |
| 11             | 10.010                         | -2             | 4.217                          | -15            | 1.6050                         | -28            | 0.5422                         | -41            | 0.1590                         |
| 10             | 9.309                          | -3             | 3.930                          | -16            | 1.4830                         | -29            | 0.4960                         | -42            | 0.1438                         |
| 9              | 8.819                          | -4             | 3.660                          | -17            | 1.3690                         | -30            | 0.4534                         | -43            | 0.1298                         |
| 8              | 8.270                          | -5             | 3.4070                         | -18            | 1.2610                         | -31            | 0.4141                         | -44            | 0.1172                         |
| 7              | 7.50                           | -6             | 3.1690                         | -19            | 1.1650                         | -32            | 0.3779                         | -45            | 0.1055                         |
| 6              | 7.260                          | -7             | 2.9460                         | -20            | 1.0740                         | -33            | 0.3445                         | -46            | 0.0950                         |
| 5              | 6.797                          | -8             | 2.7370                         | -21            | 0.9884                         | -34            | 0.3138                         | -47            | 0.0854                         |
| 4              | 6.360                          | -9             | 2.5410                         | -22            | 0.9993                         | -35            | 0.2856                         | -48            | 0.0768                         |
| 3              | 5.947                          | -10            | 2.3580                         | -23            | 0.8359                         | -36            | 0.2597                         | -49            | 0.0689                         |
| 2              | 5.559                          | -11            | 2.1860                         | -24            | 0.7678                         | -37            | 0.2359                         | -50            | 0.0617                         |

COMPRESSED AIR PURIFICATION,  
PROFESSIONAL SOLUTIONS, RELIABLE SERVICE



## COMPRESSED AIR PURIFICATION SYSTEM PROCESS FLOW



Note: The above is for reference only.  
Actual configurations may vary depending on user requirements.

# 02 REFRIGERATED AIR DRYER

Compressed air purification system

## 2.1 AH Series High-Temperature Air-Cooled Refrigerated Air Dryer



Note: LY-D600AH (as an example).

### WORKING PRINCIPLE

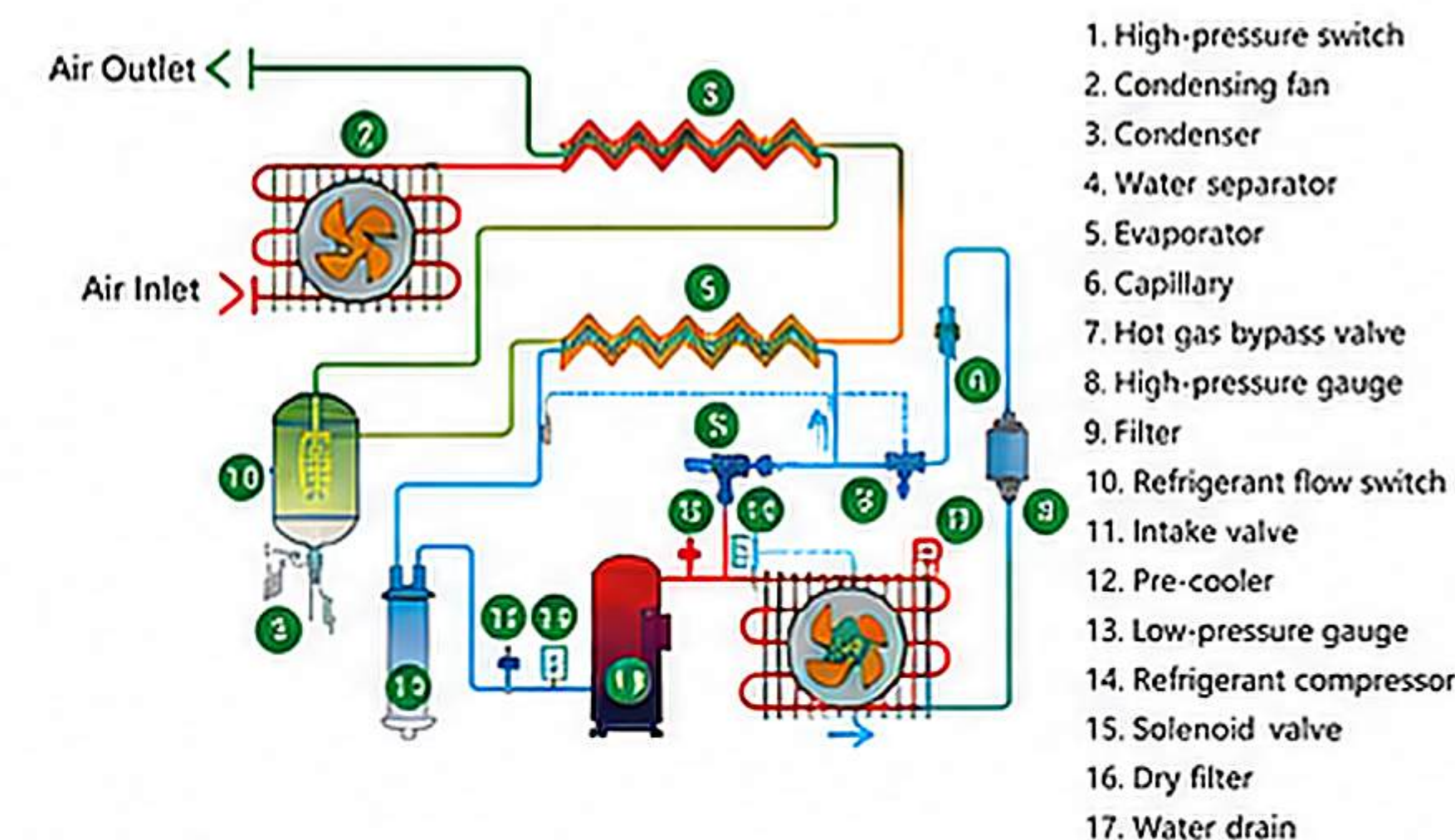
Compressed air containing moisture, oil and high-temperature gas enters the pre-cooler and air-to-air heat exchanger, where it is pre-cooled and heat exchanged to remove most of the sensible heat. The pre-cooled air then enters the evaporator, where it is further cooled to a pressure dew point of 2~10°C. The moisture in the air condenses into liquid water. The condensed water is separated by the water separator and automatically drained out. The dried, low-temperature and low-humidity compressed air is then reheated through the air-to-air heat exchanger, where it is reheated to close to ambient temperature before being sent to the end-use equipment.

### DESIGN FEATURES

- High Reliability**  
Core components are produced by leading domestic and international brands, including compressors, condensers, refrigerant components, control valves, fan motors, and protective devices, ensuring stable and reliable equipment performance.
- Efficient Heat Exchange**  
The heat exchangers feature enlarged heat exchange area and multi-channel flow design for higher efficiency and lower pressure drop.
- User-Friendly Design**  
Compact structure with a small footprint, making installation and maintenance convenient.
- Intelligent Control System**  
Equipped with a microcomputer controller, dual temperature sensors (inlet & outlet), and high/low pressure protection, enabling automatic operation and energy savings.
- Strong Customization Capability**  
Supports customized colors, PLC control, remote monitoring, Modbus communication, and other functions to meet different customer requirements.

