



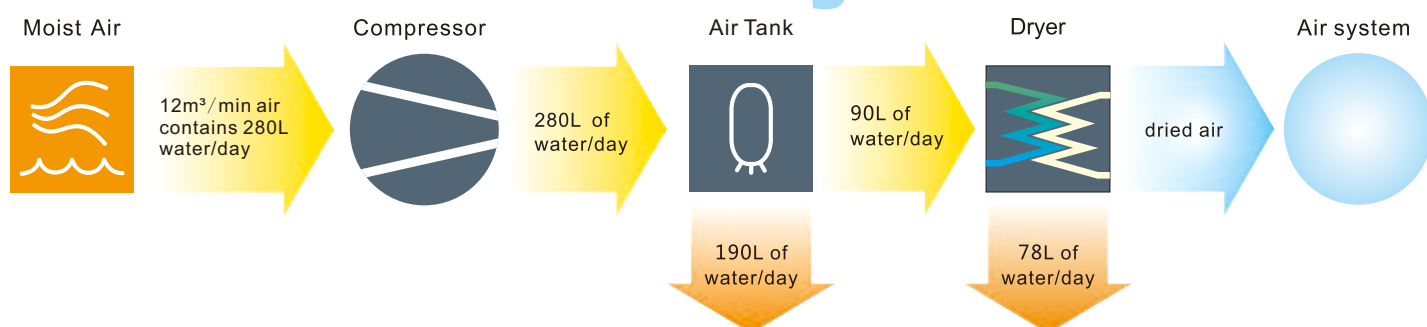
JIANYE

After-treatment Equipment for Compressed Air System



Refrigerated Air Dryer
Adsorption Air Dryer
Combine Air Dryer
Line Air Filter
After Cooler

Refrigerated Air Dryer



Why Need To Use The Refrigerated Air Dryer?

- ◆ Usually compressed air contains 100% vapor, these vapors are condensed together when the air would be cooled. The condensed water not only damages the compressor system, reduces tool efficiency, but also destroys your terminal products, corrodes piping and increases your maintenance costs.
- ◆ More than 90L water will enter into the compressor system everyday if without the air dryer. JIANYE refrigerated air dryer removes approximately 90% of water and ensures your application in good performance.



Transport and install conveniently, all pipes and wires of JIANYE refrigerated air dryer are connected before leaving manufactory.

No need to make any special installation foundation, just connect the power and turn the start button, the

We adopt thickness 0.5mm heat-exchanger and evaporator, thickness 1.0mm connected cooper pipe

Stong fan and advanced welding process, improve the cooling effect.

The Components of Refrigerated Air Dryer

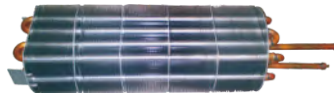


01

Pre-cooler (Heat Exchange)

Inlet air and outlet air exchanges temperature in here which result in hot inlet air gets cool and cool outlet air gets warm.

Reducing the stress of air dryer, prolong the service life of dryer. Solving the pipe frosting problem.



02

Evaporator

The core component of the air dryer. Most vapor are condensed into liquid water due to compressed air is cooled by refrigerant, then water is discharged.

Evaporator is made from aluminum plate and thickness 0.5mm cooper pipe. It oversize and long cooling distance which result in good cooling effect.

Good welding technology that greatly reduce the refrigerant leakage rate.



03

Air-cooled Condenser

Refrigerant flows with S-shaped, cooling area increased greatly.

Continual cooling process, good cooling performance.



04

Refrigerant Compressor

The "HEART" of the air dryer, and refrigerant like "BLOOD".

We adopt Japan Panasonic refrigerant compressor, stable and high efficiency



05

High Pressure Switch High/Low Pressure Switch

An Important protective device.

Prevent fan and compressor from burning caused by high outlet pressure or low inlet pressure.

Ps: all model with a high pressure switch. Model BL0080-BL0500 with a high/low pressure switch.



06

Dry Filter

Filtering the impurities in the refrigerant, it ensures the cooling system not effected by moisture and impurity. Also it protects the refrigerant compressor, prolongs the service life of refrigerant.



07

Expansion Valve

It is one of the basic component of refrigerant system. It reduces the pressure and controls the flow rate of refrigerant to improve the cooling efficiency.

Ps: model BL0080-BL0500 with an expansion valve.



08

Hot Gas Bypass Valve

While air capacity of air dryer decrease, inner temperature of an evaporator will be down to 0 ° C. meanwhile the pipe will be blocked caused by the condensate water freeze-up.

Hot gas bypass valve can solve this freeze-up problem, ensure air dryer operate smoothly.

Ps: model BL0080-BL0500 with a hot gas bypass valve.



09

Electric Auto-Drain

Discharge the condenser water from air dryer automatically.

Discharge time and interval time can be adjusted by users.

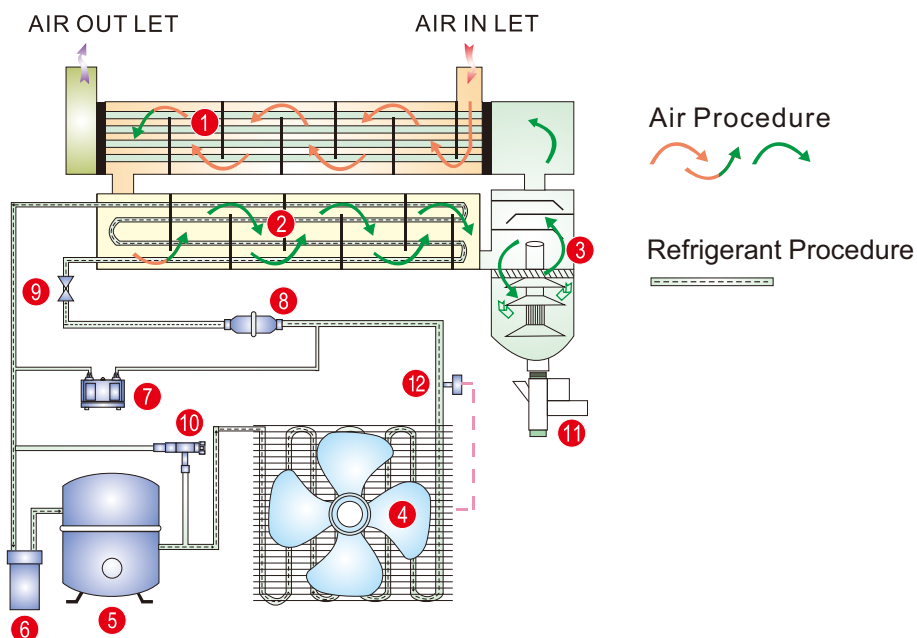
It's automatic, intelligent and low failure rate.

