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L I N G Y U 凌 宇

ENERGY-EFFICIENT. PURE AIR.

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

ABOUT US



注：上图依次为新工厂鸟瞰图、新工厂办公大楼及生产车间

GUANGDONG LINGYU ENERGY EQUIPMENT CO., LTD.

- Established in 2009 in Guangdong Province, China.
- Drafting Organization for 30+ National, Industry, and Association Standards; Holder of 30+ Patents
- Recognized as a National High-Tech Enterprise, a Guangdong Specialized, Sophisticated, Distinctive and Innovative (SRDI) Enterprise, a Guangdong Innovative SME, and a Grade-A Tax Credit Enterprise
- Annual sales exceeded RMB 100 million in 2021, with an average annual growth rate of over 25% during the past three years
- Specializing in compressed air purification and separation technologies, with integrated capabilities in R&D, manufacturing, sales, and service
- Jointly established research institutes and comprehensive laboratories with Southwest Petroleum University and Jiangsu University of Science and Technology, respectively
- Council Member of the Compressor Branch and the Gas Purification Equipment Branch of the China General Machinery Industry Association (CGMA)
- Operating approximately 40,000 m² of manufacturing facilities, with a workforce of over 300 employees
- Supported by a comprehensive sales and service network, with dedicated departments for domestic channel sales, international sales, and after-sales service, and more than 40 sales and after-sales service locations

CORE BUSINESS CONCEPTS



DEVELOPMENT CHRONICLES



BROAD PROSPECTS 2022 - Present

- 2022 – Ranked No. 1 in Zhongshan in the Energy Conservation & Environmental Protection Category of the China Innovation & Entrepreneurship Competition.
- 2022 – Established a joint research institute with Southwest Petroleum University.
- 2023 – Established a joint dryer laboratory with Jiangsu University of Science and Technology.
- Launched and mass-produced the 3rd-generation DB Series energy-saving refrigerated air dryer.
- 2023 – Won the Bronze Award at the National Machinery Industry Design Innovation Competition.
- 2024 – Won the Silver Award at the National Machinery Industry Product Quality Innovation Competition.
- A new 40,000 m² smart factory was completed and put into operation, further expanding production capacity.

HIGH QUALITY 2019-2021

- Increased R&D investment with a focus on the energy-saving market.
- Recognized as a Guangdong SRDI Enterprise.
- Annual sales exceeded RMB 100 million in 2021.
- Featured on CCTV's Brand Origin program.
- Refrigerated and desiccant air dryers passed product quality and safety certification.
- Launched a new corporate VI system.

UPGRADE 2016-2018

- Continued to host the China Compressor Industry High-End Energy-Saving & Intelligent Technology Forum.
- General Manager Yan Wenxue was interviewed by CCTV's National Brand Program.
- Obtained 24+ utility model patents.
- Blower-heated and heat-of-compression dryers were certified as High-Tech Products.
- Recognized as a National High-Tech Enterprise for the first time.
- Established a nationwide sales and service network.

INCREASING SCALE 2013-2015

- Refrigerated air dryers and other products received High-Tech Product Certification for the first time.
- Lingyu became the exclusive permanent co-organizer of the South China Air Compressor Exhibition.
- Shifted strategic focus toward mid-to-high-end products.
- Introduced "Craftsmanship" as a core concept for Lingyu's premium brand positioning.
- General Manager Yan was interviewed by Dongsheng TV on "Building the Brand, Caring for Employees."

EARLY DEVELOPMENT 2009-2012

- Obtained the National Industrial Product Production License.
- Launched sheet metal and heat exchanger workshops and a new assembly workshop.
- Obtained a design patent for product design.
- Established the first regional office in Kunshan.
- Achieved ISO 9001 Quality Management System Certification.

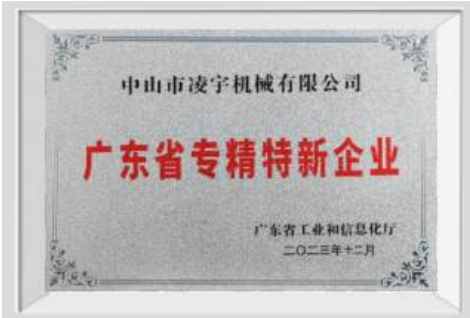
Creating a world-renowned brand



CORPORATE HONORS



High-Tech Enterprise



Specialized and Sophisticated Enterprise



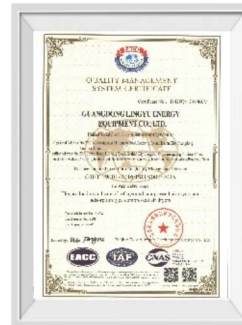
Credit Rating AAA Enterprise



AAA Quality Service Enterprise



Accumulated 30+ Patent Certificates



ISO 14001 Environmental Management System Certification,ISO 9001 Quality Management System Certification,ISO 45001 Occupational Health & 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

Corporate Mission
To provide professional, comprehensive, and competitive solutions and services for compressed air purification and separation.

Corporate Vision
To become an industry leader and build a globally recognized brand.

Development Philosophy
Technology-Driven · Value-Oriented

Brand Values
Professional · Reliable · Service-Focused

Market & Sales Strategy
Win the market through premium-quality products and professional service.



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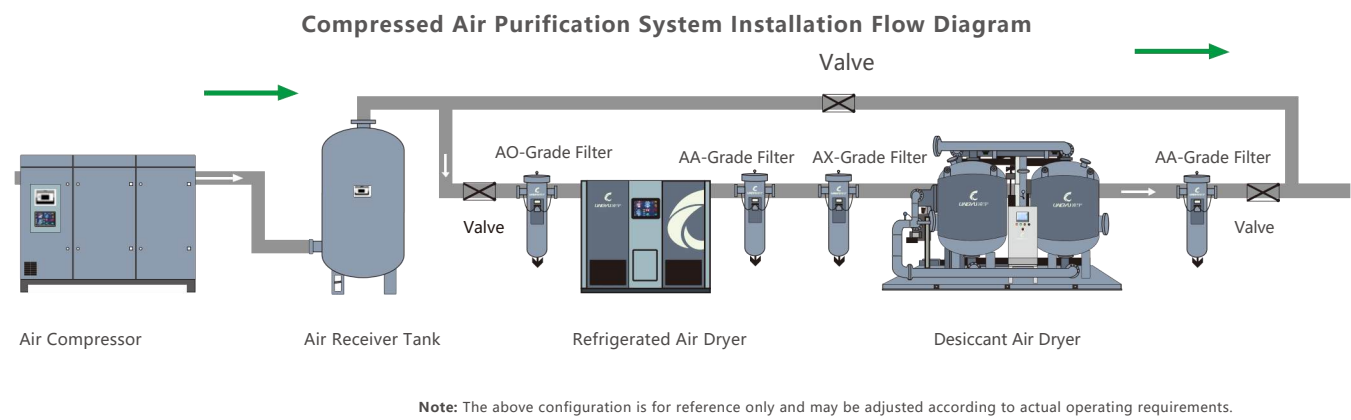
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01 Compressed air purification system