### OPERATING CONDITIONS AND TECHNICAL REQUIREMENTS

- Rated inlet pressure: 0.7 MPa  
(0.6 MPa ~ 1.0 MPa is allowed. Other working pressures are subject to customization)
- Rated inlet temperature:  $\leq 50^{\circ}\text{C}$   
(Limit inlet temperature:  $\leq 80^{\circ}\text{C}$ )
- Pressure dew point:  $2^{\circ}\text{C} \sim 10^{\circ}\text{C}$
- Ambient temperature:  $\leq 35^{\circ}\text{C}$   
( $2^{\circ}\text{C} \sim 45^{\circ}\text{C}$  can be used)
- Maximum inlet pressure drop:  $\leq 0.025 \text{ MPa}$
- Cooling method: Air-cooled
- Refrigerant: R22  
(R407C, R410A and other environmentally friendly refrigerants are subject to customization)
- Installation: Indoor installation, ensure a clearance of at least 1.5 m around the unit for proper ventilation.



Schematic Diagram of AH Series High-Temperature Air-Cooled Refrigerated Air Dryer

### TECHNICAL PARAMETER

| Model      | Capacity (m³/min) | Voltage (V/Hz) | Power (kW) | Air Inlet/Outlet | Equipment Weight (kg) | Dimension (mm) L x W x H |
|------------|-------------------|----------------|------------|------------------|-----------------------|--------------------------|
| LY-D10AC   | 1.5               | 220/50         | 0.68       | G1"              | 49                    | 680 x 440 x 710          |
| LY-D20AC   | 2.5               | 220/50         | 0.83       | G1"              | 58                    | 800 x 440 x 800          |
| LY-D30AH   | 3.8               | 220/50         | 1.10       | G1.5"            | 104                   | 980 x 500 x 930          |
| LY-D50AH   | 6.5               | 220/50         | 1.50       | G1.5"            | 129                   | 1030 x 550 x 1000        |
| LY-D75AH   | 10.5              | 220/50         | 2.20       | G2"              | 177                   | 1240 x 650 x 1150        |
| LY-D100AH  | 13.5              | 380/50         | 3.10       | G2.5"            | 215                   | 1350 x 670 x 1300        |
| LY-D120AH  | 17.0              | 380/50         | 3.10       | G2.5"            | 222                   | 1350 x 670 x 1300        |
| LY-D150AH  | 21.5              | 380/50         | 5.20       | DN80             | 283                   | 1450 x 700 x 1510        |
| LY-D180AH  | 25.0              | 380/50         | 5.20       | DN80             | 310                   | 1450 x 700 x 1510        |
| LY-D200AH  | 28.5              | 380/50         | 5.50       | DN80             | 334                   | 1550 x 850 x 1595        |
| LY-D250AH  | 32.0              | 380/50         | 6.20       | DN80             | 406                   | 1550 x 850 x 1595        |
| LY-D300AH  | 37.0              | 380/50         | 7.80       | DN100            | 524                   | 1550 x 850 x 1740        |
| LY-D350AH  | 41.5              | 380/50         | 7.80       | DN100            | 600                   | 1700 x 850 x 1740        |
| LY-D400AH  | 45.0              | 380/50         | 10.0       | DN100            | 630                   | 1830 x 950 x 1840        |
| LY-D450AH  | 50.0              | 380/50         | 10.0       | DN100            | 680                   | 1830 x 950 x 1840        |
| LY-D500AH  | 55.0              | 380/50         | 11.7       | DN125            | 714                   | 2020 x 950 x 1850        |
| LY-D550AH  | 60.0              | 380/50         | 11.7       | DN125            | 830                   | 2020 x 950 x 1850        |
| LY-D600AH  | 65.0              | 380/50         | 11.9       | DN125            | 950                   | 2300 x 1300 x 1930       |
| LY-D700AH  | 75.0              | 380/50         | 13.9       | DN125            | 950                   | 2390 x 1395 x 1805       |
| LY-DZ00AH  | 75.0              | 380/50         | 16.2       | DN125            | 1050                  | 2390 x 1290 x 1805       |
| LY-D800AH  | 85.0              | 380/50         | 16.2       | DN125            | 1200                  | 2400 x 1420 x 1860       |
| LY-D900AH  | 95.0              | 380/50         | 16.7       | DN150            | 1350                  | 3000 x 1550 x 2145       |
| LY-D1100AH | 110.0             | 380/50         | 19.7       | DN150            | 1450                  | 3100 x 1600 x 2180       |

Note: For air volume greater than 110 m³/min or special specifications, materials, or temperature requirements, please contact our company or dealer for technical information. The above data is for reference only and is subject to change without prior notice. For other specifications, please contact our company directly.

# 02 REFRIGERATED AIR DRYER

Compressed air purification system

## 2.2 WH Series High-Temperature Water-Cooled Refrigerated Air Dryer



Note: LY-D600WH (as an example).

### WORKING PRINCIPLE

Compressed air containing moisture and oil enters the pre-cooler and air-to-water heat exchanger, where it is pre-cooled and the sensible heat is removed, lowering the temperature of the compressed air. The pre-cooled air then enters the evaporator, where it is further cooled to a pressure dew point of  $2^{\circ}\text{C} \sim 10^{\circ}\text{C}$ . The moisture in the air condenses into liquid water. Oil and a portion of water are separated in the water separator. The remaining oil and water are discharged through the automatic drain. The dried, low-temperature air then passes through the air-to-air heat exchanger, where it is reheated close to ambient temperature before being delivered to the end-user equipment.

### DESIGN FEATURES

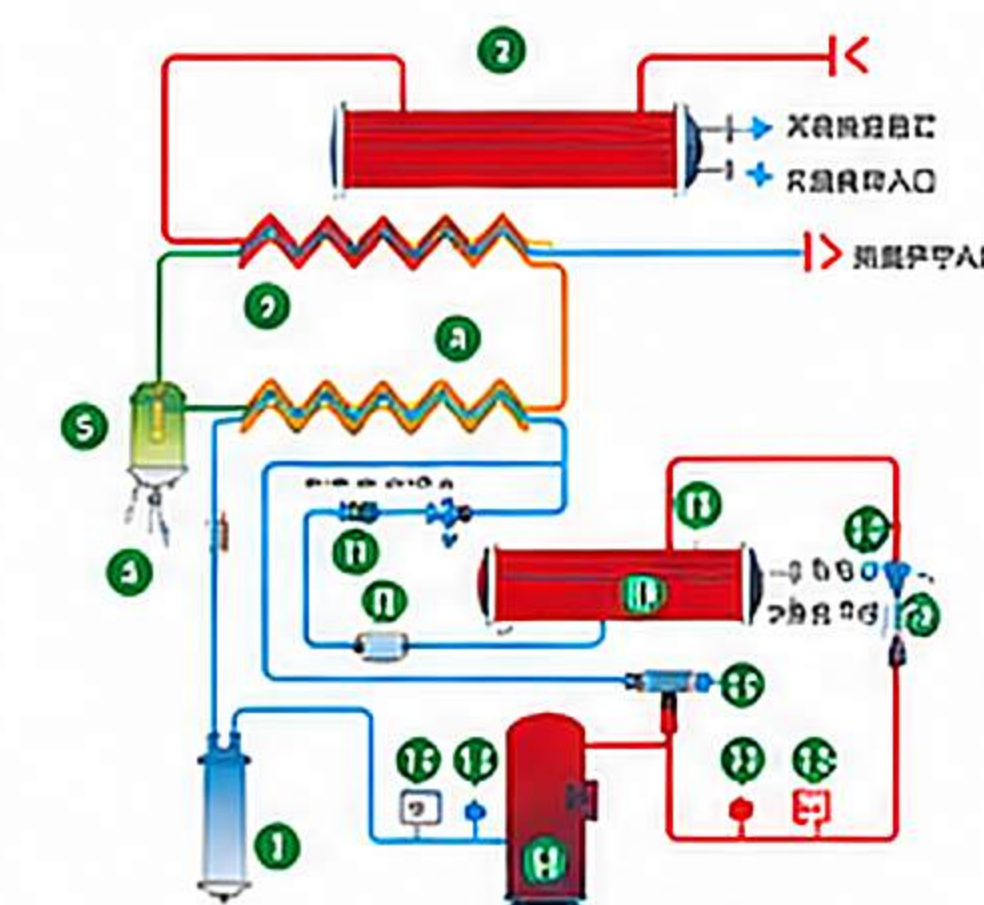
- High Reliability**  
Core components are sourced from leading global brands such as Panasonic, Copeland, Danfoss and Hanbell. At the same time, well-known brands for valves, motors and electrical components are selected to ensure stable and reliable equipment performance.
- Efficient Heat Exchange**  
The heat exchangers feature an optimized structure and high-efficiency finned tube design to ensure high heat exchange efficiency and low pressure drop.
- User-Friendly Design**  
Compact structure with a small footprint and simplified installation and maintenance.
- Intelligent Control System**  
Adopts dual temperature sensors (inlet & outlet) with high/low pressure protection. Supports automatic operation and energy-saving control.
- Strong Customization Capability**  
Supports color customization, PLC control, remote monitoring, Modbus communication, and other functions according to customer requirements.