JIANYE

Refrigerated Air Dryer

► Operation Process

1. Pre-cooler / Heat Exchanger
2. Evaporator
3. Air / Water Separator
4. Air-cooled Condenser
5. Refrigerant Compressor
6. Refrigerant Reservoir
7. High-low Pressure switch
8. Dry Filter
9. Expansion Valve (Capillary)
10. Hot Gas Bypass Valve
11. Electric Auto-Drain
12. High Pressure Switch



Air Procedure:

The compressed air from “AIR INLET” enters into air dryer and goes through (1) Pre-cooler, the compressed air will be pre-cooled first, after that it flows through (2) Evaporator to get further cooler, the vapor of the compressed air is condensed because the air gets cool, when the cooled compressed air passes (3) Air/water separator, water will be discharged by (11) Electric auto-drain automatically. At last the dry and cool compressed air enters into the copper pipe of (1) Pre-cooler again, the outlet air and inlet air exchange the temperature in pre-cooler. Dry compressed air out from “AIR OUTLET”.

Refrigerant Procedure:

The refrigerant will be compressed by (5) Refrigerant compressor, after that it is a high temperature and high pressure vapor, the refrigerant vapor enters into (4) Air-cooled condenser to get lower temperature, this moment refrigerant from a vapor to a liquid state, and then liquid refrigerant go through (8) Dryer filter to get purer, and then it pass by the (9) Expansion valve, the pressure of refrigerant becomes lower. Gas and liquid mixed refrigerant flow into copper pipe of (1) Evaporator to low down the compressed air temperature, finally refrigerant gets back to (5) Refrigerant reservoir, this is a circular process.

Technical Parameters



| Model | Air capacity | | Compressor Power | Power Supply | Air Connection | N.W. | Dimension(L×W×H) |
|--------|--------------|------|------------------|---------------|----------------|------|------------------|
| | m³/min | CFM | hp | v/hz/ph | -- | kg | mm |
| BL0001 | 0.16 | 5 | 0.19 | 220v/50hz/1ph | DN15(G1/2") | 45 | 400x600x640 |
| BL0005 | 0.8 | 28 | 0.25 | 220v/50hz/1ph | DN20(G3/4") | 50 | 400x800x640 |
| BL0010 | 1.8 | 64 | 0.35 | 220v/50hz/1ph | DN20(G3/4") | 55 | 400x800x640 |
| BL0020 | 2.8 | 99 | 0.5 | 220v/50hz/1ph | DN25(G1") | 65 | 400x800x780 |
| BL0030 | 3.8 | 134 | 0.75 | 220v/50hz/1ph | DN25(G1") | 68 | 400x800x780 |
| BL0040 | 5.5 | 194 | 1.25 | 220v/50hz/1ph | DN40(G1-1/2") | 90 | 500x860x880 |
| BL0060 | 6.8 | 240 | 1.5 | 230v/50hz/1ph | DN40(G1-1/2") | 95 | 500x860x880 |
| BL0080 | 8.8 | 311 | 2 | 220v/50hz/1ph | DN50(G2") | 130 | 700x900x1000 |
| BL0100 | 11.5 | 406 | 2.5 | 220v/50hz/1ph | DN50(G2") | 135 | 700x900x1000 |
| BL0120 | 14 | 494 | 3 | 380v/50hz/3ph | DN65(G2-1/2") | 160 | 700x1000x1000 |
| BL0150 | 16 | 565 | 4 | 380v/50hz/3ph | DN65(G2-1/2") | 165 | 800x1000x1000 |
| BL0200 | 22.8 | 805 | 5 | 380v/50hz/3ph | DN80(F3) | 250 | 700x1450x1160 |
| BL0250 | 28.5 | 1007 | 6 | 380v/50hz/3ph | DN80(F3) | 300 | 700x1450x1160 |
| BL0300 | 35 | 1236 | 8 | 380v/50hz/3ph | DN80(F3) | 400 | 1800x1000x1360 |
| BL0400 | 45 | 1589 | 10 | 380v/50hz/3ph | DN100(F4) | 500 | 2000x1000x1360 |
| BL0500 | 55 | 1943 | 12.5 | 380v/50hz/3ph | DN100(F4) | 600 | 2200x1100x1480 |

Operating Range:

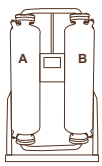
◆ Working Pressure: 0.6-1.3Mpa (normal pressure type) ◆ Ambient Temperature: 5-45℃
3.0-4.0Mpa (high pressure type)

◆ Max. Inlet Temperature: <80℃

Standard Conditions:

◆ Air Inlet Temperature: 38℃ ◆ Ambient Temperature: 35℃ ◆ Working Pressure: 0.7Mpa ◆ Pressure Dew Point: 2-10℃
◆ Refrigerant: R22 ◆ Cooling Method: air-cooled
◆ Please contact us for any specification that is not within the above mentioned standards.





