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The technical parameters and illustrations in this brochure are for reference only. Actual products may vary.
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 m²**, 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 m² 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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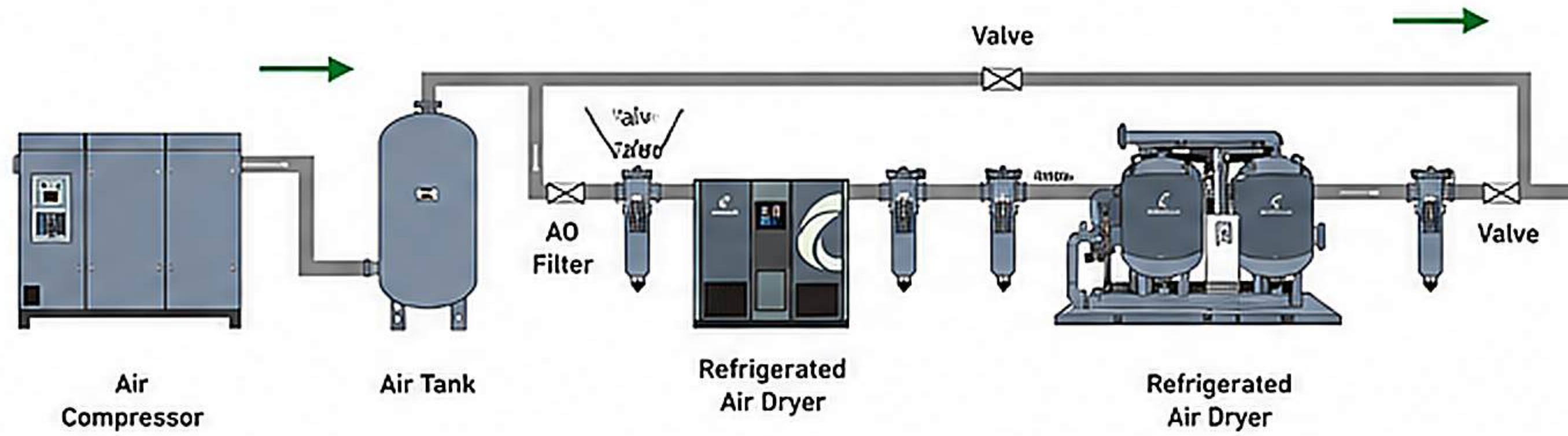
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01 COMPRESSED AIR PURIFICATION SYSTEM

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

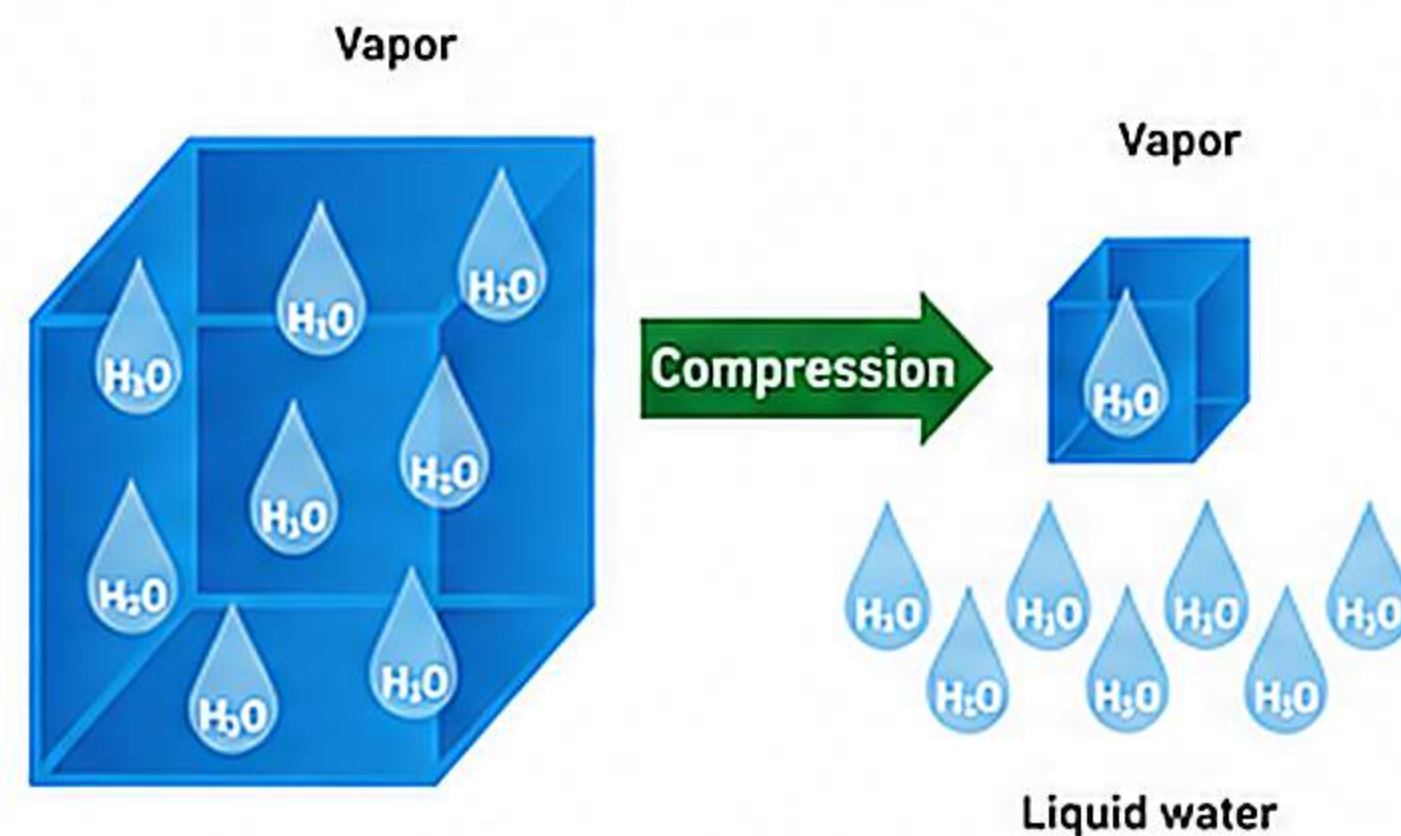
Water vapor, liquid water

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.