COMPRESSED AIR PURIFICATION,  
PROFESSIONAL SOLUTIONS, RELIABLE SERVICE



### OPERATING CONDITIONS AND TECHNICAL REQUIREMENTS

- Rated inlet pressure: 0.7 MPa  
(0.6 MPa ~ 1.0 MPa is allowed. Other working pressures are subject to customization)
- Rated inlet temperature:  $\leq 50^{\circ}\text{C}$   
(Limit inlet temperature:  $\leq 80^{\circ}\text{C}$ )
- Pressure dew point:  $2^{\circ}\text{C} \sim 10^{\circ}\text{C}$
- Ambient temperature:  $\leq 32^{\circ}\text{C}$   
( $2^{\circ}\text{C} \sim 45^{\circ}\text{C}$  can be used)
- Maximum inlet pressure drop:  $\leq 0.025$  MPa
- Cooling method: Water-cooled
- Cooling water pressure: 0.2 ~ 0.4 MPa
- Cooling water temperature:  $\leq 32^{\circ}\text{C}$   
( $2^{\circ}\text{C} \sim 38^{\circ}\text{C}$  can be used)
- Refrigerant: R22  
(R407C, R410a and other environmentally friendly refrigerants are subject to customization)
- Installation: Indoor installation.  
Keep at least 1.5 m clearance around the unit for proper ventilation.



1. Refrigerant gas separator
2. Condenser
3. System fan
4. Drier filter
5. Water separator
6. Capillary
7. Hot gas bypass valve
8. High-pressure gauge
9. Filter
10. Refrigerant flow switch
11. Inlet valve
12. Pre-cooler
13. Low-pressure gauge
14. Refrigerant compressor
15. Solenoid valve
16. Dry filter
17. Water drain

Schematic Diagram of WH Series  
High-Temperature Water-Cooled Refrigerated Air Dryer

### TECHNICAL PARAMETER

| Model      | Capacity (m <sup>3</sup> /min) | Voltage (V/Hz) | Power (kW) | Cooling Water Inlet | Air Inlet/Outlet | Equipment Weight (kg) | Dimension (mm) L x W x H |
|------------|--------------------------------|----------------|------------|---------------------|------------------|-----------------------|--------------------------|
| LY-D75WH   | 10.5                           | 220/50         | 1.8        | G1"                 | G2"              | 160                   | 1240×650×1150            |
| LY-D100WH  | 13.5                           | 380/50         | 2.6        | G1"                 | G2.5"            | 225                   | 1350×670×1300            |
| LY-D120WH  | 17.0                           | 380/50         | 2.6        | G1"                 | G2.5"            | 235                   | 1350×670×1300            |
| LY-D150WH  | 21.5                           | 380/50         | 4.6        | G1"                 | DN80             | 295                   | 1450×700×1510            |
| LY-D180WH  | 25.0                           | 380/50         | 4.6        | G1"                 | DN80             | 345                   | 1450×700×1510            |
| LY-D200WH  | 28.5                           | 380/50         | 4.6        | G1½"                | DN80             | 430                   | 1550×850×1595            |
| LY-D250WH  | 32.0                           | 380/50         | 5.4        | G1½"                | DN80             | 450                   | 1550×850×1595            |
| LY-D300WH  | 37.0                           | 380/50         | 6.9        | G1½"                | DN100            | 550                   | 1700×850×1740            |
| LY-D350WH  | 41.5                           | 380/50         | 6.9        | G1½"                | DN100            | 600                   | 1700×850×1740            |
| LY-D400WH  | 45.0                           | 380/50         | 8.7        | G1½"                | DN100            | 630                   | 1830×950×1840            |
| LY-D450WH  | 50.0                           | 380/50         | 8.7        | G1½"                | DN100            | 680                   | 1830×950×1840            |
| LY-D500WH  | 55.0                           | 380/50         | 10.3       | G2"                 | DN125            | 780                   | 2020×950×1650            |
| LY-D550WH  | 60.0                           | 380/50         | 10.3       | G2"                 | DN125            | 830                   | 2020×950×1650            |
| LY-D600WH  | 65.0                           | 380/50         | 21         | G2"                 | DN125            | 900                   | 2250×1300×1595           |
| LY-D700WH  | 75.0                           | 380/50         | 11.6       | G2"                 | DN125            | 1000                  | 2180×1395×1625           |
| LY-D800WH  | 85.0                           | 380/50         | 13.8       | G2"                 | DN125            | 1150                  | 2280×1395×1625           |
| LY-D900WH  | 95.0                           | 380/50         | 15.5       | G2"                 | DN150            | 1300                  | 2450×1450×1766           |
| LY-D1100WH | 110.0                          | 380/50         | 17.0       | G2"                 | DN150            | 1400                  | 2450×1540×1850           |
| LY-D1200WH | 120.0                          | 380/50         | 19.2       | G2"/G2½"            | DN150            | 1500                  | 2600×1540×1895           |
| LY-D1400WH | 140.0                          | 380/50         | 20.4       | G2½"                | DN200            | 1750                  | 2600×1750×1950           |
| LY-D1600WH | 160.0                          | 380/50         | 21.9       | G2½"                | DN200            | 1950                  | 2650×1950×2100           |

Note: For air volume greater than 110 m<sup>3</sup>/min or special specifications, materials, or temperature requirements, please contact our company or dealer for technical information. The above data is for reference only and is subject to change without prior notice. For other specifications, please contact our company directly.