Compressed air is an essential source of power for industrial applications and production processes. To ensure reliable operation and prevent production downtime, compressed air must be clean, dry, and oil-free.

Compressed air is produced by compressing large volumes of ambient air, which naturally contains contaminants such as dust particles and moisture in the form of water vapor. When combined with oil introduced by the air compressor, these contaminants can form harmful and corrosive emulsions, leading to equipment failure, production downtime, and significant economic losses.



QUESTION 1:COMPRESSED AIR MOISTURE

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

Types of Contamination

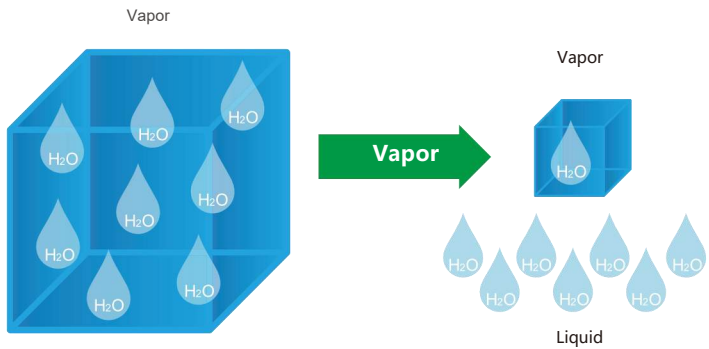
Liquid Water · Water Vapor

How Is the Contamination Formed?

When air is compressed, the amount of water contained per cubic meter increases.At any given temperature, air can hold only a limited amount of water vapor.As the air continues to be compressed, excess moisture condenses into liquid water.

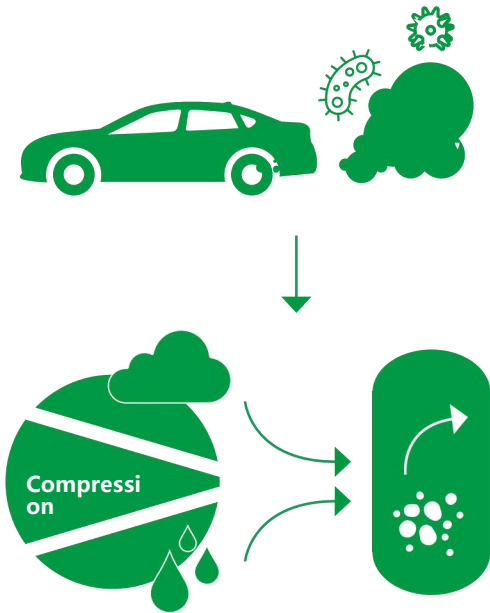
What Problems Can It Cause?

Pipeline corrosion
Reduced final product quality
Control system failures
Freezing



Problem 2: Oil Contamination in Compressed Air

■ Lingyu Solution: Refrigerated Air Dryers, Oil Removal Filters, Oil-Water Separators, High-Efficiency Oil Removal Systems, etc.



Types of Contamination: Liquid Oil · Oil Vapor

What Problems Can Oil Contamination Cause?

- Damage to production equipment, resulting in product defects, reduced productivity, and increased costs
- Air pollution, creating an unhealthy working environment
- Deposits and blockages in compressed air pipelines

How Is Oil Contamination Formed?

Oil-lubricated compressors may introduce lubricating oil into the compressed air system. In addition, oil vapors from vehicle exhaust and industrial emissions present in the ambient air can be drawn into the compressor and enter the compressed air system.

Problem 3: Solid Particle Contamination in Compressed Air

■ Lingyu Solution: Dust Removal Filters · Self-Cleaning Filters

Types of Contamination: Dust · Pipeline Contaminants

How Is the Contamination Formed?

Solid contaminants may come from airborne dust and particles drawn into the compressor, desiccant dust from adsorption dryers, and metal particles from compressed air pipelines.

What Problems Can It Cause?

Damage to production equipment, resulting in product defects, reduced productivity, and increased operating costs.



01 Compressed air purification system

What Is Saturated Air?