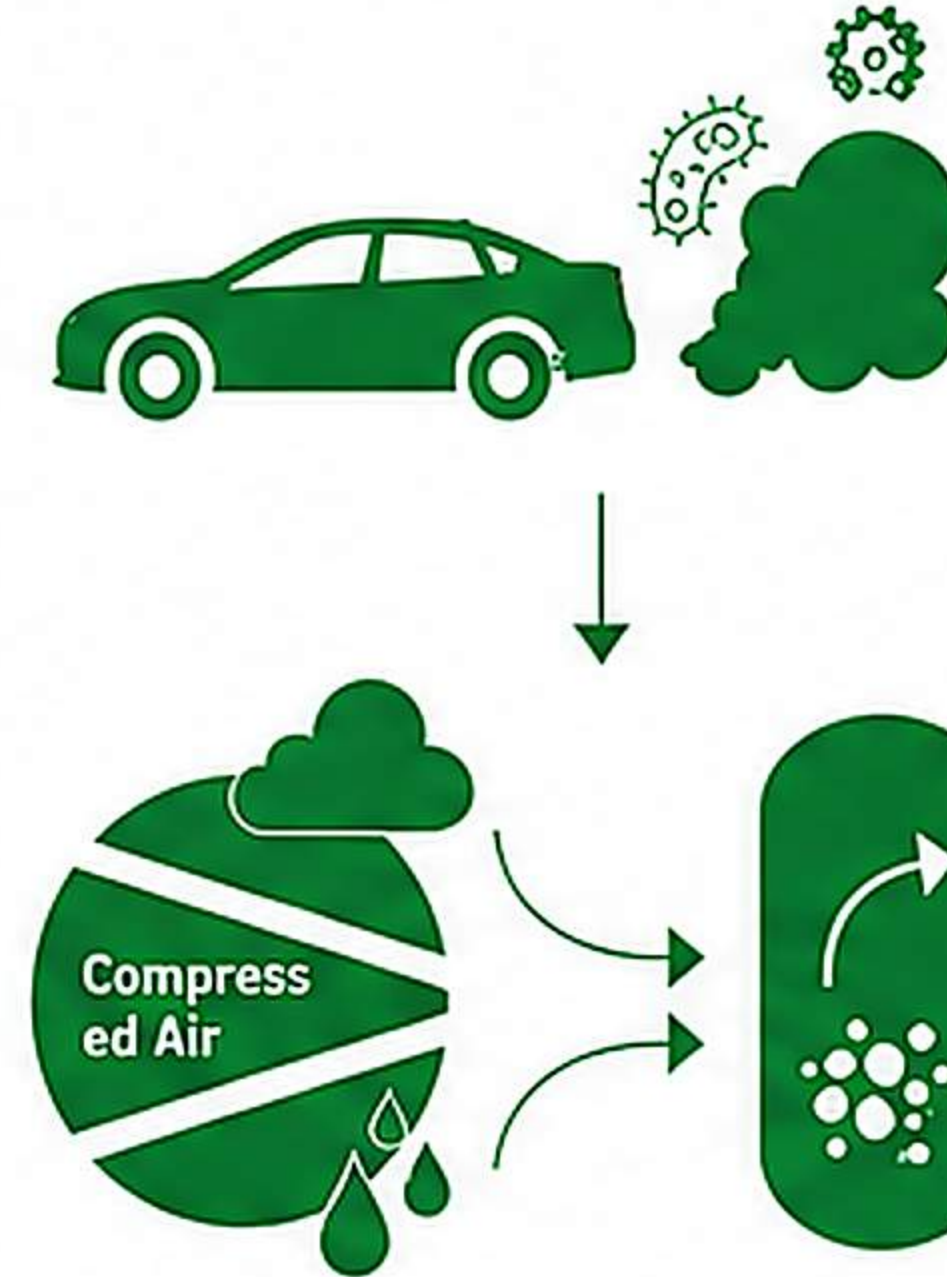
WHAT PROBLEMS CAN CONTAMINANTS CAUSE?