# 02 REFRIGERATED AIR DRYER

Compressed air purification system

## 2.3.1 PD Series Panel Type Air Dryer



### WORKING PRINCIPLE

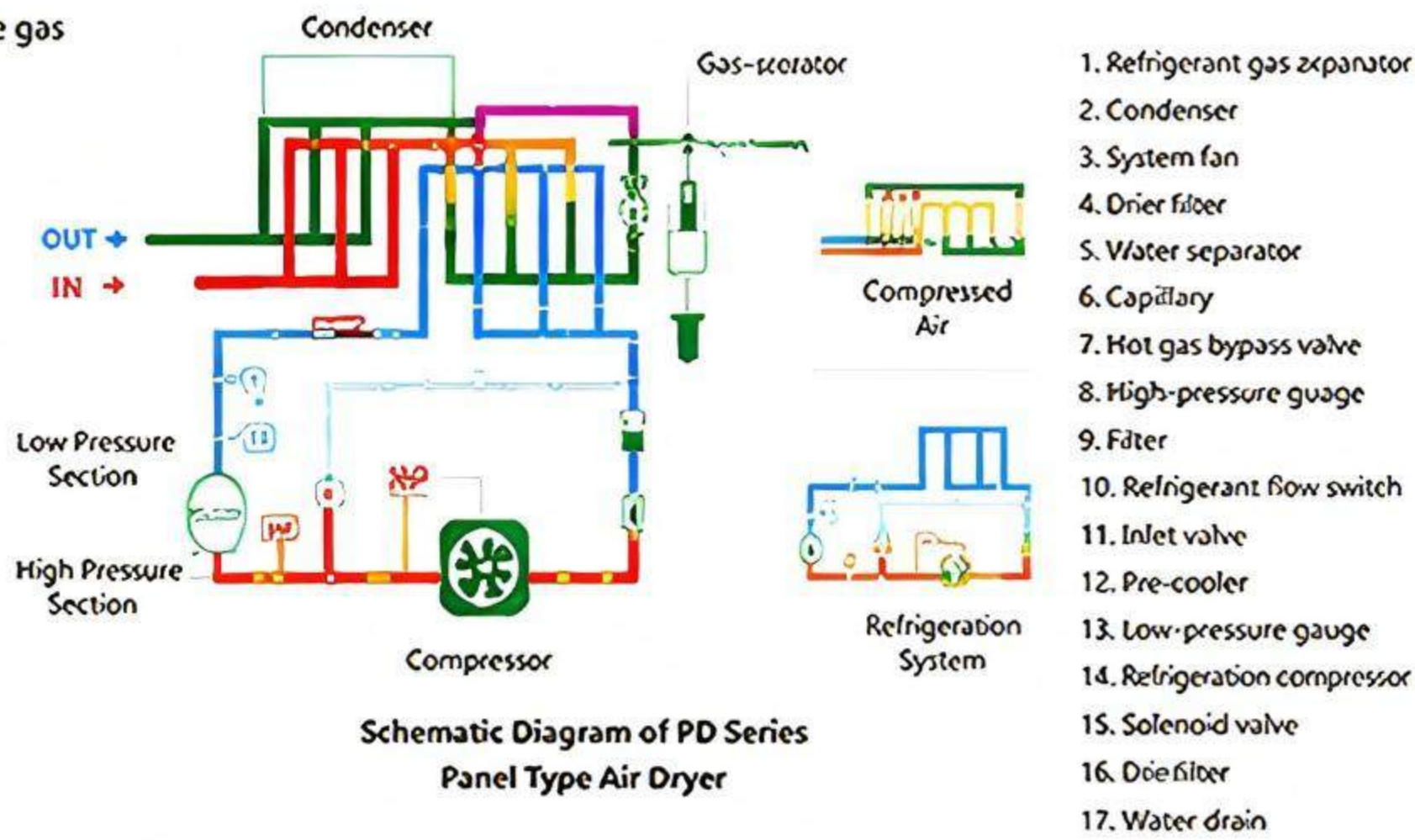
The PD series panel type air dryer is installed on the basis of a refrigeration air dryer. It adopts an all-in-one integrated design combining evaporator, condenser, hot gas bypass valve, and water separator. The hot gas bypass valve automatically adjusts the refrigerant flow according to the load of the air dryer, ensuring the outlet air dew point is maintained below 10°C under various working conditions, while saving energy and improving stability.

### DESIGN FEATURES

- Energy Saving**  
All-in-one integrated heat exchanger design, saving 20%~30% energy.
- Low Pressure Drop**  
The overall pressure drop is less than 0.015 MPa, minimizing energy loss.
- Wide Operating Range**  
The entire series uses environmentally friendly refrigerant R410A / R407C, compliant with international environmental standards, with a maximum working pressure of 1.6 MPa.
- Stable Dew Point**  
Standard pressure dew point: 2°C to 10°C, controlled by electronic automatic drainage system.
- High Reliability**  
Advanced control logic design, enabling stable operation under a wide range of load and ambient conditions.
- Intelligent Control**  
Intelligent controller with automatic operation, digital display, fault alarms, standard RS-485 communication interface.
- Modern Appearance**  
Modular, compact design with premium coating, corrosion-resistant, easy to install and maintain, suitable for various industrial applications.

### OPERATING CONDITIONS AND TECHNICAL REQUIREMENTS

- Applicable fluid: Compressed air, non-corrosive and non-flammable gas
- Operating Pressure: 0.6~1.6 MPa  
(other operating pressures available upon request)
- Rated Inlet Air Temperature: 42°C
- Maximum Inlet Air Temperature: ≤ 60°C
- Pressure dew point: 2°C ~ 10°C
- Maximum pressure drop: ≤ 0.015 MPa
- Outlet dew point: 2°C ~ 10°C
- Ambient temperature: 35°C  
(2°C ~ 40°C can be used)
- Cooling method: Air-cooled / Water-cooled (optional)



### TECHNICAL PARAMETER (Air-cooled Type)

| Model     | Capacity (m³/min) | Voltage (V/Hz) | Power (kW) | Air Inlet/Outlet | Equipment Weight (kg) | Dimension (mm) L x W x H |
|-----------|-------------------|----------------|------------|------------------|-----------------------|--------------------------|
| LY-PD10A  | 1.60              | 220/50         | 0.70       | RC1"             | 160                   | 500 × 360 × 750          |
| LY-PD20A  | 2.60              | 220/50         | 0.79       | RC1"             | 225                   | 500 × 380 × 750          |
| LY-PD30A  | 3.80              | 220/50         | 0.90       | RC1"½"           | 235                   | 520 × 450 × 920          |
| LY-PD50A  | 6.50              | 220/50         | 1.20       | RC1"½"           | 295                   | 670 × 560 × 1060         |
| LY-PD75A  | 10.50             | 220/50         | 2.00       | RC2"             | 345                   | 670 × 560 × 1060         |
| LY-PD100A | 13.50             | 220/50         | 2.22       | RC2"             | 430                   | 1010 × 760 × 1480        |
| LY-PD120A | 17.00             | 220/50         | 2.80       | RC2"½"           | 450                   | 1200 × 700 × 1480        |
| LY-PD150A | 21.50             | 380/50         | 3.90       | DN80             | 550                   | 1460 × 700 × 1480        |
| LY-PD180A | 25.00             | 380/50         | 4.90       | DN80             | 630                   | 1460 × 740 × 1600        |
| LY-PD200A | 28.50             | 380/50         | 5.40       | DN80             | 680                   | 1480 × 740 × 1600        |
| LY-PD250A | 32.50             | 380/50         | 6.50       | DN80             | 800                   | 1480 × 740 × 1460        |
| LY-PD300A | 37.00             | 380/50         | 7.80       | DN100            | 1000                  | 1640 × 840 × 1750        |
| LY-PD400A | 45.00             | 380/50         | 8.80       | DN100            | 1150                  | 1640 × 840 × 1750        |
| LY-PD500A | 55.00             | 380/50         | 10.10      | DN125            | 1400                  | 1740 × 840 × 1750        |
| LY-PD600A | 75.00             | 380/50         | 10.10      | DN125            | 1500                  | 1890 × 840 × 1863        |
| LY-PD700A | 75.00             | 380/50         | 11.10      | DN125            | 1750                  | 1890 × 950 × 2010        |
| LY-PD800A | 85.00             | 380/50         | 13.70      | DN125            | 1950                  | 2220 × 950 × 2063        |