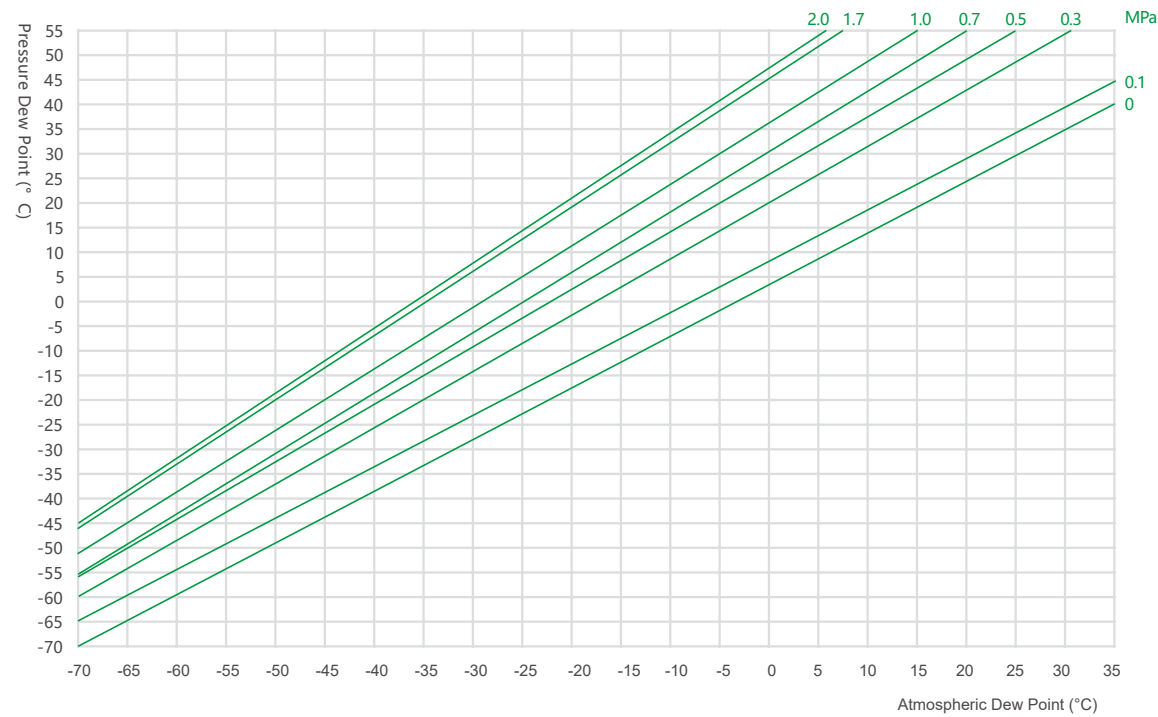
At a given temperature and pressure, there is a limit to the amount of water vapor that air can hold. When the water vapor content reaches the maximum possible level at a given temperature, the air is called saturated air. If the water vapor content is below this limit, the air is called unsaturated air.

Dew Point – Definition and Explanation

At a given air pressure, as the air temperature gradually decreases, the water vapor eventually reaches saturation and begins to condense into liquid water. The temperature at which condensation begins is called the dew point temperature at that pressure.

The dew point of moist air depends on its moisture content: the higher the moisture content, the higher the dew point; the lower the moisture content, the lower the dew point.