- 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

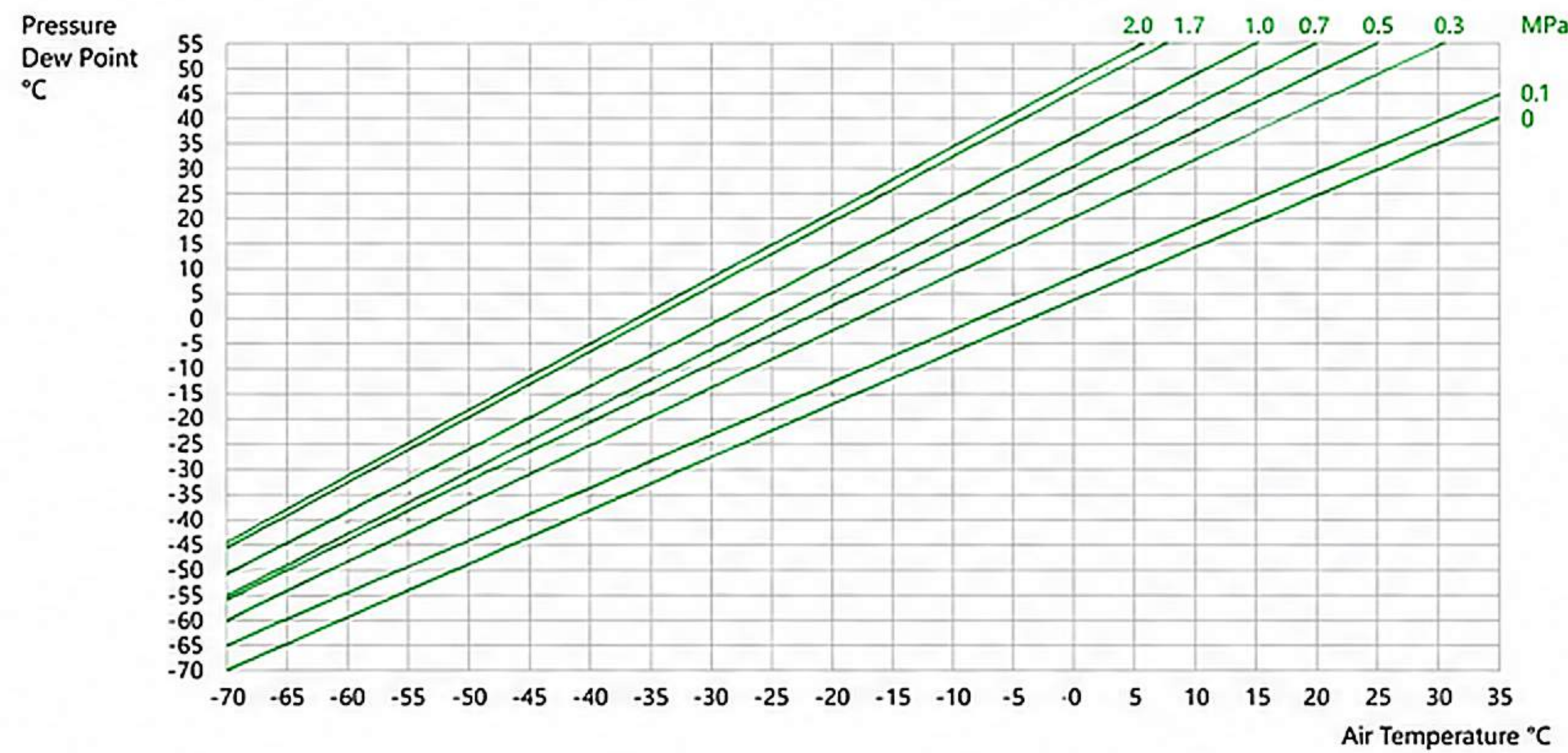
What is humid compressed air?

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



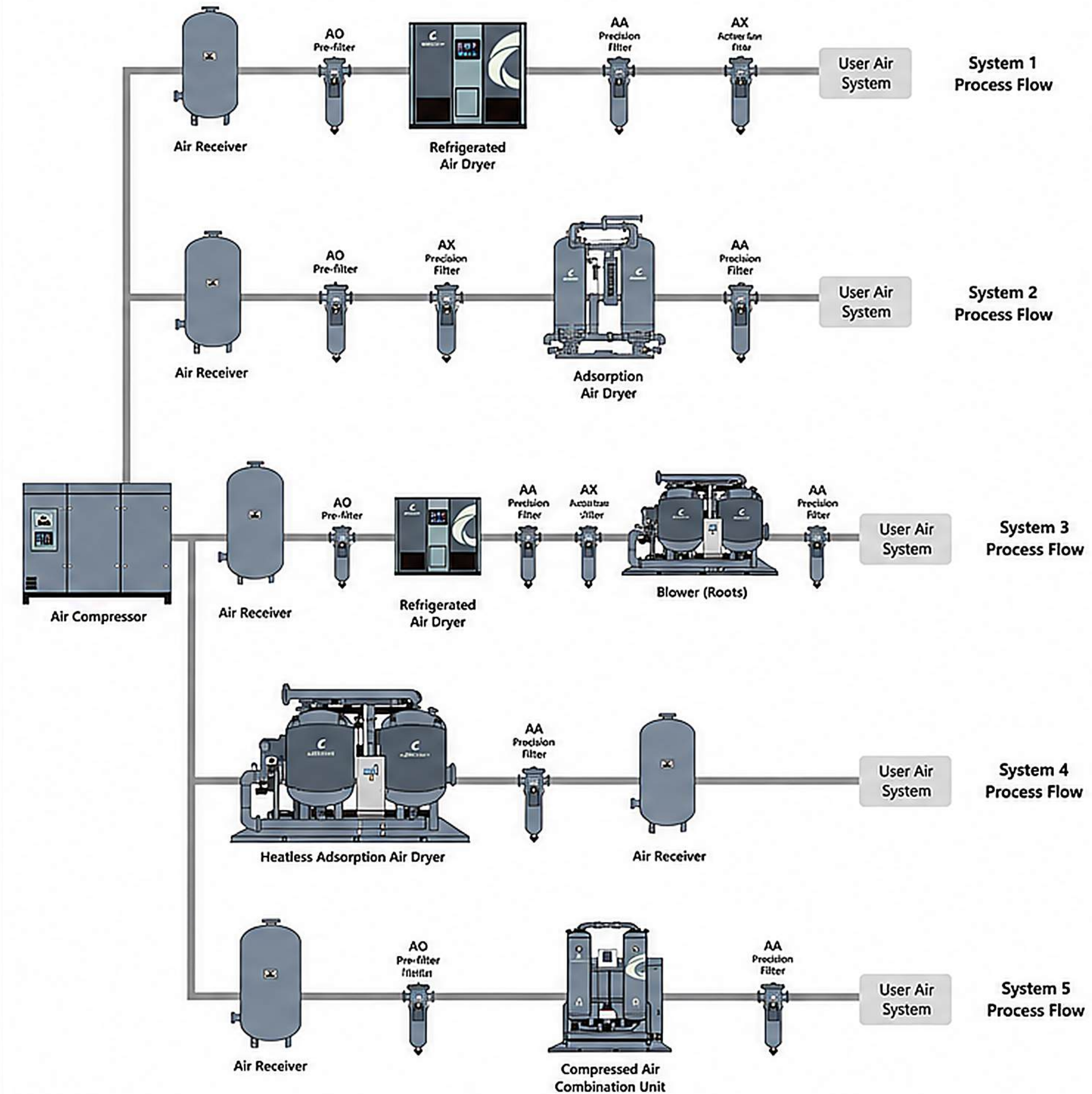
Pressure Dew Point – Moisture Content Reference Table