The Components of Adsorption Air Dryer





Adsorption Tower

Reasonable design and good drying efficiency. There is a large air diffuser inside the tower that can ensure compressed air contacts with absorbent more than 5seconds, also make sure compressed air 100% through the absorbent.

Tower can be used more than 10 years because of the rust prevention treatment.



Check Valve

It prevent compressed air backflow, low compressed air consumption and save energy. It is sensitive and stable.



Pneumatic Valve Pneumatic Butterfly Valve

Control compressed air enter in to A/B tower intelligently. It is long service life time and reliable.

Ps: B0005-BX0150 with pneumatic valves, BX0200-BX0500 with pneumatic butterfly valve.



Controller

The controller is consisted of several of microprocessor chips. Very simple and easy to handle the controller. The operation cycle and swith state are showed by LED display clearly.

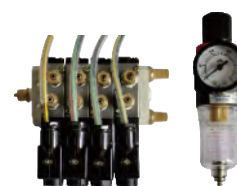


Absorbent

(activated alumina and molecular sieves)

Perfect match of activated alumina and molecular sieves that result in high performance.

Durable and high quality absorbent.



Solenoid Valve Pneumatic Control Valve

Best cooperation of solenoid valve and pneumatic control valve, they ensure inlet pressure above 0.4Mpa to guarantee the absorption air dryer operate smoothly.



Muffler

It maximize to low down the exhaust noise.



Throttle valve

It adjusts the regeneration air flow rate to reduce the compressed air consumption.

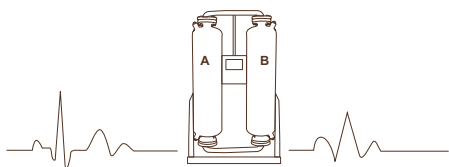


Heater

Only need 7% compressed air as regeneration air to revive the absorbent if air dryer with a heater. Due to that compressed air is saved greatly.

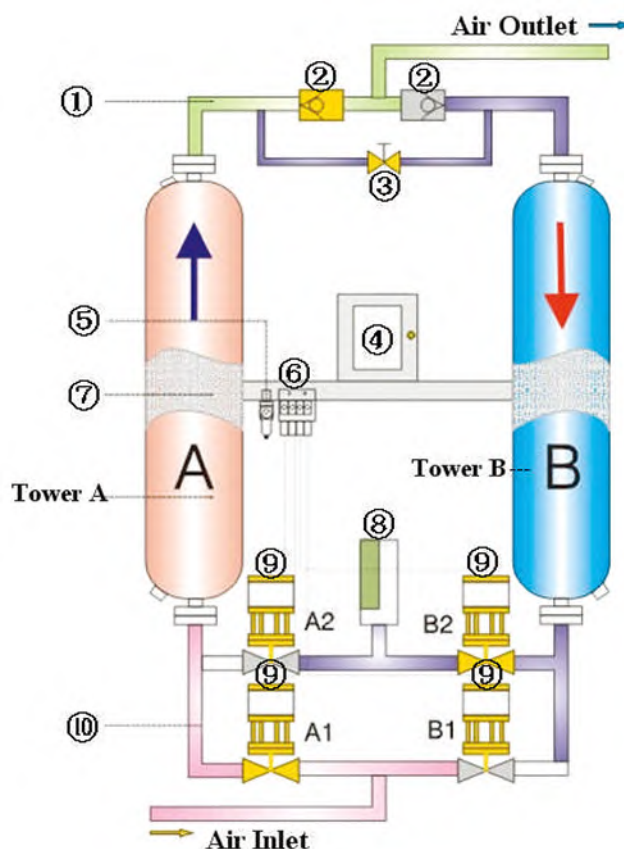
The low hot adsorption air dryer suit for the user who need a large number of compressed air.

(Ps: low hot adsorption air dryer with a heater)



Heatless Adsorption Air Dryer

- ① Upper Tube System
- ② Check Valve
- ③ Throttle Valve
- ④ Controller
- ⑤ Pneumatic Control Valve
- ⑥ Solenoid Valve
- ⑦ Absorbent
(activated alumina and molecular sieves)
- ⑧ Muffler
- ⑨ Pneumatic(Valve A1、A2、B1、B2)
- ⑩ Underside Tube System



Operation process

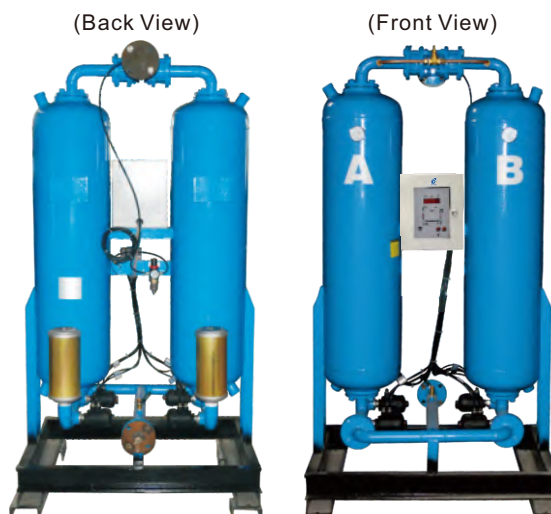
Adsorption—the compressed air enters into tower A from (9) **Pneumatic valve A1**, and then flows past the (7) **Absorbent** from bottom to top, after that the compressed air comes out from the (1) **Upper tube**.

Regeneration—a part of dry compressed air (about 14%) as regeneration air enters into the tower B from (3) **Throttle valve**, it flows past the (7) **absorbent** from top to bottom, absorbent in tower B recovers the adsorption function. After that regeneration air will be discharged from (9) **Pneumatic valve B2** and (8) **Muffler**.

Pressure equalizing—finish the regeneration program, (9) **Pneumatic valve B2** turn off, the pressure of tower B rises to working pressure, and it ready to adsorb.