Pressure Dew Point (PDP) – Atmospheric Dew Point (ADP) Conversion Chart

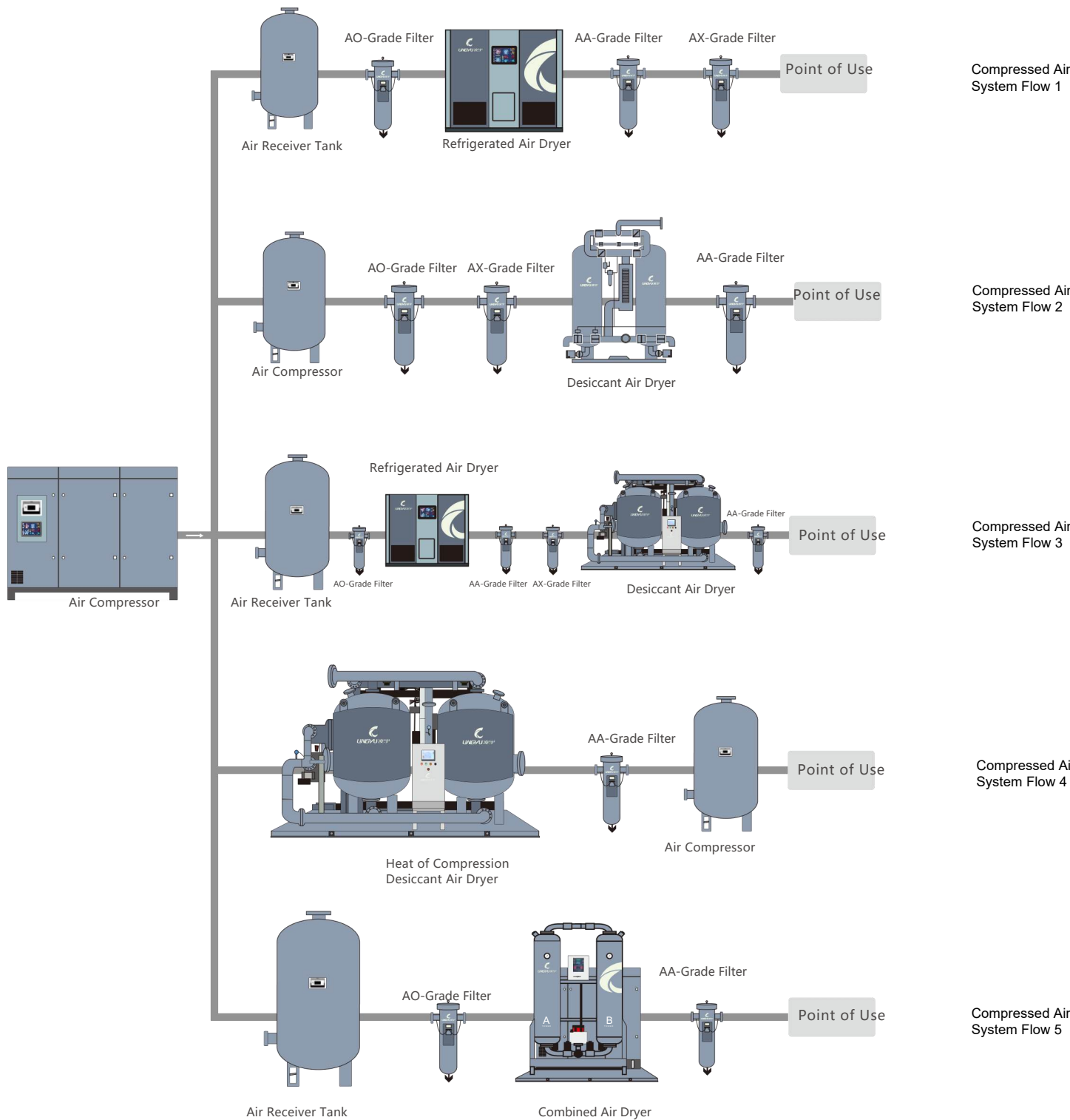


Atmospheric Dew Point vs. Moisture Content Chart

Dew Point (°C)	Moisture Content (g/m³)	Dew Point (°C)	Moisture Content (g/m³)	Dew Point (°C)	Moisture Content (g/m³)	Dew Point (°C)	Moisture Content (g/m³)	Dew Point (°C)	Moisture Content (g/m³)	Dew Point (°C)	Moisture Content (g/m³)
14	12.070	1	5.192	-12	2.0060	-25	0.7074	-38	0.2141	-51.1	0.0540
13	11.350	0	4.847	-13	1.8760	-26	0.6463	-39	0.1940	-53.9	0.0400
12	10.660	-1	4.523	-14	1.7360	-27	0.5922	-40	0.1757	-56.7	0.0290
11	10.010	-2	4.217	-15	1.6050	-28	0.5422	-41	0.1590	-59.4	0.0210
10	9.309	-3	3.930	-16	1.4830	-29	0.4960	-42	0.1438	-62.2	0.0140
9	8.819	-4	3.660	-17	1.3690	-30	0.4534	-43	0.1298	-65.0	0.0110
8	8.270	-5	3.4070	-18	1.2610	-31	0.4141	-44	0.1172	-67.8	0.0080
7	7.50	-6	3.1690	-19	1.1650	-32	0.3779	-45	0.1055	-70.6	0.0050
6	7.260	-7	2.9460	-20	1.0740	-33	0.3445	-46	0.0950	-73.3	0.0030
5	6.797	-8	2.7370	-21	0.9884	-34	0.3138	-47	0.0854		
4	6.360	-9	2.5410	-22	0.9093	-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		



Air Compressor Station Purification
System Process Flow Diagram



Note: The above configuration is for reference only and may be adjusted according to actual operating requirements.

05 Nitrogen generator

5.1 PSA Pressure Swing Adsorption (PSA) Nitrogen Generator

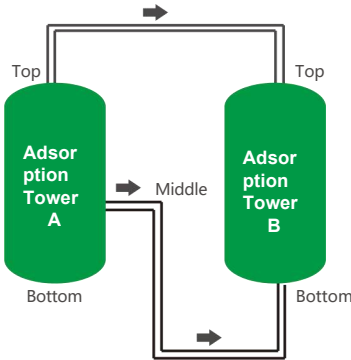


Working Principle

The PSA (Pressure Swing Adsorption) Nitrogen Generator operates with two pressure vessels (adsorption towers) that alternate between adsorption and regeneration cycles. Each tower is filled with Carbon Molecular Sieve (CMS), a specialized adsorbent that selectively adsorbs oxygen molecules from compressed air. Compressed air enters Tower A, where oxygen molecules are preferentially adsorbed by the CMS, while nitrogen passes through the adsorption bed and is collected as product gas. While Tower A is in the adsorption cycle, Tower B simultaneously undergoes depressurization and regeneration. During regeneration, the oxygen previously adsorbed by the CMS is desorbed and discharged to the atmosphere with the assistance of a small amount of nitrogen purge gas. When the CMS in Tower A reaches its predetermined adsorption capacity and Tower B has completed regeneration, the system automatically switches operating modes: Tower B begins adsorption while Tower A undergoes regeneration. The two towers continuously alternate between adsorption and regeneration under automatic PLC control, ensuring a continuous supply of nitrogen at the specified purity.

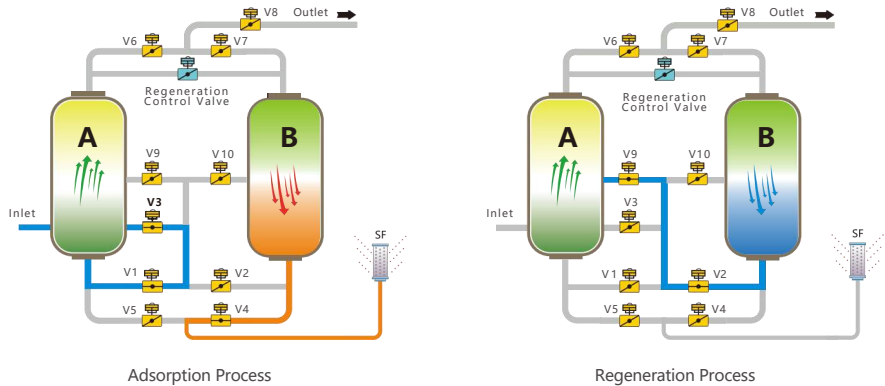
Design Features

- **Fully Automatic Operation:**Automatic start/stop and operating-cycle switching provide fully automated system operation.
- **PLC-Controlled Pneumatic Valves:**Pneumatic valve switching is automatically controlled by the PLC, ensuring accurate sequencing and reliable operation.
- **Real-Time Nitrogen Monitoring:**Nitrogen purity and flow rate are continuously monitored online in real time.
- **Off-Spec Nitrogen Alarm & Protection:**An alarm is activated when nitrogen purity falls below the specified value. If the off-spec condition persists for a preset period, the system automatically shuts down for protection.
- **Automatic CMS Compaction System:**Equipped with an automatic Carbon Molecular Sieve compaction device to maintain proper packing density and help prevent CMS pulverization caused by bed movement.
- **Digital Touchscreen Display:**The digital touchscreen provides real-time display and monitoring of key operating parameters, including pressure, nitrogen purity, flow rate, and system operating status.
- **Energy-Efficient Pressure Equalization:**An optimized unequal-pressure equalization process improves nitrogen recovery efficiency and indirectly reduces overall energy consumption by approximately 5%.