Dew Point (°C)	Water Content g/m ³	Dew Point (°C)	Water Content g/m ³	Dew Point (°C)	Water Content g/m ³	Dew Point (°C)	Water Content g/m ³	Dew Point (°C)	Water Content g/m ³
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.

05 NITROGEN GENERATOR

Nitrogen generator

5.1 PSA Pressure Swing Adsorption Nitrogen Generator

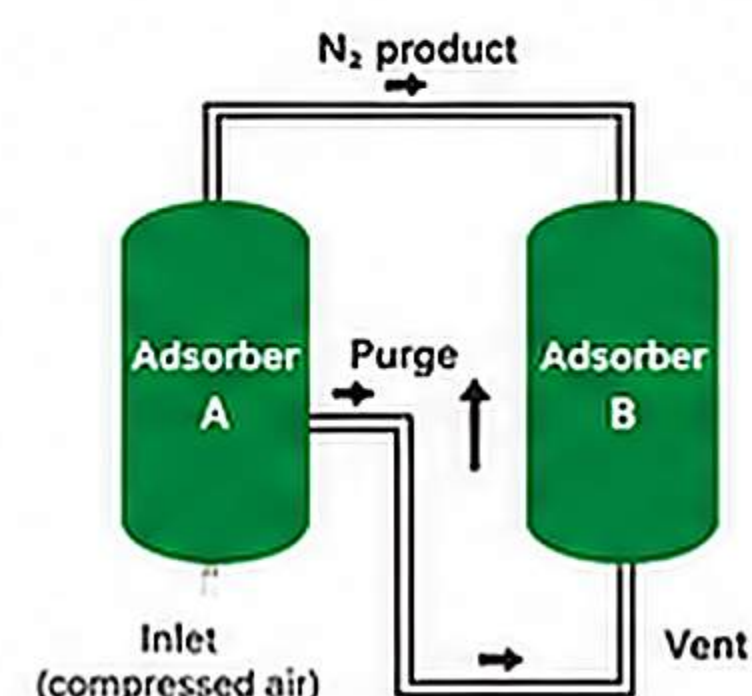


WORKING PRINCIPLE

The PSA nitrogen generator uses the pressure swing adsorption principle to separate nitrogen from compressed air. The compressed air first passes through a pretreatment system composed of air filters and air dryers to remove oil, water, and dust, ensuring clean and dry air enters the adsorption towers. Under pressure, the adsorbent selectively adsorbs oxygen and other trace gases, while nitrogen passes through as the product gas. When the adsorbent becomes saturated, the system automatically switches. The adsorption tower being regenerated is depressurized to near atmospheric pressure, and a small amount of product nitrogen is used for counter-current desorption, removing the adsorbed oxygen. After regeneration, pressurization is completed, and the tower returns to adsorption service. This cycle repeats to continuously produce high-purity nitrogen.