Task switch—(9) **Pneumatic valve B1** turns on, A1 turns off, A2 turns on and B2 turns off. Task of tower A & B is changed, tower B adsorbs vapor and tower A regenerates absorbent. The operation task and time are controlled by controller automatically.

Technical Parameters



| Model | Air Flow Rates | | Air connection | Net Weigh | Dimension (L×W×H) |
|--------|----------------|------|----------------|-----------|-------------------|
| | Nm³/min | CFM | | | |
| -- | | | mm | kg | mm |
| BX0005 | 0.8 | 28 | DN15 | 70 | 600x350x1500 |
| BX0010 | 1.8 | 64 | DN20 | 80 | 650x450x1500 |
| BX0020 | 2.8 | 99 | DN20 | 100 | 700x450x1500 |
| BX0030 | 3.8 | 134 | DN25 | 130 | 900x480x1600 |
| BX0040 | 5.5 | 194 | DN40 | 250 | 1000x650x1750 |
| BX0060 | 6.8 | 240 | DN40 | 280 | 1000x700x1900 |
| BX0080 | 8.8 | 311 | DN50 | 450 | 1100x700x1800 |
| BX0100 | 11.5 | 406 | DN50 | 500 | 1100x650x2050 |
| BX0120 | 14 | 494 | DN65 | 550 | 1200x850x2200 |
| BX0150 | 16 | 565 | DN65 | 580 | 1200x850x2200 |
| BX0200 | 22.8 | 805 | DN80 | 860 | 1400x1000x2350 |
| BX0250 | 28.5 | 1007 | DN80 | 1200 | 1400x1000x2500 |
| BX0300 | 35 | 1236 | DN80 | 1600 | 1750x1100x2500 |
| BX0400 | 45 | 1589 | DN100 | 1900 | 1700x1100x2600 |
| BX0500 | 55 | 1943 | DN100 | 2300 | 1900x1200x2800 |
| BX0600 | 65 | 2296 | DN125 | 2800 | 2000x1300x2800 |
| BX0800 | 85 | 3002 | DN150 | 3400 | 2200x1600x2900 |
| BX1000 | 105 | 3709 | DN150 | 4100 | 2600x1600x2960 |
| BX1200 | 120 | 4238 | DN200 | 4500 | 3200x1600x3000 |
| BX1600 | 160 | 5651 | DN200 | 6000 | 3800x1800x3000 |
| BX2000 | 200 | 7064 | DN250 | 7500 | 4200x2000x3000 |

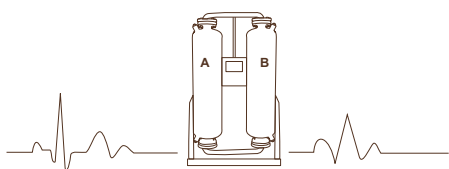


HEATLESS ADSORPTION AIR DRYER

Standard Condition

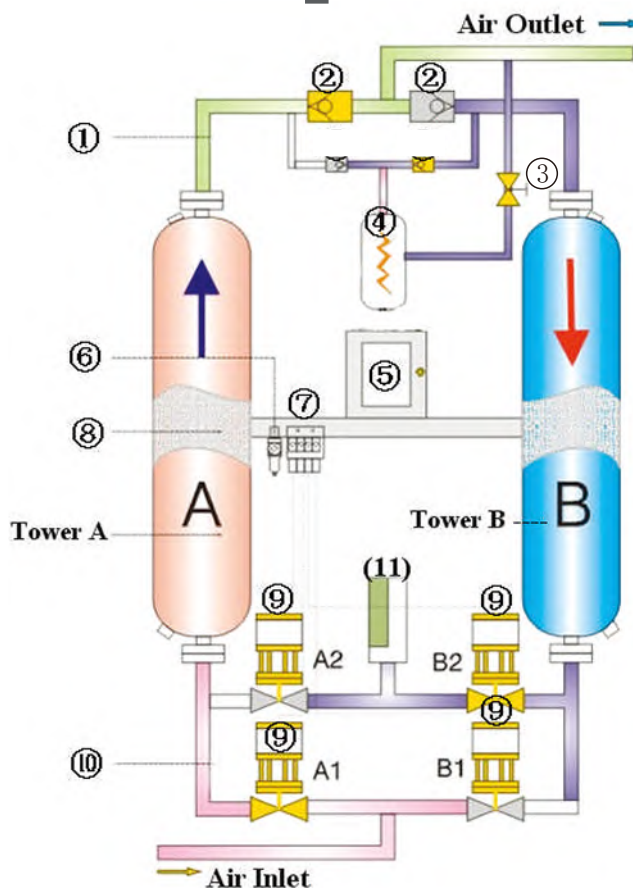
- ◆ Working pressure: 0.6-1.0Mpa
- ◆ Pressure dew point: -20℃ ~ -40℃
- ◆ Air inlet temperature: 0℃ ~ 45℃
- ◆ Power supply: BX0005-BX0120: 220v/50hz/1ph
BX0150-BX2000: 380v/50hz/3ph
- ◆ Compressed air consumption: ≤14%
- ◆ Pressure drop: ≤0.025Mpa
- ◆ Absorbent: activated alumina & molecular sieves

If need the heatless adsorption air dryer is not in standard, please contact the supplier.