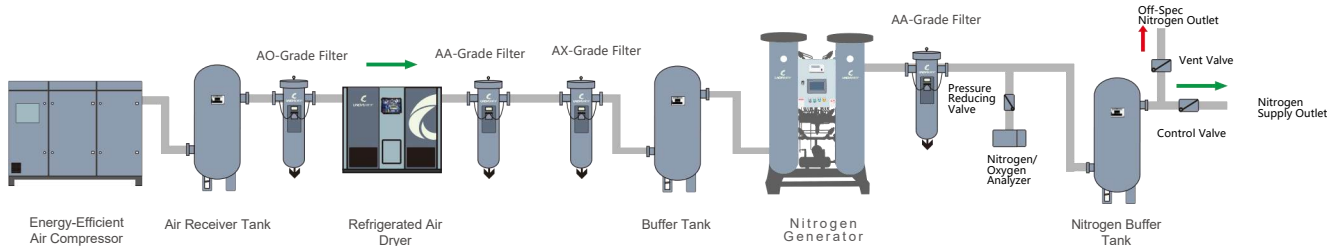


Operating conditions and Technical requirements

- Inlet Air Temperature: ≤40°C
- Inlet Air Pressure: 0.5–0.8 MPa
- Nitrogen Purity: 95%–99.999%
- Nitrogen Dew Point: ≤−40°C
- Ambient Temperature: ≤40°C
- Switching Cycle: 45–60 s
- Power Supply: 220 V / 50 Hz
- Noise Level: ≤75 dB



System configuration diagram



Technical Parameter

LYZD-A Series Nitrogen Generator Nitrogen Purity: 98%					
Model	Nitrogen Production (m³/h)	Intel pipe size	Outel pipe size	Overall DimensionsH*L*W	Effective air consumption (m³/min)
LYZD-A20	20	DN20	DN15	1500*850*500	0.66
LYZD-A30	30	DN20		1800*900*600	1.00
LYZD-A50	50	DN20	DN15	1900*1000*600	1.67
LYZD-A70	70	DN32		2400*1150*700	2.33
LYZD-A80	80	DN32	DN25	2400*1150*700	2.66
LYZD-A100	100	DN32		2230*1700*800	3.33
LYZD-A120	120	DN40	DN32	2600*1200*800	4.00
LYZD-A140	140	DN40		2600*1400*900	4.66
LYZD-A160	160	DN50	DN32	2600*1500*900	5.33
LYZD-A180	180	DN50		2780*2150*900	6.00
LYZD-A200	200	DN50	DN40	2750*1750*900	6.67
LYZD-A250	250	DN50		2750*1900*1000	8.33
LYZD-A300	300	DN65	DN50	2807*2100*1050	10.0
LYZD-A350	350	DN65		2890*2200*1200	11.67
LYZD-A400	400	DN65	DN50	2890*2200*1200	13.33
LYZD-A450	450	DN65		2900*2500*1350	15.00
LYZD-A500	500	DN80	DN65	2900*2500*1350	16.67
LYZD-A550	550	DN80		2900*2500*1350	18.33
LYZD-A600	600	DN80	DN80	2900*2500*1400	20.00

Note: The data listed in this table are based on design conditions of an adsorption pressure of 0.8 MPa(g), ambient temperature of 20°C, and relative humidity of 80% for the feed air. The data provided in this catalog are for reference only.

05 Nitrogen generator

■ Technical Parameter

LYZD-A Series Nitrogen Generator Nitrogen Purity: 99.0%					
Model	Nitrogen Production (m³/h)	Intel pipe size	Outel pipe size	Overall DimensionsH*L*W	Effective air consumption (m³/min)
LYZD-B15	15	DN15	DN15	1500*850*500	0.55
LYZD-B25	25	DN20	DN15	1800*900*600	0.91
LYZD-B35	35	DN20	DN15	2115*1428*570	1.28
LYZD-B45	45	DN20	DN15	1900*1000*600	1.65
LYZD-B50	50	DN25	DN25	2400*1150*700	2.00
LYZD-B60	60	DN25	DN25	2430*1500*600	1.83
LYZD-B70	70	DN32	DN25	2568*1500*690	2.56
LYZD-B90	90	DN32	DN32	2600*1150*800	3.30
LYZD-B110	110	DN40	DN40	2700*1750*750	4.03
LYZD-B120	120	DN40	DN40	2652*1750*765	4.40
LYZD-B140	140	DN40	DN40	2600*1500*900	5.13
LYZD-B160	160	DN40	DN40	2780*2050*920	5.86
LYZD-B180	180	DN50	DN40	2750*1750*900	6.60
LYZD-B220	220	DN50	DN40	2750*1900*1000	8.06
LYZD-B260	260	DN50	DN50	2750*2160*1000	9.53
LYZD-B310	310	DN65	DN50	3031*2350*1200	11.36
LYZD-B350	350	DN65	DN50	2900*2500*1350	12.83
LYZD-B400	400	DN65	DN50	2900*2500*1350	14.67
LYZD-B440	440	DN65	DN50	2900*2500*1350	16.13
LYZD-B480	480	DN80	DN80	2900*2500*1350	17.60
LYZD-B530	530	DN80	DN80	3350*2900*1650	19.43
Note: The data listed in this table are based on design conditions of an adsorption pressure of 0.8 MPa(g), ambient temperature of 20°C, and relative humidity of 80% for the feed air. The data provided in this catalog are for reference only.					

■ Technical Parameter

LYZD-A Series Nitrogen Generator Nitrogen Purity: 99.5%					
Model	Nitrogen Production (m³/h)	Intel pipe size	Outel pipe size	Overall DimensionsH*L*W	Effective air consumption (m³/min)
LYZD-C12	12	DN15	DN15	1500*850*500	0.60
LYZD-C20	20	DN20	DN15	1800*900*600	1.00
LYZD-C35	35	DN20	DN15	2150*1350*600	1.75
LYZD-C50	50	DN25	DN25	2456*1500*700	2.50
LYZD-C60	60	DN32	DN25	2400*1100*700	3.00
LYZD-C70	70	DN32	DN25	2600*1150*800	3.50
LYZD-C90	90	DN40	DN40	2600*1200*800	4.50
LYZD-C100	100	DN40	DN40	2638*1750*765	5.00
LYZD-C120	120	DN40	DN40	2600*1500*900	6.00
LYZD-C130	130	DN40	DN40	2750*1600*900	6.50
LYZD-C150	150	DN50	DN40	2750*1750*900	7.50
LYZD-C220	220	DN50	DN40	2920*2400*1250	11.00
LYZD-C250	250	DN65	DN50	2890*2200*1200	12.50
LYZD-C290	290	DN65	DN50	2360*2350*1200	14.50
LYZD-C330	330	DN65	DN50	2890*2300*1200	16.50
LYZD-C370	370	DN65	DN50	2900*2500*1350	18.50
LYZD-C400	400	DN80	DN65	2900*2500*1350	20.00
LYZD-C440	440	DN80	DN65	2900*2500*1400	22.00
Note: The data listed in this table are based on design conditions of an adsorption pressure of 0.8 MPa(g), ambient temperature of 20°C, and relative humidity of 80% for the feed air. The data provided in this catalog are for reference only.					