### TECHNICAL PARAMETER (Water-cooled Type)

| Model      | Capacity (m³/min) | Voltage (V/Hz) | Power (kW) | Air Inlet/Outlet | Equipment Weight (kg) | Dimension (mm) L x W x H |
|------------|-------------------|----------------|------------|------------------|-----------------------|--------------------------|
| LY-PD150W  | 21.5              | 380/50         | 2.8        | DN80             | 1380                  | 740 × 1450 × 1450        |
| LY-PD180W  | 25.0              | 380/50         | 3.6        | DN80             | 1380                  | 740 × 1430 × 1430        |
| LY-PD200W  | 28.0              | 380/50         | 3.8        | DN80             | 1380                  | 740 × 1540 × 1540        |
| LY-PD250W  | 32.0              | 380/50         | 4.2        | DN80             | 1480                  | 740 × 1540 × 1540        |
| LY-PD300W  | 37.0              | 380/50         | 6.0        | DN100            | 1590                  | 740 × 1550 × 1550        |
| LY-PD400W  | 45.0              | 380/50         | 6.6        | DN100            | 1590                  | 840 × 1700 × 1550        |
| LY-PD600W  | 65.0              | 380/50         | 7.6        | DN125            | 1890                  | 840 × 1753 × 1753        |
| LY-PD800W  | 75.0              | 380/50         | 8.5        | DN125            | 2090                  | 840 × 1753 × 1753        |
| LY-PD800W  | 85.0              | 380/50         | 10.2       | DN125            | 2280                  | 840 × 1763 × 1753        |
| LY-PD900W  | 95.0              | 380/50         | 11.3       | DN150            | 2280                  | 940 × 1763 × 1763        |
| LY-PD1100W | 110.0             | 380/50         | 12.9       | DN150            | 2680                  | 940 × 1763 × 1863        |
| LY-PD1200W | 120.0             | 380/50         | 14.7       | DN150            | 2880                  | 940 × 1763 × 1863        |
| LY-PD1400W | 140.0             | 380/50         | 14.7       | DN200            | 2000                  | 1350 × 1863 × 1863       |
| LY-PD1600W | 165.0             | 380/50         | 16.9       | DN200            | 2200                  | 1350 × 1863 × 2100       |

Note: For air volume greater than 110 m³/min or special specifications, materials, or temperature requirements, please contact our company or dealer for technical information. The above data is for reference only and is subject to change without prior notice. For other specifications, please contact our company directly.

## 2.3.2 DD SERIES LOW DEW POINT AIR DRYER

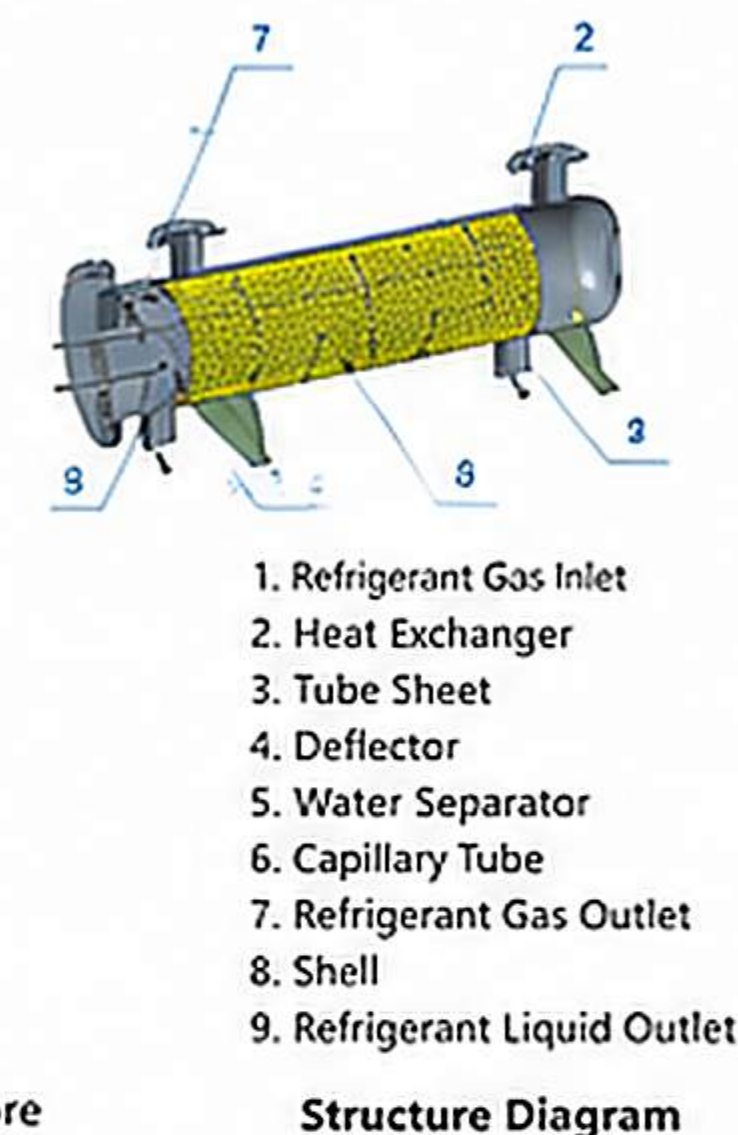
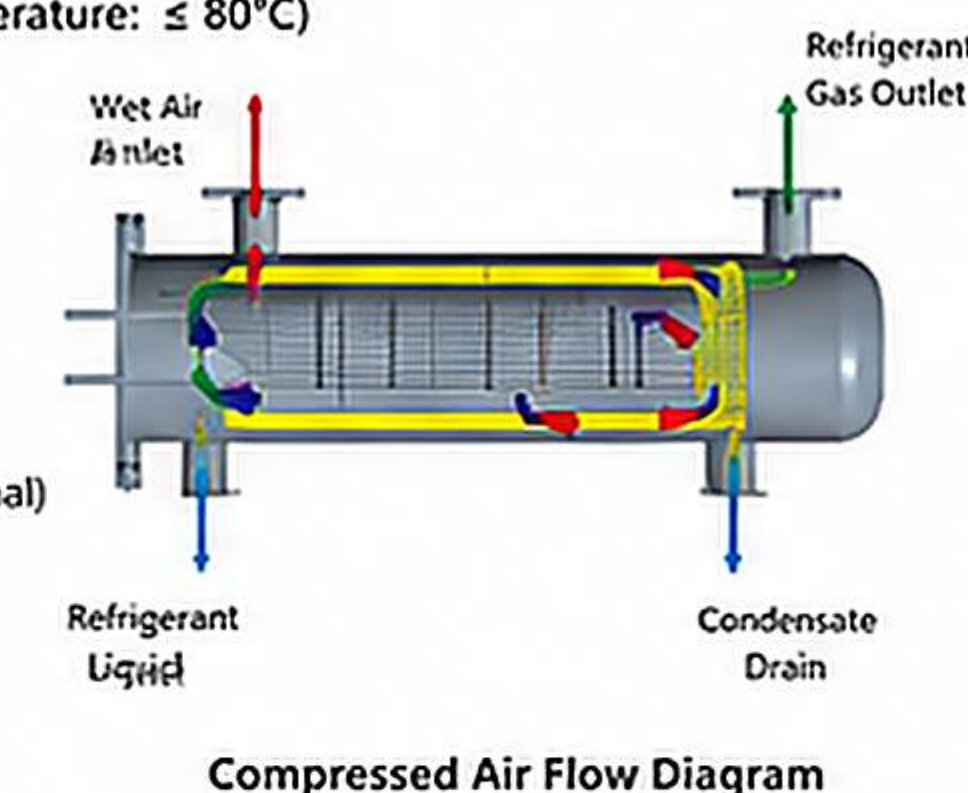


### DESIGN FEATURES

- Low Pressure Drop**  
Optimized internal piping structure with a flow passage area approximately three times that of conventional designs. The pressure drop at rated flow is further reduced, with external pressure drop < 0.1 bar(g).
- Low Dew Point**  
Unique three-in-one heat exchanger design with an independent water circuit, ensuring stable low dew point performance.
- Intelligent Control**  
Standard PLC intelligent control. Real-time monitoring of key parameters and automatic control of the refrigeration system to ensure stable operation. Standard RS-485 communication interface.