Low Hot Adsorption Air Dryer

- ① Upper Tube System
- ② Check Valve
- ③ Throttle Valve
- ④ Heater
- ⑤ Controller
- ⑥ Pneumatic Control Valve
- ⑦ Solenoid Valve
- ⑧ Absorbent
(activated alumina and molecular sieves)
- ⑨ Pneumatic Valve (A1、A2、B1、B2)
- ⑩ Underside Tube System
- ⑪ Muffler



Operation process

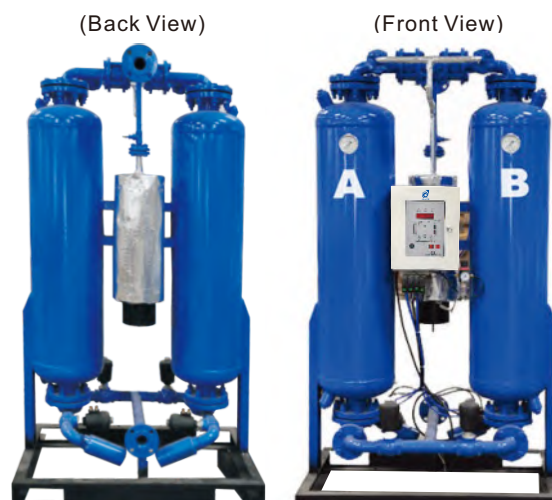
Adsorption—the compressed air enters into tower A from (9) Pneumatic valve A1, and then flows past the (7) Adsorbent from bottom to top, after that the compressed air comes out from the (1) Upper tube.

Regeneration—a bit of dry compressed air (about 7%) as regeneration air will be warmed up by (4) Heater and then enters into the tower B from (3) Throttle valve, it flows past the (7) absorbent from top to bottom, absorbent in tower B recovers the adsorption function. After that regeneration air will be discharged from (9) Pneumatic valve B2 and (11) Muffler.

Pressure equalizing—finish the regeneration program, (9) Pneumatic valve B2 turn off, the pressure of tower B rises to working pressure, and it ready to adsorb.

Task switch— (9)Pneumatic valve B1 turns on, A1 turns off, A2 turns on and B2 turns off. Task of tower A & B is changed, tower B adsorbs vapor and tower A regenerates absorbent. The operation task and time are controlled by controller automatically.

Technical Parameters



| Model | Air Flow Rates | | Air connection | Heater Power | Net Weigh | Dimension (L×W×H) |
|----------|----------------------|------|----------------|--------------|-----------|-------------------|
| | Nm ³ /min | CFM | | | | |
| -- | Nm ³ /min | CFM | mm | kw | kg | mm |
| BX0010LH | 1.8 | 64 | DN20 | 0.35 | 95 | 650x450x1500 |
| BX0020LH | 2.8 | 99 | DN20 | 0.5 | 120 | 700x450x1500 |
| BX0030LH | 3.8 | 134 | DN25 | 0.75 | 140 | 900x480x1600 |
| BX0040LH | 5.5 | 194 | DN40 | 1.25 | 270 | 1000x650x1750 |
| BX0060LH | 6.8 | 240 | DN40 | 1.5 | 300 | 1000x700x1900 |
| BX0080LH | 8.8 | 311 | DN50 | 2 | 480 | 1100x700x1800 |
| BX0100LH | 11.5 | 406 | DN50 | 2.5 | 530 | 1100x650x2050 |
| BX0120LH | 14 | 494 | DN65 | 3 | 580 | 1200x850x2200 |
| BX0150LH | 16 | 565 | DN65 | 3.75 | 620 | 1200x850x2200 |
| BX0200LH | 22.8 | 805 | DN80 | 5 | 900 | 1400x1000x2350 |
| BX0250LH | 28.5 | 1007 | DN80 | 6.25 | 1250 | 1400x1000x2500 |
| BX0300LH | 35 | 1236 | DN80 | 7.5 | 1700 | 1750x1100x2500 |
| BX0400LH | 45 | 1589 | DN100 | 10 | 2000 | 1700x1100x2600 |
| BX0500LH | 55 | 1943 | DN100 | 12.5 | 2500 | 1900x1200x2800 |
| BX0600LH | 65 | 2296 | DN125 | 15 | 3000 | 2000x1300x2800 |
| BX0800LH | 85 | 3002 | DN150 | 20 | 3800 | 2200x1600x2900 |
| BX1000LH | 105 | 3709 | DN150 | 25 | 4500 | 2600x1600x2960 |
| BX1200LH | 120 | 4238 | DN200 | 30 | 5000 | 3200x1600x3000 |
| BX1600LH | 160 | 5651 | DN200 | 40 | 6500 | 3800x1800x3000 |
| BX2000LH | 200 | 7064 | DN250 | 50 | 8000 | 4200x2000x3000 |