■ Technical Parameter

LYZD-A Series Nitrogen Generator Nitrogen Purity: 99.9%					
Model	Nitrogen Production (m³/h)	Intel pipe size	Outel pipe size	Overall DimensionsH*L*W	Effective air consumption (m³/min)
LYZD-D10	10	DN15	DN15	1910*1150*520	0.66
LYZD-D15	15	DN20	DN15	1800*900*600	1.00
LYZD-D20	20	DN20	DN15	1900*1000*600	1.33
LYZD-D25	25	DN20	DN15	2200*1400*570	1.67
LYZD-D30	30	DN25	DN25	2413*1400*570	2.00
LYZD-D35	35	DN25	DN25	2400*1100*700	2.33
LYZD-D40	40	DN32	DN25	2456*1500*700	2.66
LYZD-D50	50	DN32	DN25	2528*1675*770	3.33
LYZD-D60	60	DN40	DN40	2700*1480*720	4.00
LYZD-D70	70	DN40	DN40	2600*1400*900	4.66
LYZD-D80	80	DN40	DN40	2600*1500*900	5.33
LYZD-D90	90	DN40	DN40	2850*3150*1000	6.00
LYZD-D120	120	DN50	DN40	3087*2100*1130	8.00
LYZD-D150	150	DN50	DN40	3100*2350*1200	10.00
LYZD-D170	170	DN65	DN40	2890*2150*1200	11.33
LYZD-D200	200	DN65	DN40	3160*2350*1200	13.33
LYZD-D220	220	DN65	DN40	2890*2300*1200	14.67
LYZD-D250	250	DN65	DN50	2900*2500*1350	16.67
LYZD-D270	270	DN65	DN50	2900*2500*1350	18.00
LYZD-D300	300	DN80	DN50	3500*2500*1400	20.00
Note: The data listed in this table are based on design conditions of an adsorption pressure of 0.8 MPa(g), ambient temperature of 20°C, and relative humidity of 80% for the feed air. The data provided in this catalog are for reference only.					

■ Technical Parameter

LYZD-A Series Nitrogen Generator Nitrogen Purity: 99.99%					
Model	Nitrogen Production (m³/h)	Intel pipe size	Outel pipe size	Overall DimensionsH*L*W	Effective air consumption (m³/min)
LYZD-E5	5	DN15	DN15	1936*1000*600	0.43
LYZD-E10	10	DN20	DN15	2205*1050*650	0.86
LYZD-E15	15	DN20	DN15	1900*1000*600	1.30
LYZD-E20	20	DN25	DN25	2150*1250*550	1.73
LYZD-E25	25	DN32	DN25	2400*1100*700	2.16
LYZD-E30	30	DN32	DN25	2600*1150*800	2.60
LYZD-E35	35	DN32	DN25	2600*1200*800	3.03
LYZD-E40	40	DN40	DN25	2600*1400*800	3.46
LYZD-E50	50	DN40	DN25	2718*1750*765	4.33
LYZD-E60	60	DN40	DN40	2707*2050*900	5.20
LYZD-E70	70	DN50	DN40	3087*2100*1130	6.06
LYZD-E90	90	DN50	DN40	2745*2300*1050	7.80
LYZD-E120	120	DN50	DN40	3160*2350*1200	10.40
LYZD-E130	130	DN50	DN40	2890*2200*1200	11.26
LYZD-E150	150	DN65	DN40	2890*2300*1200	13.00
LYZD-E170	170	DN65	DN40	2900*2500*1350	13.86
LYZD-E180	180	DN65	DN40	3232*2700*1450	15.60
LYZD-E200	200	DN80	DN40	3232*2800*1450	17.33
Note: The data listed in this table are based on design conditions of an adsorption pressure of 0.8 MPa(g), ambient temperature of 20°C, and relative humidity of 80% for the feed air. The data provided in this catalog are for reference only.					

■ Nitrogen Purity of Nitrogen Generator: 99.999%For customized nitrogen generators with higher purity requirements, please contact our company for further consultation and technical solutions.

5.2 Carbon-Based Deoxygenation Purification System



Working Principle

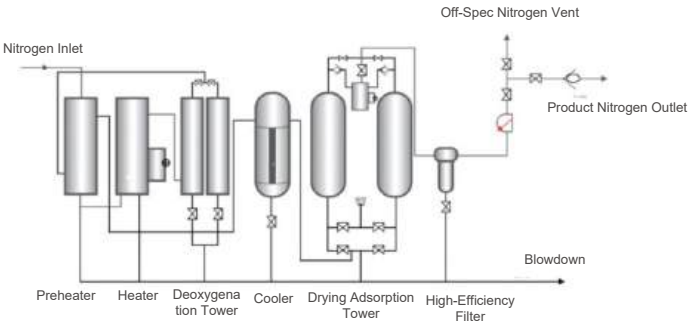
The Carbon-Based Deoxygenation Purification System is designed for further purification of nitrogen produced by a PSA nitrogen generator, upgrading standard nitrogen with a purity of approximately 99.9% to ≥99.999%.At a controlled temperature, residual oxygen in the feed nitrogen reacts with the carbon-based catalyst through an oxidation reaction to form carbon dioxide (CO₂):C + O₂ → CO₂. Through this reaction, the residual oxygen content in the nitrogen is reduced to ≤5 ppm. The gas then undergoes a Pressure Swing Adsorption (PSA) purification process to remove CO₂ and moisture, followed by precision filtration to eliminate particulate contaminants. The final product is high-purity nitrogen with a purity of ≥99.999%.The 3093 catalyst used in this combustion-type nitrogen purification system is consumable and must be replenished after a certain period of operation. A major advantage of this system is that no external hydrogen source is required, and the purified nitrogen contains no residual hydrogen.The feed nitrogen supply should be sized at approximately 1.1 times the required product nitrogen capacity. Feed nitrogen with a purity of approximately 99.9% is generally recommended, providing an economical solution with low operating costs.