### OPERATING CONDITIONS AND TECHNICAL REQUIREMENTS

- Applicable fluid: Compressed air, non-corrosive and non-flammable gas
- Rated inlet pressure: 0.7 MPa  
(0.6 MPa ~ 1.0 MPa is allowed. Other working pressures are subject to customization)
- Rated inlet temperature: 45°C (Limit inlet temperature: ≤ 80°C)
- Pressure dew point: 2°C ~ 10°C
- Outlet pressure dew point: < 0.01 MPa
- Inlet air temperature: 35°C  
(2°C ~ 45°C can be used)
- Cooling method: Air-cooled / Water-cooled (optional)



### DESIGN SCHEMATIC

- The shell-and-tube heat exchanger is designed for the optimal position of the internal heat exchange core to achieve better heat exchange performance and lower pressure drop.
- All internal condensate water is guided to the drainage point by optimized flow path design. The shell is made of 304 stainless steel and processed through multiple stages to ensure clean, dry compressed air.

### TECHNICAL PARAMETER

| Model        | Capacity (m³/min) | Power Supply (V/Hz) | Power (kW) | Inlet/Outlet Connection | Weight (kg) | Dimension (mm) L x W x H |
|--------------|-------------------|---------------------|------------|-------------------------|-------------|--------------------------|
| LY-DD30A     | 3.8               | 220/50              | 1.50       | G1½"                    | 202         | 1100×600×1050            |
| LY-DD50A     | 6.5               | 220/50              | 2.50       | G1½"                    | 222         | 1100×600×1100            |
| LY-DD75A     | 10.5              | 220/50              | 2.70       | G2"                     | 276         | 1250×700×1155            |
| LY-DD100A/W  | 13.5              | 220/50              | 3.20       | G2½"                    | 326/320     | 1400×600×1200            |
| LY-DD120A/W  | 17.0              | 220/50              | 4.90       | DN80                    | 358/352     | 1500×950×1400            |
| LY-DD150A/W  | 21.5              | 220/50              | 5.05       | DN80                    | 365/359     | 1450×800×1200            |
| LY-DD180A/W  | 25.0              | 220/50              | 5.20       | DN80                    | 486/473     | 1550×950×1480            |
| LY-DD200A/W  | 28.5              | 380/50              | 6.50       | DN80                    | 490/477     | 1650×950×1480            |
| LY-DD250A/W  | 32.0              | 380/50              | 6.95       | DN80                    | 505/492     | 1650×940×1480            |
| LY-DD300A/W  | 37.0              | 380/50              | 9.80       | DN100                   | 635/642     | 1900×980×1580            |
| LY-DD400A/W  | 45.0              | 380/50              | 9.80       | DN100                   | 657/639     | 1900×980×1580            |
| LY-DD500A/W  | 55.0              | 380/50              | 12.30      | DN125                   | 842/824     | 2100×1000×1700           |
| LY-DD600A/W  | 65.0              | 380/50              | 14.50      | DN125                   | 842/827     | 2100×1000×1700           |
| LY-DD700A/W  | 75.0              | 380/50              | 18.50      | DN125                   | 1150/1132   | 2400×1100×1650           |
| LY-DD800A/W  | 85.0              | 380/50              | 18.50      | DN125                   | 1307/1345   | 2400×1100×1650           |
| LY-DD900A/W  | 95.0              | 380/50              | 23.50      | DN150                   | 1680/1653   | 2450×1200×2250           |
| LY-DD1100A/W | 110.0             | 380/50              | 28.50      | DN150                   | 1850/1825   | 2450×1200×2250           |
| LY-DD1200A/W | 120.0             | 380/50              | 28.50      | DN150                   | 1850/1865   | 2450×1200×2250           |

Note: For air volume greater than 120 m³/min or special specifications, materials, or temperature requirements, please contact our company or dealer for technical information. The above data is for reference only and is subject to change without prior notice. For other specifications, please contact our company directly.

# 02 REFRIGERATED AIR DRYER

Compressed air purification system

## 2.3.3 PB Series Variable Frequency Energy-Saving Air Dryer



### DESIGN FEATURES

#### High Thermal Efficiency

The front-mounted pre-cooler and aftercooler configuration, combined with a high-efficiency shell-and-tube heat exchanger, significantly improves heat exchange efficiency. This allows the use of a compact heat exchanger, effectively reducing the footprint.

#### All-in-One Integrated Design

The integrated design of the evaporator, condenser, and water separator not only reduces the number of components and potential leakage points, but also lowers pressure drop and increases the heat exchange area, achieving more than 30% reduction in pressure loss compared with a plate heat exchanger.

#### Variable Frequency Energy Saving

The system automatically adjusts the cooling capacity according to the load, adapting to variations in inlet air volume, pressure, and temperature. The intelligent variable frequency control ensures stable dew point performance while maximizing energy savings. Equipped with RS-485 communication interface.

### OPERATING CONDITIONS AND TECHNICAL REQUIREMENTS

- Applicable fluid: Compressed air, non-corrosive and non-flammable gas
- Inlet air temperature:  $\leq 60^{\circ}\text{C}$
- Pressure dew point:  $2 \sim 8^{\circ}\text{C}$
- Inlet air pressure:  $0.6 \sim 1.0 \text{ MPa}$
- Ambient temperature:  $\leq 42^{\circ}\text{C}$   
(For temperatures above  $42^{\circ}\text{C}$  up to  $45^{\circ}\text{C}$ , special equipment is required.)
- Maximum working pressure:  $\leq 1.3 \text{ bar}$
- Specific power consumption:  $0.08 \sim 0.18 \text{ kW}/(\text{m}^3/\text{min})$   
(For inlet air temperature  $35 \sim 60^{\circ}\text{C}$ , ambient temperature  $30 \sim 42^{\circ}\text{C}$ )



### DESIGN SCHEMATIC

- The compressed air first passes through the pre-cooler and aftercooler for preliminary cooling, then enters the evaporator for further heat exchange to lower the temperature to the required level. After passing through the water separator, condensate is removed. Finally, the air flows through the reheater to raise the temperature before being discharged. The system automatically adjusts the cooling capacity according to user requirements to ensure a stable dew point.