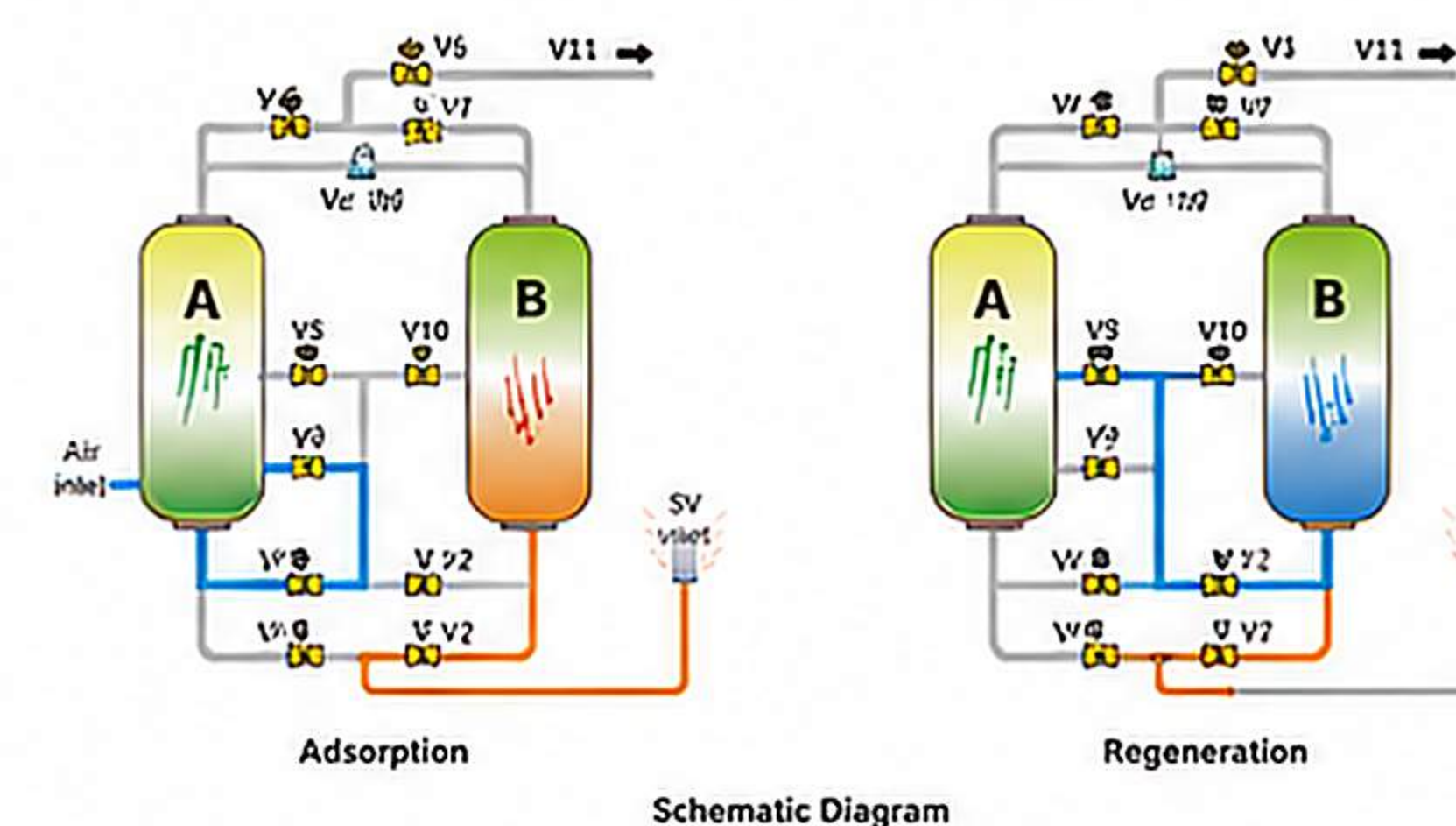
DESIGN FEATURES

- Fully automatic operation to achieve unattended and intelligent control;
- PLC control with touch screen for easy operation;
- Real-time display of nitrogen purity;
- Safety design with multiple interlocks and fault alarms;
- Purge gas is used for regeneration to save energy;
- Digital flowmeters display real-time flow and total flow;
- High-quality adsorbent ensures high nitrogen purity and long service life;
- Efficient air recovery with purged gas recovery, with recovery efficiency $\geq 5\%$.



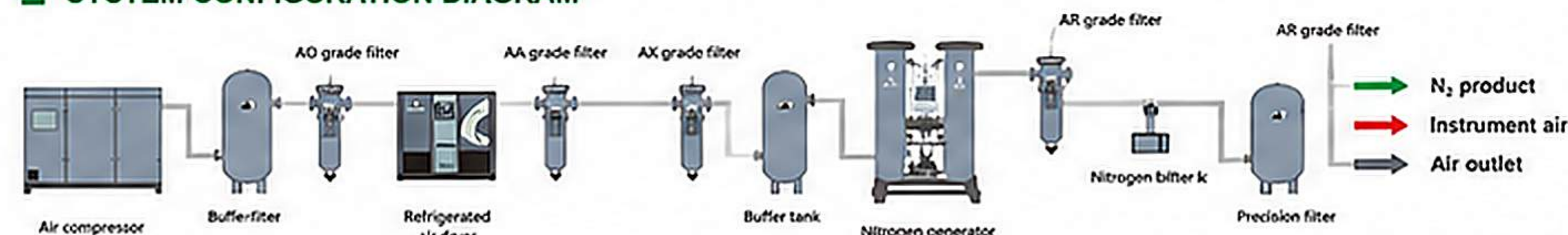
OPERATING CONDITIONS AND TECHNICAL REQUIREMENTS

- Inlet temperature: $\leq 40^{\circ}\text{C}$
- Inlet pressure: 0.5 MPa ~ 0.8 MPa
- Nitrogen purity: 95% ~ 99.999%
- Dew point: $\leq -40^{\circ}\text{C}$ (at 1 atm)
- Ambient temperature: $\leq 40^{\circ}\text{C}$
- Adsorbent life: 4 ~ 6 years
- Power supply: 220 V / 50 Hz
- Noise level: ≤ 75 dB



Note: The valves in the diagram are shown in their normal (unenergized) state. They may differ from the actual configuration.