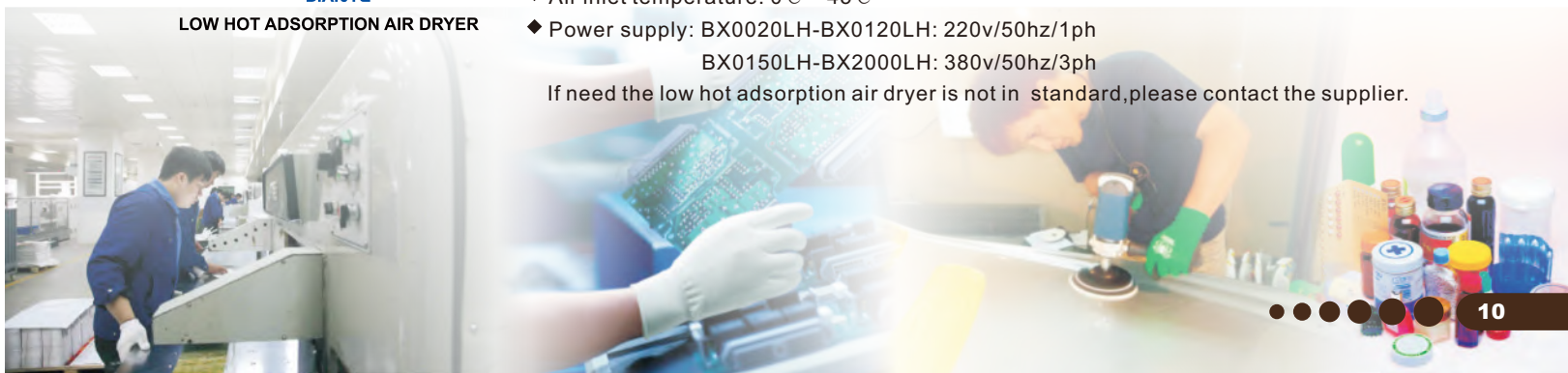
Standard Condition

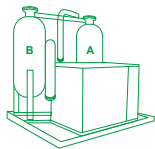
- ◆ Working pressure: 0.6-1.0Mpa
- ◆ Pressure dew point: -20℃ ~ -40℃
- ◆ Air inlet temperature: 0℃ ~ 45℃
- ◆ Power supply: BX0020LH-BX0120LH: 220v/50hz/1ph
BX0150LH-BX2000LH: 380v/50hz/3ph
- ◆ Compressed air consumption: ≤7%
- ◆ Pressure drop: ≤0.025Mpa
- ◆ Absorbent: activated alumina & molecular sieves

If need the low hot adsorption air dryer is not in standard, please contact the supplier.



LOW HOT ADSORPTION AIR DRYER





Combine Air Dryer

Refrigerated Air Dryer & Adsorption Air Dryer



Working Process

- Hot and humidity Inlet compressed air exchanges temperature with cool & dry compressed air in the heat exchanger of refrigerated air dryer. After preliminary cooling, inlet compressed air will be cool again by refrigerant, most of water will be condensed together and will be discharge. At this time dew point of compressed air about 2-10℃.
- In order to get lower dew point compressed air, compressed air enter into adsorption air dryer to have further drying. After four processes: adsorption, regeneration, pressure equalizing and task exchange, the dew point of compressed air about -20 ~ -40℃. At last cool & dry compressed air flow through heat exchanger to low down the inter air compressor, thus we get dry and low dew point compressed air.

Advantages

- Low pressure dew point: Compressed air is treated by refrigerated air dryer and adsorption air dryer, due to that the dew point can be -20 ~ -40℃. Combine air dryers are widely used in high precision product line.
- Best Adaptable: No ambient temperature limited.
- Low consumption: Only need 3-5% compressed air to revive the absorbent, low compressed air consumption.
- Integrative structure design: Refrigerated air dryer and adsorption air dryer are connected before leaving manufactory, save space. All pipes are connected, no need to install the foundation, just put it on the flat ground and connect the power, the combine dryer can be operated.

Technical Parameters

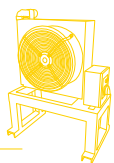
| Model | Air Flow Rates | | Air connection | Net Weigh | Dimension (L×W×H) |
|--------|----------------|------|----------------|-----------|-------------------|
| -- | Nm³/min | CFM | mm | kg | mm |
| BC0030 | 3.8 | 134 | DN25 | 220 | 1150x700x1800 |
| BC0040 | 5.5 | 194 | DN40 | 370 | 900x1300x1800 |
| BC0060 | 6.8 | 240 | DN40 | 400 | 1000x1300x1800 |
| BC0080 | 8.8 | 311 | DN50 | 600 | 1060x1400x2000 |
| BC0100 | 11.5 | 406 | DN50 | 650 | 1160x1400x1900 |
| BC0120 | 14 | 494 | DN65 | 800 | 1160x1600x1900 |
| BC0150 | 16 | 565 | DN65 | 900 | 1260x1600x2000 |
| BC0200 | 22.8 | 805 | DN80 | 1500 | 1500x2000x2050 |
| BC0250 | 28.5 | 1007 | DN80 | 1700 | 1700x2000x2180 |
| BC0300 | 35 | 1236 | DN80 | 2100 | 1700x2000x2220 |
| BC0400 | 45 | 1589 | DN100 | 2500 | 2000x2100x2400 |
| BC0500 | 55 | 1943 | DN100 | 3100 | 2200x2100x2500 |
| BC0600 | 65 | 2296 | DN125 | 3500 | 2400x2200x2650 |
| BC0800 | 85 | 3002 | DN150 | 4200 | 2600x2600x2900 |
| BC1000 | 105 | 3709 | DN150 | 5200 | 3000x2800x3000 |
| BC1200 | 120 | 4238 | DN200 | 5800 | 3200x3000x3000 |
| BC1600 | 160 | 5651 | DN200 | 7600 | 3800x3300x3000 |
| BC2000 | 200 | 7064 | DN250 | 9500 | 4200x3500x3000 |

Standard Condition

- Working pressure: 0.6-1.0Mpa
- Pressure dew point: -20℃ ~ -40℃
- Air inlet temperature: 0℃ ~ 45℃
- Power supply: BC0030-BC0120: 220v/50hz/1ph
BC0150-BC2000: 380v/50hz/3ph
- Compressed air consumption: ≤5%
- Pressure drop: ≤0.025Mpa
- Absorbent: activated alumina & molecular sieves



If need the combine air dryer is not in standard, please contact with the supplier.



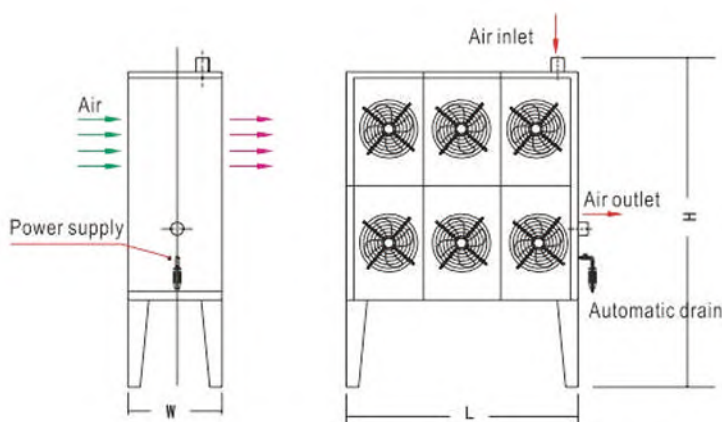
AFTER-COOLER



Function

- JIANYE Air cooled After-cooler get rid of the water in the compressed air.
- The temperature of compressed air can be low down to 42°C.
- JIANYE After-cooler suit for the high temperature environment.
- It's no need to make the install foundation.
- Recommend you install the after-cooler behind the screw air compressor or piston air compressor.