### TECHNICAL PARAMETER

#### PB Series (Air-Cooled Type)

| Model       | Capacity<br>( $\text{m}^3/\text{min}$ ) | Input Power<br>(kW) | Connection Size | Weight<br>(kg) | Dimension (mm)<br>L x W x H |
|-------------|-----------------------------------------|---------------------|-----------------|----------------|-----------------------------|
| LY-PB250AH  | 28.5                                    | 1.5-5.8             | DN80            | 310            | 1500x950x1600               |
| LY-PB300AH  | 32.0                                    | 1.5-6.2             | DN80            | 340            | 1500x950x1600               |
| LY-PB400AH  | 37.0                                    | 2.1-7.8             | DN100           | 420            | 1750x1050x1825              |
| LY-PB500AH  | 45.0                                    | 2.5-9.2             | DN100           | 460            | 1750x1050x1825              |
| LY-PB600AH  | 55.0                                    | 3.1-10.5            | DN125           | 530            | 2100x1050x2000              |
| LY-PB700AH  | 65.0                                    | 3.5-11.8            | DN125           | 585            | 2100x1050x2000              |
| LY-PB800AH  | 75.0                                    | 3.8-14.5            | DN125           | 690            | 2200x1200x2180              |
| LY-PB900AH  | 85.0                                    | 4.2-15.8            | DN125           | 720            | 2200x1200x2180              |
| LY-PB1000AH | 90.0                                    | 5.0-18.5            | DN150           | 810            | 2400x1400x2410              |
| LY-PB1100AH | 100.0                                   | 6.2-21.5            | DN150           | 850            | 2400x1400x2410              |
| LY-PB1200AH | 110.0                                   | 6.5-23.5            | DN150           | 890            | 2400x1400x2410              |
| LY-PB1300AH | 120.0                                   | 7.0-24.5            | DN150           | 925            | 2400x1400x2410              |

Note: For air volume greater than  $120 \text{ m}^3/\text{min}$  or special specifications, materials, or temperature requirements, please contact our company or dealer for technical information.

### TECHNICAL PARAMETER

#### PB Series (Water-Cooled Type)

| Model          | Capacity<br>( $\text{m}^3/\text{min}$ ) | Input Power<br>(kW) | Connection Size | Weight<br>(kg) | Dimension (mm)<br>L x W x H |
|----------------|-----------------------------------------|---------------------|-----------------|----------------|-----------------------------|
| LY-PB100A/W/N  | 13.5                                    | 1.1-3.5             | DN65            | 220/230        | 1250x800x1400               |
| LY-PB120A/W/N  | 17.5                                    | 1.2-5.2             | DN65            | 245/255        | 1400x800x1600               |
| LY-PB150A/W/N  | 22.0                                    | 1.4-5.1             | DN80            | 255/265        | 1400x800x1600               |
| LY-PB200A/W/N  | 28.5                                    | 1.5-5.8             | DN80            | 280/280        | 1500x950x1600               |
| LY-PB250A/W/N  | 32.0                                    | 1.5-6.2             | DN80            | 295/310        | 1500x950x1600               |
| LY-PB300A/W/N  | 37.0                                    | 2.1-7.8             | DN100           | 350/365        | 1750x1050x1825              |
| LY-PB400A/W/N  | 45.0                                    | 2.5-9.2             | DN100           | 380/390        | 1750x1050x1825              |
| LY-PB500A/W/N  | 55.0                                    | 3.1-10.5            | DN125           | 450/465        | 2100x1050x2000              |
| LY-PB600A/W/N  | 65.0                                    | 3.5-11.8            | DN125           | 480/490        | 2100x1050x2000              |
| LY-PB700A/W/N  | 75.0                                    | 3.8-14.5            | DN125           | 580/585        | 2200x1200x2180              |
| LY-PB800A/W/N  | 85.0                                    | 4.2-15.8            | DN125           | 610/620        | 2200x1200x2180              |
| LY-PB900A/W/N  | 90.0                                    | 5.0-18.5            | DN150           | 715/730        | 2400x1400x2410              |
| LY-PB1000A/W/N | 100.0                                   | 6.2-21.5            | DN150           | 750/770        | 2400x1400x2410              |
| LY-PB1100A/W/N | 110.0                                   | 6.5-23.5            | DN150           | 780/820        | 2400x1400x2410              |
| LY-PB1200A/W/N | 120.0                                   | 7.0-24.5            | DN150           | 810/850        | 2400x1400x2410              |

Note: For air volume greater than  $120 \text{ m}^3/\text{min}$  or special specifications, materials, or temperature requirements, please contact our company or dealer for technical information.

## PARTIAL PROJECTS

Project Owner 1: XX Huayi Co., Ltd. — Grade-1 Compressed Air System for a Compressor Station  
(Actual On-site Photo)



|                                |                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Flow</b>                | 6×150 m³/min                                                                                                                                                                                                                                                                                                                        |
| <b>Equipment Configuration</b> | D Series High-Efficiency Coalescing Filter + Adsorption Dryer                                                                                                                                                                                                                                                                       |
| <b>Project Requirements</b>    | Requirement: This project is a grade-1 compressed air system, used for pneumatic conveying and control of instruments and valves. The dew point must be ≤ -40°C, the residual oil content ≤ 0.01 ppm, and the particle size ≤ 1 μm.                                                                                                 |
| <b>Solution Advantages</b>     | Customized a combined filtration and drying system to ensure stability and continuous supply of grade-1 compressed air, with the following advantages:<br>① Low pressure drop and high purification efficiency;<br>① Stable operation and reliable performance;<br>① Long service life of filter elements;<br>① Low operating cost. |

Project Owner 2: XX Food Co., Ltd. (Actual On-site Photo)



|                                |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Flow</b>                | 10×65 m³/min                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Equipment Configuration</b> | Carbon Molecular Sieve Nitrogen Generator                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Project Requirements</b>    | Requirement: The project requires on-site production of nitrogen for food packaging. Nitrogen purity ≥ 99.99%, dew point ≤ -40°C, residual oil content ≤ 0.01 ppm, particle size ≤ 1 μm, oil content ≤ 0.1 mg/m³.                                                                                                                                                                                                         |
| <b>Solution Advantages</b>     | A customized nitrogen generator system was provided with the following advantages:<br>① High nitrogen purity, meeting food-grade standards;<br>① Fully automated operation, easy to use;<br>① Energy saving and consumption reduction;<br>① Stable nitrogen supply, low maintenance cost;<br>① Modular design for flexible expansion;<br>① Dual adsorbers for parallel operation to ensure uninterrupted nitrogen supply. |

Project Owner 3: XX Optoelectronics Co., Ltd. (Actual On-site Photo)



|                                |                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Flow</b>                | 8×220 m³/min                                                                                                                                                                                                                                                                                                                                      |
| <b>Equipment Configuration</b> | D Series High-Efficiency Coalescing Filter + Refrigerated Dryer                                                                                                                                                                                                                                                                                   |
| <b>Project Requirements</b>    | Requirement: Used for clean compressed air in precision production. Dew point ≤ 2-10°C, residual oil content ≤ 0.01 ppm, particle size ≤ 1 μm, oil content ≤ 0.1 mg/m³.                                                                                                                                                                           |
| <b>Solution Advantages</b>     | Combined solution to ensure a stable and clean air supply with the following advantages:<br>① High purification efficiency, stable dew point control;<br>① Low pressure drop and energy saving;<br>① Filter elements made of high-quality materials with long service life;<br>① Easy installation and maintenance;<br>① High cost-effectiveness. |