SYSTEM CONFIGURATION DIAGRAM



TECHNICAL PARAMETER 98% Nitrogen Purity Equipment Selection

Model	Nitrogen Production (Nm ³ /h)	Inlet Pipe Size	Outlet Pipe Size	Air Outlet Connection	Equipment Weight (kg)	Overall Dimensions (mm) L x W x H	Effective Air Consumption (Nm ³ /min)
LY-DZ-A20	20	DN20	DN15	G1"	182	1260×762×1803	0.66
LY-DZ-A30	30	DN20	DN15	G1"	263	1260×940×1700	1.00
LY-DZ-A50	50	DN20	DN20	G1½"	420	1345×1030×1713	1.67
LY-DZ-A70	70	DN32	DN25	G1½"	574	1455×1160×1847	2.33
LY-DZ-A80	80	DN32	DN25	G2"	782	1665×1295×2175	2.56
LY-DZ-A100	100	DN32	DN32	G2"	980	1665×1366×2225	3.33
LY-DZ-A120	120	DN40	DN32	DN65	1072	1725×1346×2384	4.00
LY-DZ-A140	140	DN40	DN32	DN80	1399	1955×1459×2465	4.66
LY-DZ-A160	160	DN50	DN40	DN80	1554	1950×1459×2466	5.33
LY-DZ-A180	180	DN50	DN40	DN80	1820	2070×1560×2448	6.00
LY-DZ-A200	200	DN50	DN40	DN100	2010	2115×1600×2640	6.67
LY-DZ-A300	300	DN65	DN50	DN100	2336	2140×1760×2680	8.33
LY-DZ-A400	400	DN65	DN65	DN100	2750	2200×1842×2541	10.0
LY-DZ-A450	450	DN65	DN65	DN100	2830	2900×2500×1400	11.67
LY-DZ-A500	500	DN80	DN80	DN100	-	2900×2500×1400	13.33
LY-DZ-A500	500	DN80	DN80	DN100	-	2900×2500×1350	15.00
LY-DZ-A550	550	DN80	DN80	DN100	-	2900×2500×1350	15.00
LY-DZ-A600	600	DN80	DN80	DN100	-	2900×2500×1350	16.67

Note: For air volume greater than 260 Nm³/min or special specifications (materials, etc.), please contact our company or dealer. The above data are for reference only and are subject to change without prior notice.

■ TECHNICAL PARAMETER 99.0% Nitrogen Purity Equipment Selection

LYZD-D Series PSA Pressure Swing Adsorption Nitrogen Generator Nitrogen Purity: 99.0%					
Model	Nitrogen Production (Nm ³ /h)	Inlet Pipe Size	Outlet Pipe Size	Overall Dimensions (mm) L×W×H	Effective Air Consumption (Nm ³ /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	2115×1420×570	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	DN50	2750×1900×1000	9.53
LYZD-B310	310	DN65	DN50	3030×2350×1200	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	16.15
LYZD-B480	480	DN80	DN80	2900×2800×1350	17.63
LYZD-B530	530	DN80	DN80	3350×2900×1650	19.43

Note: Inlet pressure is based on 0.8 MPa (gauge). When inlet pressure is 0.7 MPa (gauge), nitrogen production may be reduced by about 20%.
The above data are for reference only and are subject to change without prior notice.

■ TECHNICAL PARAMETER 99.5% Nitrogen Purity Equipment Selection

LYZD-C Series PSA Pressure Swing Adsorption Nitrogen Generator Nitrogen Purity: 99.5%					
Model	Nitrogen Production (Nm ³ /h)	Inlet Pipe Size	Outlet Pipe Size	Overall Dimensions (mm) L×W×H	Effective Air Consumption (Nm ³ /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	2658×1500×765	5.00
LYZD-C120	120	DN40	DN40	2600×1500×900	6.00
LYZD-C130	130	DN40	DN40	2600×1600×900	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: Inlet pressure is based on 0.8 MPa (gauge). When inlet pressure is 0.7 MPa (gauge), nitrogen production may be reduced by about 20%.
The above data are for reference only and are subject to change without prior notice.

■ TECHNICAL PARAMETER 99.9% Nitrogen Purity Equipment Selection

LYZD-D Series PSA Pressure Swing Adsorption Nitrogen Generator Nitrogen Purity: 99.9%					
Model	Nitrogen Production (Nm ³ /h)	Inlet Pipe Size	Outlet Pipe Size	Overall Dimensions (mm) L×W×H	Effective Air Consumption (Nm ³ /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	2850×1350×1000	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	2900×2300×1200	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: Inlet pressure is based on 0.8 MPa (gauge). When inlet pressure is 0.7 MPa (gauge), nitrogen production may be reduced by about 20%.
The above data are for reference only and are subject to change without prior notice.

■ TECHNICAL PARAMETER 99.99% Nitrogen Purity Equipment Selection

LYZD-E Series PSA Pressure Swing Adsorption Nitrogen Generator Nitrogen Purity: 99.99%					
Model	Nitrogen Production (Nm ³ /h)	Inlet Pipe Size	Outlet Pipe Size	Overall Dimensions (mm) L×W×H	Effective Air Consumption (Nm ³ /min)
LYZD-E5	5	DN15	DN15	1936×1000×500	0.48
LYZD-E10	10	DN20	DN15	2205×1050×550	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	36	DN32	DN25	2600×1400×800	3.03
LYZD-E50	50	DN40	DN25	2718×1750×765	4.35
LYZD-E60	60	DN40	DN40	2719×2050×765	5.20
LYZD-E70	70	DN50	DN40	3007×2100×1200	6.06
LYZD-E90	90	DN50	DN40	2745×2100×1050	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	2890×2300×1350	13.86
LYZD-E180	180	DN65	DN40	3322×2700×1450	15.60
LYZD-E200	200	DN80	DN40	3232×2800×1450	17.33

Note: Inlet pressure is based on 0.8 MPa (gauge). When inlet pressure is 0.7 MPa (gauge), nitrogen production may be reduced by about 20%.
The above data are for reference only and are subject to change without prior notice.

■ Nitrogen generator purity: 99.999%, please contact us for customized options!

5.2 Carbon Molecular Sieve Nitrogen Purification System



WORKING PRINCIPLE

The carbon molecular sieve (CMS) nitrogen purification system adopts PSA (Pressure Swing Adsorption) technology to produce high-purity nitrogen. Under normal conditions, the residual gas mainly consists of 99.9% nitrogen and up to 99.99% nitrogen can be achieved. At a certain pressure, the air from the air compressor enters the pretreatment system, where moisture, oil, CO₂ and other impurities are removed, and the dew point is controlled at $\leq -55^{\circ}\text{C}$. The gas then enters the adsorption tower filled with carbon molecular sieve adsorbent. The CO₂, H₂O and other impurities are adsorbed by the adsorbent, while nitrogen passes through the adsorbent and is collected at the finished product. The system uses two adsorbent towers in parallel. While one tower is producing nitrogen, the other is undergoing depressurization, purging and regeneration. The two towers automatically switch in cycles to ensure continuous nitrogen supply.