Dimension Drawing



| Model | Air Flow Rates | | Power | Fan Power | Fan | Air Connection | Dimensions (L*W*H) |
|---------|----------------|------|-------|-----------------|------------------|----------------|------------------------|
| -- | (Nm3/min) | CFM | (W) | input/output(W) | model * quanlity | (mm) | (mm) |
| BAC0010 | 1.8 | 64 | 120 | 85/39 | Φ 300*1 | DN20(G3/4") | 550X300X640 |
| BAC0030 | 3.8 | 134 | 150 | 140/80 | Φ 350*1 | DN25(G1") | 620X300X730 |
| BAC0060 | 6.8 | 240 | 250 | 140/80 | Φ 350*1 | DN40(G1-1/2") | 620X300X760 |
| BAC0080 | 8.8 | 311 | 300 | 180/112 | Φ 400*1 | DN50(G2") | 830X350X940 |
| BAC0120 | 14 | 494 | 380 | 140/80*2 | Φ 350*2 | DN65(G2-1/2") | 1380X550X1100 |
| BAC0150 | 16 | 565 | 500 | 180/110*2 | Φ 400*2 | DN65(G2-1/2") | 1500X600X1150 |
| BAC0250 | 28.5 | 1007 | 100 | 450/270*2 | Φ 500*2 | DN80(F3) | 1600X600X1250 |



**AIR COOLED
AFTER-COOLER**

Working Condition :

Inlet Pressure: 0.4~1.0MPa

Inlet Temperature: ≤150

Air Ambient Temperature: ≤40

Pressure Drop: ≤0.021 Mpa

Power supply: BAC0010-BAC0120:220v/50hz/1ph

BAC0150-BAC0250:380v/50hz/3ph

Air outlet Temperature:

(1)When the air pressure is higher than 0.7MPa, the outlet temperature will be the ambient temperature +6~8

(2)When the air pressure is lower than 0.7 MPa, the outlet temperature will be the ambient temperature +8~12

If need the air cooled after-cooler is not in standard, please contact the supplier.

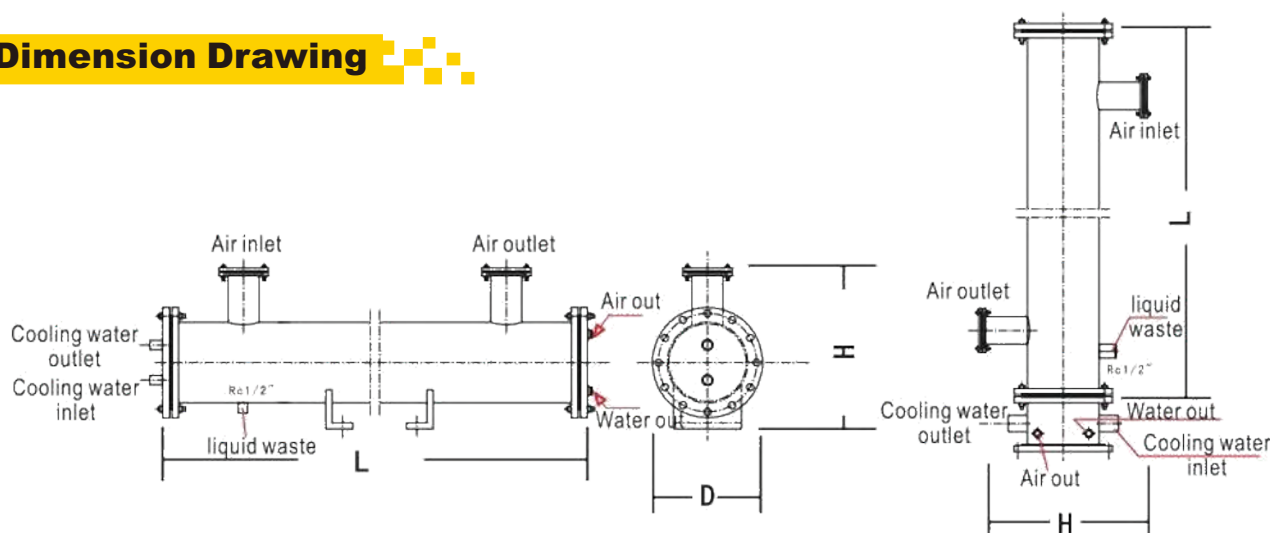
WATER COOLED AFTER-COOLER

Advantage

- JIANYE water cooled after-cooler low down the temperature of compressed air.
- It is easy to install.
- It can suit for the environment which in high temperature, high humidity and heavy dust.