Design Features

- Utilizes a high-efficiency Type 3093 deoxygenation agent, featuring advanced process technology, excellent operational stability, and high nitrogen purity.
- The purified nitrogen is hydrogen-free, making the system suitable for applications with stringent requirements for residual hydrogen and oxygen content.
- An integrated preheater recovers heat from the purified nitrogen discharged from the deoxygenation tower, reducing energy consumption by more than 30%.
- An adsorption dryer is used for CO₂ removal and deep dehydration, providing high adsorption capacity, extended adsorption cycles, and low energy consumption.
- The adsorption dryer is controlled by a Siemens PLC, ensuring safe and reliable operation.
- A dual deoxygenation tower configuration with one tower in operation and one on standby allows the catalyst to be replenished without interrupting nitrogen production, ensuring continuous operation.
- The dual-heater system adopts a duty/standby configuration, maintaining the required heating temperature while improving overall system reliability.
- Once the carbon catalyst in the deoxygenation tower is depleted, no impurities or carbon powder residue remain. No purging is required, and fresh carbon catalyst can be added directly.
- Equipped with an automatic interlocked venting system and multiple fault alarm functions.

Operating conditions and Technical requirements

- Nitrogen Capacity: 10–800 m³/h
- Oxygen Content: ≤10 ppm
- CO₂ Content: ≤5 ppm
- Nitrogen Purity: ≥99.999%
- Pressure Drop: ≤0.1 MPa
- Nitrogen Atmospheric Dew Point: ≤−60°C
- Power Supply: 380 V / 50 Hz



Technical Parameter

Model	General Nitrogen consumption (Nm³/h)	Intel/Outel pipe size	Pure nitrogen production(Nm³/h)	Catalyst loss (kg/Month)	Cooling water (t/h)	Applied power (kw)	Dimensions(mm) H*L*W
LYCZ-5	5.5	DN20	5	3.3	0.1	4.5	2000*1350*2300
LYCZ-10	11	DN20	10	6.6	0.1	4.5	2000*1350*2300
LYCZ-20	22	DN20	20	13.2	0.2	6	2000*1350*2300
LYCZ-30	33	DN25	30	19.8	0.2	6	2000*1350*2300
LYCZ-35	38.5	DN25	35	23.1	0.3	9	2200*1550*2600
LYCZ-40	44	DN25	40	26.4	0.3	9	2200*1550*2600
LYCZ-50	55	DN25	50	33	0.3	12	2200*1550*2600
LYCZ-60	66	DN25	60	39.6	0.5	12	2200*1550*2600
LYCZ-80	88	DN40	80	52.8	0.6	15	2550*1850*2750
LYCZ-100	110	DN40	100	66	0.8	15	2550*1850*2750
LYCZ-150	165	DN50	150	99	1.1	18	2950*2100*3000
LYCZ-200	220	DN50	200	132	1.5	24	3350*2350*3300
LYCZ-250	275	DN65	250	165	1.9	30	3750*2500*3600
LYCZ-300	330	DN65	300	198	2.2	30	3750*2500*3600
LYCZ-400	440	DN65	400	264	3	33	4100*2800*3800
LYCZ-500	550	DN65	500	330	3.7	36	4100*2800*3800
LYCZ-600	660	DN65	600	396	4.4	40	4100*2800*3800
LYCZ-800	880	DN80	800	528	5.9	48	7500*3000*3800
LYCZ-1000	1100	DN80	1000	660	7.4	60	7500*3000*3800

Note: The above data are for reference only and are subject to change without prior notice. For products with other specifications, please contact our company directly.

07 Project Cases

Partial projects

Project Reference 1: Class 1 Energy-Efficient Compressed Air Station Project for a Semiconductor Company (Actual Site Photo of the Compressor Station)

	Project Scale	6 × 150 m³/min Units
	System Configuration	Zero-Air-Loss Heat-of-Compression (HOC) Regenerative Adsorption Dryers
	Project Requirements	Meet Class 1 Energy Efficiency Standards and provide 200 million m³ of clean, oil-free, low-dew-point compressed air.
	Proposed Solution	Six 150 m³/min zero-air-loss HOC regenerative adsorption dryers were supplied, featuring: - Class 1 energy-efficient operation and intelligent monitoring - High-performance pneumatic butterfly valves - Advanced automatic control system - High-quality adsorbent with sufficient filling capacity

Project Reference 2: A Foundry Co., Ltd. (Actual Interior View of the Compressed Air Station)

	Project Scale	10 × 65 m³/min Units
	System Configuration	Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers
	Project Requirements	Project Requirements: Safe, reliable, fully automated operation with integration into the central control system and MES. Performance: Dew Point: ≤ -40°C, Oil Content: ≤ 0.01 ppm, Particle Size: ≤ 1 µm, Regeneration Air Consumption: 0%
	Proposed Solution	Ten 65 m³/min zero-air-loss blower-heated dryers were supplied, featuring: - High-performance pneumatic butterfly valves - High-quality adsorbent - Optimized airflow distribution - Dew-point and time-based control modes - Siemens touchscreen and Schneider electrical components - Integrated oil-water separation and high-efficiency filtration

Project Reference 3: A Photovoltaic Technology Co., Ltd. (Actual Site Photo of the Compressed Air Station)

	Project Scale	8 × 220 m³/min Units
	System Configuration	Low-Purge Blower-Heated Regenerative Adsorption Dryers
	Project Requirements	Project Requirements: High efficiency, energy savings, safe and reliable operation, easy maintenance, and an attractive design. Performance: Pressure Dew Point: ≤ -40°C, Oil Content: ≤ 0.01 ppm, Particle Size: ≤ 1 µm, Regeneration Air Consumption: ≤ 3%
	Proposed Solution	Eight customized 220 m³/min low-purge blower-heated regenerative adsorption dryers, featuring: - High-performance pneumatic butterfly valves - High-quality adsorbent - Optimized airflow distribution and advanced control system - Approx. 8% energy savings compared with conventional heated-purge dryers - Excellent moisture removal and stable dew-point performance

Project Reference 4: Compressed Air Dryer Retrofit Project for an Electrical Appliance Group Co., Ltd. (Actual Site Photo of the Compressed Air Station)