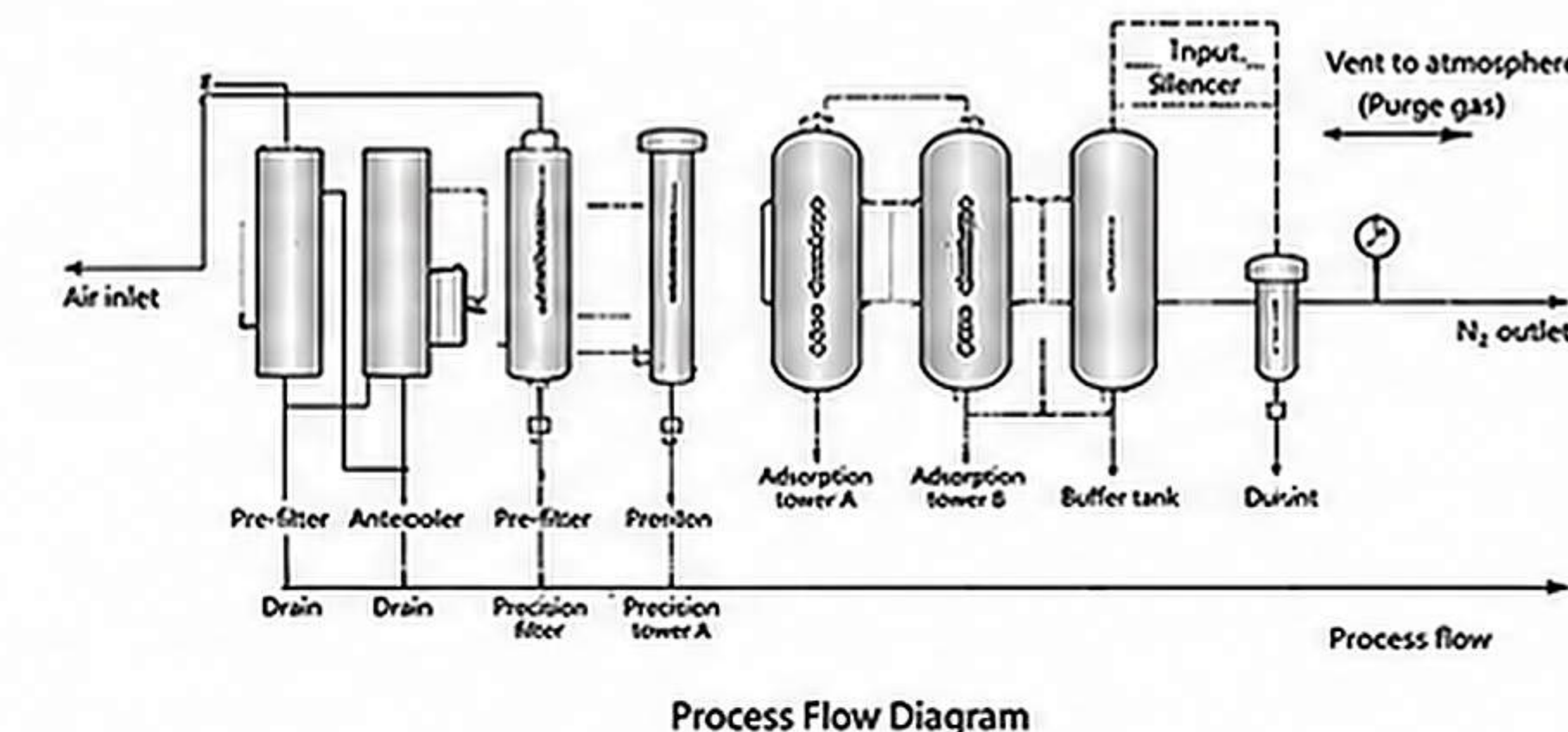
The nitrogen purity can reach 99.9% to 99.999%, meeting diverse needs.

DESIGN FEATURES

- Uses domestic 3093 carbon molecular sieve, advanced process, stable performance, and high nitrogen purity;
- High nitrogen purity with low energy consumption, delivering excellent economic benefits;
- Modular design, easy installation, and flexible combination meets capacity requirements of up to 30% redundancy;
- CO₂ and moisture are effectively adsorbed, resulting in higher nitrogen purity and lower dew point;
- PLC control with touchscreen interface for easy operation, safe and reliable;
- Dual adsorption towers are used alternately, ensuring continuous and stable nitrogen supply without interruption;
- Dual pre-filters can be connected in series for deeper purification, extending adsorbent life;
- Adsorbent can be reactivated by heating regeneration, no need for replacement or direct heating regeneration;
- Automatic fault detection with real-time alarm prompts.