Project Owner 4: XX Electric Co., Ltd. — Compressed Air System for Explosion-Proof Dryers  
(Actual On-site Photo)



|                                |                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Flow</b>                | 4×85 m³/min                                                                                                                                                                                                                                                                                                                             |
| <b>Equipment Configuration</b> | Explosion-Proof Refrigerated Dryer (Water-Cooled)                                                                                                                                                                                                                                                                                       |
| <b>Project Requirements</b>    | Requirement: For uses in explosive gas environments. Dew point ≤ 2-10°C, residual oil content ≤ 0.01 ppm, particle size ≤ 1 μm, oil content ≤ 0.1 mg/m³.                                                                                                                                                                                |
| <b>Solution Advantages</b>     | Explosion-proof design, safe and reliable operation; meets Class IIB T3 explosion-proof requirements;<br>① Efficient cooling, stable dew point control;<br>① Intelligent control with fault alarm;<br>① Stainless steel heat exchanger with long service life;<br>① Equipped with RS-485 communication interface for remote monitoring. |

Project Owner 5: XX Energy Technology Co., Ltd. (Actual On-site Photo)



|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Flow</b>                | 6×50 m³/min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Equipment Configuration</b> | Stainless Steel Carbon Molecular Sieve Nitrogen Generator                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Project Requirements</b>    | Requirement: For clean nitrogen used in lithium battery production. Nitrogen purity ≥ 99.99%, dew point ≤ -40°C, residual oil content ≤ 0.01 ppm, particle size ≤ 1 μm, oil content ≤ 0.1 mg/m³.                                                                                                                                                                                                                                                                                           |
| <b>Solution Advantages</b>     | Stainless steel nitrogen generator system with the following advantages:<br>① High purity and stability;<br>① Stainless steel material, corrosion-resistant and long service life;<br>① No consumables, low operating cost;<br>① Intelligent control with remote monitoring;<br>① Dual-tower design for parallel operation, ensuring stable nitrogen supply;<br>① Outlet pressure and flow adjustable;<br>① Applications: lithium battery production, chemical industry, electronics, etc. |

Project Owner 6: XX Lithium Co., Ltd. (Actual On-site Photo)



|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Flow</b>                | 6×110 m³/min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Equipment Configuration</b> | D Series Coalescing Filter + Refrigerated Dryer                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Project Requirements</b>    | Requirement: For clean air in lithium battery production. Dew point ≤ 2-10°C, residual oil content ≤ 0.01 ppm, particle size ≤ 1 μm, oil content ≤ 0-0.1 mg/m³.                                                                                                                                                                                                                                                                                                                                        |
| <b>Solution Advantages</b>     | Combined solution to ensure a stable and clean air supply with the following advantages:<br>① High purification efficiency and stable dew point control;<br>① Low pressure drop and energy-saving operation;<br>① Filter elements made of high-quality materials with long service life;<br>① Outlet pressure and flow adjustable;<br>① Applications: lithium battery production, pneumatic conveying, A/B tank pressurization, etc.;<br>① Stainless steel structure: corrosion-resistant and durable. |

## CASES



**End User** New Energy Materials  
**Equipment** Dual-tower heatless air dryer  
2 sets (60 m³/min per set)



**End User** Water Treatment Industry  
**Equipment** Refrigerated dryer  
5 sets (45 m³/min per set)



**End User** Pharmaceutical Co., Ltd.  
**Equipment** Refrigerated dryer  
4 sets (28.5 m³/min per set)



**End User** Chemical Plant  
**Equipment** Heatless dryer  
1 set (40 m³/min)



**End User** New Energy Materials  
**Equipment** Heatless dryer  
9 sets (200 m³/min per set)



**End User** New Energy Industry  
**Equipment** Refrigerated dryer  
8 sets (55 m³/min per set)



**End User** Chemical Plant  
**Equipment** Refrigerated dryer  
8 sets (250 m³/min per set)



**End User** Power Plant  
**Equipment** Refrigerated dryer  
2 sets (75 m³/min per set)



**End User** Automotive  
**Equipment** Refrigerated dryer  
5 sets (3 m³/min per set)

① Petrochemical Industry ② New Energy & Automotive ③ Machinery Manufacturing ④ Metallurgical Industry



**End User** Extra-high Voltage Industry  
**Equipment** Refrigerated dryer  
50 sets (50 m³/min per set)



**End User** New Energy Industry  
**Equipment** Heatless dryer  
3 sets (60 m³/min per set)



**End User** New Energy Industry  
**Equipment** Refrigerated dryer  
5 sets (60 m³/min per set)



**End User** New Energy Industry  
**Equipment** Heatless dryer  
12 sets (220 m³/min per set)



**End User** Chemical Fiber Company  
**Equipment** Refrigerated dryer  
6 sets (205 m³/min per set)



**End User** New Materials  
**Equipment** Refrigerated dryer  
5 sets (55 m³/min per set)



**End User** Battery Industry  
**Equipment** Heatless dryer  
3 sets (85 m³/min per set)



**End User** Pharmaceutical Industry  
**Equipment** Refrigerated dryer  
10 sets (45 m³/min per set)



**End User** Food & Beverage  
**Equipment** Heatless dryer  
4 sets (45 m³/min per set, 40 bar)

⑤ Electronics Industry ⑥ Military Industry ⑦ Textile & Printing Industry ⑧ Food & Pharmaceutical Industry

## ■ LINGYU SERVICES



## ■ SERVICE CONTENT

- Provide free pre-sales consultation;
- On-site commissioning, maintenance, and upkeep of equipment;
- On-site troubleshooting and customized maintenance solutions.

## ■ COMPLETE ACCESSORIES

- **Air Treatment Components**  
Air filters, regulators, coolers, steam traps, dryers, precision filters, silencers, air tanks, pressure gauges, pipeline filters, condensate drains, fittings, etc.
- **Valve Category**  
Valves, solenoid valves, angle seat valves, safety valves, check valves, electric actuators, pneumatic actuators, etc.
- **Other Accessories**  
Filter elements, filter housings, pressure vessels, etc.

## ■ SERVICE INDUSTRIES AND CUSTOMERS

|                         |                    |                       |                     |                            |                 |            |
|-------------------------|--------------------|-----------------------|---------------------|----------------------------|-----------------|------------|
| Electronics Industry    | LUXSHARE ICT       | FOUNDER 方正            | 先科 SAST             | 三安光电 Sanan Optoelectronics | SMIC            | HF         |
| Power Industry          | 中国华电 CHINA HUADIAN | 中国国电 CHINA GUODIAN    | 大唐集团公司 CHINA DATANG | 中国华电 CHD                   | 中宝煤炭 CHINA COAL |            |
| Home Appliance Industry | TCL 王牌             | GREE 格力               | CHANGHONG 长虹        | Haier 海尔                   | Midea           |            |
| Aviation Industry       | AVIC               | 中国商飞 COMAC            | 厦门航空 XIAMEN AIR     | 中国航发 AECC                  | SAC             | 中国商飞 COMAC |
| Railway Industry        | 中国铁路 CHINA RAILWAY | 中国铁路 CHINA RAILWAY    | ANSTEEL 鞍钢集团        | 中国中车 CHINA RAILWAY GROUP   | CSG 中国铝业        | 广晟铜业       |
| Machinery Industry      | SANY               | 玉柴机器 YUCHAI           | 中联重科 ZHONGLI        | CSSC                       | 中船重工            |            |
| Automotive Industry     | G                  | H                     | Toyota              | NISSAN                     |                 | BMW        |
| New Energy Industry     | BYD                | 国轩高科 GOTION HIGH-TECH | CATL 宁德时代           | 理想                         |                 |            |

Note: The above are representative customers from our cooperation.