	Project Scale	4 × 85 m³/min Units
	System Configuration	Dual-Efficiency Energy-Saving Refrigerated Air Dryers (Water-Cooled)
	Project Requirements	Project Requirements: Four energy-efficient dryers to reduce system pressure drop and overall energy consumption. Performance: Pressure Dew Point: 2-10°C, Oil Content: ≤ 0.01 ppm, Particle Size: ≤ 1 µm
	Proposed Solution	Four 85 m³/min dual-efficiency refrigerated air dryers, combining low pressure drop and variable-frequency technology. - Variable-frequency operation adjusts automatically according to air demand - Terminal pressure increased from 6.45 bar to 6.8 bar - Overall energy savings of approximately 39% - Mitsubishi variable-frequency compressor and electronic expansion valve - Patented low-pressure-drop design - Intelligent touchscreen control with RS-485 communication

Project Reference 5: An Energy Storage Technology Co., Ltd. (Actual Interior View of the Compressed Air Station)

	Project Scale	6 × 50 m³/min Units
	System Configuration	Stainless Steel Low-Purge Blower-Heated Regenerative Adsorption Dryers
	Project Requirements	Project Requirements: Safe, stable, and reliable dryers with an advanced control system. Performance: Pressure Dew Point: ≤ -40°C, Oil Content: ≤ 0.01 ppm, Particle Size: ≤ 1 µm, Regeneration Air Consumption: ≤ 3%
	Proposed Solution	Six 50 m³/min stainless steel blower-heated adsorption dryers, featuring: - High-performance hard-seated pneumatic butterfly valves - High-quality adsorbent for stable dew-point performance - Optimized airflow distribution - Comprehensive temperature and pressure monitoring 7-inch touchscreen with international-brand electrical components - Stainless steel construction

Project Reference 6: An Aluminum Industry Co., Ltd. (Actual Site Photo of the Compressed Air Station)

	Project Scale	6 × 110 m³/min Units
	System Configuration	Zero-Air-Loss Heat-of-Compression + Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers
	Project Requirements	Project Requirements: High efficiency, energy savings, safe and reliable operation, easy maintenance, and attractive appearance. Performance: Pressure Dew Point: ≤ -40°C, Oil Content: ≤ 0.01 ppm, Particle Size: ≤ 1 µm, Regeneration Air Consumption: 0%
	Proposed Solution	Customized 110 m³/min zero-air-loss HOC and blower-heated regenerative adsorption dryers, featuring: - Multi-point temperature monitoring for control and protection - Multi-point pressure monitoring for safe and reliable operation - Local/Remote control modes - Time-Based/Dew-Point-Based control modes

07 Project Cases

Cases



Project Client New Energy Materials
Machine Model 2 Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers + 3 Refrigerated Air Dryers + 350 m³/h Nitrogen Generator



Project Client Cement Industry
Machine Model 5 × 45 m³/min Refrigerated Air Dryers



Project Client Pharmaceutical Co., Ltd.
Machine Model 4 × 28.5 m³/min Refrigerated Air Dryers + Modular Adsorption Dryers



Project Client Petrochemical Industry
Machine Model 4 × 40 m³/min CCS-Certified Adsorption Dryers



Project Client New Energy Materials
Machine Model 9 × 200 m³/min Blower-Heated Regenerative Adsorption Dryers



Project Client New Energy Industry
Machine Model 8 × 95 m³/min Stainless Steel Adsorption Dryers



Project Client Petrochemical Industry
Machine Model 8 × 250 m³/min WH Series Refrigerated Air Dryers



Project Client Power Plant
Machine Model 2 × 75 m³/min Modular Adsorption Dryers



Project Client Overseas Market
Machine Model 5 Refrigerated Air Dryers + Nitrogen Generators

Petrochemical Industry New Energy Vehicle Industry Machinery Manufacturing Industry Metallurgy & Steelmaking Industry



Project Client A Foreign-Invested Electromechanical Company
Machine Model 50 × 50 m³/min Modular Adsorption Dryers



Project Client New Energy Industry
Machine Model 3 Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers + 4 Stainless Steel Combined Air Dryers



Project Client New Energy Industry
Machine Model 5 Sets of Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers + Refrigerated Air Dryers



Project Client New Energy Industry
Machine Model 12 × 220 m³/min Low-Purge Blower-Heated Regenerative Adsorption Dryers



Project Client Chemical Industry
Machine Model 6 × 32 m³/min Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers + Refrigerated Air Dryers



Project Client Advanced Materials Industry
Machine Model 5 × 55 m³/min AH Series Refrigerated Air Dryers



Project Client Pharmaceutical Industry
Machine Model 3 × 85 m³/min Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers



Project Client Pharmaceutical & Food Industry
Machine Model 10 × 45 m³/min Energy-Efficient Refrigerated Air Dryers + Blower-Heated Regenerative Adsorption Dryers



Project Client Food Industry
Machine Model 4 × 45 m³/min Zero-Air-Loss Blower-Heated Regenerative Adsorption Dryers (40 bar)

Electronic Components Industry Defense Manufacturing Industry Textile Dyeing & Printing Industry Pharmaceutical & Food Industry

08 our services

LINGYU Services



Professional & Efficient



Committed to Improving Customer Satisfaction



Nationwide Coverage Rapid Response

Service Scope

- Free after-sales technical consultation
- Commissioning, repair, and maintenance of Lingyu
- equipment under warranty
- On-site inspection and customized maintenance solutions for
- out-of-warranty Lingyu equipment and other brands

Comprehensive Spare Parts Supply

- Refrigerated Air Dryer Parts**
Fans, compressors, condensers, evaporators, filter driers, expansion valves, bypass valves, pressure gauges, various drain valves, etc.
- Adsorption Dryer Parts**
Valves, electrical control boxes, adsorbents, diffusers, silencers, solenoid valves, check valves, etc.
- Other Spare Parts**
Various filter elements, differential pressure gauges, etc.

Service industry and customers

Electronics Industry						
Power Industry						
Home Appliance Industry						
Aerospace Industry						
Steel Industry						
Machinery Industry						
Automotive Industry						
Lithium Battery Industry						

Note: The companies listed above include both existing customers and prospective customers with upcoming cooperation.