OPERATING CONDITIONS AND TECHNICAL REQUIREMENTS

- Air flow: 10 – 800 Nm³/h
- Particles: < 10 ppm
- CO₂ content: ≤ 5 ppm
- Nitrogen purity: $\geq 99.999\%$
- Pressure: ≤ 0.1 MPa
- Ambient temperature: 5 - 60°C
- Power supply: 380 V / 50 Hz



TECHNICAL PARAMETER

Model	Nitrogen Production (Nm ³ /h)	Inlet Prioritet Pipe Size	Outlet/Outlet Pipe Size	Nitrogen Purity (Nm ³ /h)	Carbon Molecular Sieve Filling (kg/set)	Cooling Water (m ³ /h)	Installed Power (kW)	Overall Dimensions (mm) L x W x H
LYZC-5	5.5	DN20	DN20	5	3.3	0.1	4.5	2000×1350×2300
LYZC-10	11	DN20	DN20	10	6.6	0.1	4.5	2000×1350×2300
LYZC-20	22	DN20	DN20	20	13.2	0.2	6	2000×1350×2300
LYZC-30	33	DN25	DN25	30	19.8	0.2	6	2000×1350×2300
LYZC-35	38.5	DN25	DN25	35	23.1	0.3	9	2200×1550×2600
LYZC-40	44	DN25	DN25	40	26.4	0.3	9	2200×1550×2600
LYZC-50	55	DN25	DN25	50	33.0	0.3	12	2200×1550×2600
LYZC-60	66	DN25	DN25	60	39.6	0.5	12	2200×1550×2600
LYZC-80	88	DN40	DN40	80	52.8	0.6	15	2550×1850×2750
LYZC-100	110	DN40	DN40	100	66.0	0.8	15	2550×1850×2750
LYZC-150	165	DN50	DN50	150	99.0	1.1	18	2950×2100×3000
LYZC-200	220	DN50	DN50	200	132.0	1.5	24	3350×2350×3300
LYZC-250	275	DN65	DN50	250	165.0	1.9	30	3750×2500×3600
LYZC-300	330	DN65	DN50	300	198.0	2.2	30	3750×2500×3600
LYZC-400	440	DN65	DN60	400	264.0	3.0	33	4100×2800×3600
LYZC-500	550	DN65	DN60	500	330.0	3.7	36	4100×2800×3800
LYZC-600	660	DN65	DN60	600	396.0	4.4	40	4100×2800×3800
LYZC-800	880	DN80	DN60	800	528.0	5.9	48	7500×3000×3800
LYZC-1000	1100	DN80	DN60	1000	660.0	7.4	60	7500×3000×3800

Note: Inlet pressure is based on 0.8 MPa (gauge). When inlet pressure is 0.7 MPa (gauge), nitrogen production may be reduced by about 20%. The above data are for reference only and are subject to change without prior notice.

PARTIAL PROJECTS

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



Air Flow	6×150 m³/min
Equipment Configuration	D Series High-Efficiency Coalescing Filter + Adsorption Dryer
Project Requirements	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.
Solution Advantages	Customized a combined filtration and drying system to ensure stability and continuous supply of grade-1 compressed air, with the following advantages: ① Low pressure drop and high purification efficiency; ① Stable operation and reliable performance; ① Long service life of filter elements; ① Low operating cost.

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



Air Flow	10×65 m³/min
Equipment Configuration	Carbon Molecular Sieve Nitrogen Generator
Project Requirements	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.
Solution Advantages	A customized nitrogen generator system was provided with the following advantages: ① High nitrogen purity, meeting food-grade standards; ① Fully automated operation, easy to use; ① Energy saving and consumption reduction; ① Stable nitrogen supply, low maintenance cost; ① Modular design for flexible expansion; ① Dual adsorbers for parallel operation to ensure uninterrupted nitrogen supply.

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



Air Flow	8×220 m³/min
Equipment Configuration	D Series High-Efficiency Coalescing Filter + Refrigerated Dryer
Project Requirements	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.
Solution Advantages	Combined solution to ensure a stable and clean air supply with the following advantages: ① High purification efficiency, stable dew point control; ① Low pressure drop and energy saving; ① Filter elements made of high-quality materials with long service life; ① Easy installation and maintenance; ① High cost-effectiveness.

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



Air Flow	4×85 m³/min
Equipment Configuration	Explosion-Proof Refrigerated Dryer (Water-Cooled)
Project Requirements	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.
Solution Advantages	Explosion-proof design, safe and reliable operation; meets Class IIB T3 explosion-proof requirements; ① Efficient cooling, stable dew point control; ① Intelligent control with fault alarm; ① Stainless steel heat exchanger with long service life; ① Equipped with RS-485 communication interface for remote monitoring.

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



Air Flow	6×50 m³/min
Equipment Configuration	Stainless Steel Carbon Molecular Sieve Nitrogen Generator
Project Requirements	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.
Solution Advantages	Stainless steel nitrogen generator system with the following advantages: ① High purity and stability; ① Stainless steel material, corrosion-resistant and long service life; ① No consumables, low operating cost; ① Intelligent control with remote monitoring; ① Dual-tower design for parallel operation, ensuring stable nitrogen supply; ① Outlet pressure and flow adjustable; ① Applications: lithium battery production, chemical industry, electronics, etc.

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



Air Flow	6×110 m³/min
Equipment Configuration	D Series Coalescing Filter + Refrigerated Dryer
Project Requirements	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.
Solution Advantages	Combined solution to ensure a stable and clean air supply with the following advantages: ① High purification efficiency and stable dew point control; ① Low pressure drop and energy-saving operation; ① Filter elements made of high-quality materials with long service life; ① Outlet pressure and flow adjustable; ① Applications: lithium battery production, pneumatic conveying, A/B tank pressurization, etc.; 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

08 OUR SERVICES

Our services

■ 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	中国华能 CHINA HUANENG
Home Appliance Industry	TCL 王牌	GREE 格力	长虹 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	广晟有色 GUANGSHENG CO.
Machinery Industry	SANY	玉柴机器 YUCHAI	中联重科 ZHONGLI	CSSC	中船重工	
Automotive Industry	G	H	Toyota	NISSAN	东风 DONGFENG	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.