Dimension Drawing



| Model | Air Flow Rates | | Air Connection | Water Flow Rates | Water Tube Connection | Dimensions (L*W*H) |
|----------|------------------------|-------|----------------|------------------|-----------------------|-----------------------|
| | (Nm ³ /min) | (CFM) | | | | |
| BAC0250W | 28.5 | 1007 | DN80(F3) | 6 | G1-1/2" | 1650X330X400 |
| BAC0300W | 35 | 1236 | DN80(F3) | 8 | G2" | 1650X400X500 |
| BAC0400W | 45 | 1589 | DN100(F4) | 12 | G2" | 2150X400X500 |
| BAC0500W | 55 | 1943 | DN100(F4) | 14 | G2-1/2" | 2150X450X560 |
| BAC0600W | 65 | 2296 | DN125(F5) | 17 | G2-1/2" | 2200X450X560 |
| BAC0800W | 85 | 3002 | DN150(F6) | 21 | G3" | 2200X500X600 |
| BAC1000W | 105 | 3709 | DN150(F6) | 27 | G3" | 2200X500X600 |



**WATER COOLED
AFTER-COOLER**

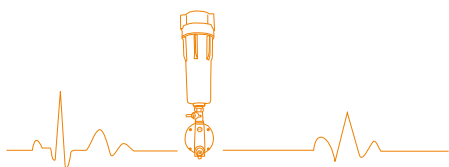
Working Condition:

Inlet Pressure: 0.4~1.0MPa
Inlet Temperature: ≤180℃
Cooling Water Inlet Pressure: 0.25~0.4MPa
Cooling Water Inlet Temperature: ≤35℃

Air outlet Temperature:

It will be changed along with the cooling water flow.
0.25 m³/h cooling water are consumed for 1Nm³/min compressed air.

If need the water cooled after-cooler is not in standard, please contact the supplier.



Why Need To Use The LINE AIR FILTER ?

► The hidden danger of untreated air

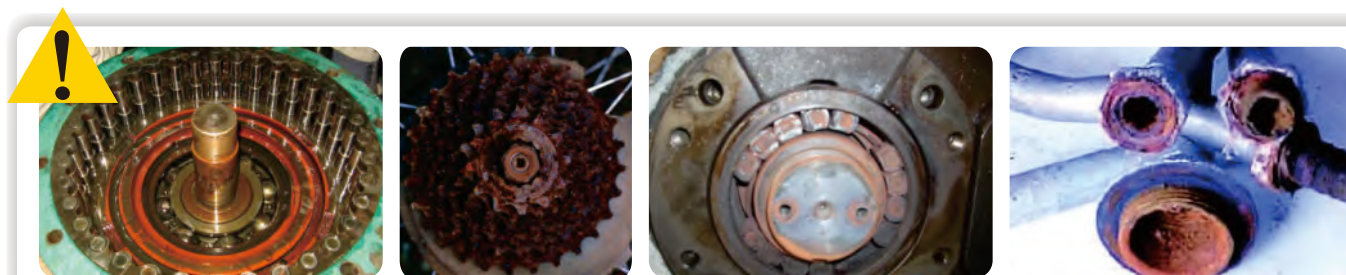
There are about 140 million of dust particles in every cubic meter air.
The polluted air can not be ignored because that is a huge threat for compressed air system and any machines.



► The bad quality of compressed air will cost you more money

The compressed air which contains water, dirt, rust particles and bacteria which will lead to the below problems,

- ◆ The tools and equipments will be broken down frequently. It will make them in a shorter lifetime, that will increase your maintenance fee and waste your production time.
- ◆ There are contaminated and other harmful materials in the end products.
- ◆ It will destroy the pipe of the compressed air system. And it will lead to the compressed air leakage.



► Features of JIANYE Line Air Filter

- ◆ **Advantage module design:** The filter element is separated from the shell and cover. It is easy to change the filter element.
- ◆ **Special treatment shell:** after a high strength fluorine carbon treatment, the lifetime of the shell up to 10 years.
- ◆ **Optimal sealing:** The line air filter is sealed by O-ring and epoxy resin ring that can avoid the air leakage problem.
- ◆ **High efficiency filter element:** The filter element is made by $\Phi 0.5\mu\text{m}$ borosilicate filter which thickness is 3000um and the density is 4% (the void is 96%). Therefore Jianye filter element in high capacity and with a longer lifetime.
- ◆ **Stable auto-drain:** It work intelligently. Simple structure with low consumption.



► Different Grades of Line Filters

AO Filter: Pre-filter

Get rid of the particles which bigger than $1\mu\text{m}$, also collect fluid oil and water, oil content in the air: $\leq 0.5 \text{ mg/m}^3(\text{PPM})$ at 21°C .

AA Filter: After-filter

Get rid of the vapor, oil mist and particles which bigger than $0.01\mu\text{m}$, oil content in the air: $\leq 0.01 \text{ mg/m}^3(\text{PPM})$ at 21°C (should prepose a AO filter)

AX Filter: High Efficiency filter

Get rid of the vapor, oil mist and particles which bigger than $0.01\mu\text{m}$, oil content in the air: $\leq 0.001 \text{ mg/m}^3(\text{PPM})$ at 21°C (should prepose a AO filter & AA filter)



ACS Filter: Activated carbon filter

Absorb oil vapour and hydrocarbon smell, oil content in the air: $\leq 0.003 \text{ mg/m}^3(\text{PPM})$ at 21°C

(should prepose a AO filter & AA filter)

AR Filter: Common dedusting filter

Get rid of the particles which bigger than $1\mu\text{m}$. (should be installed after the adsorption air dryer)

AAR Filter: High Efficiency dedusting filter

Get rid of the particles which bigger than $0.01\mu\text{m}$. (should be installed after the adsorption air dryer)

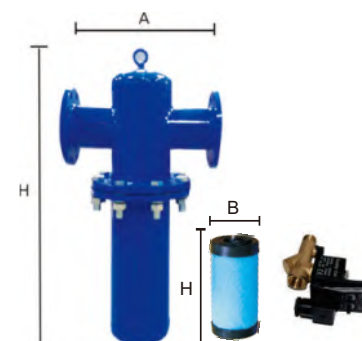
Technical Parameters (Conventional Air Filters)

| Model | Air Connection | Air Flow Rates | | Dimension (A×H) | N.W | Model (Filter Element) | Element Dimension (B×H) |
|-----------|----------------|----------------------|-----|-----------------|-----|------------------------|-------------------------|
| -- | mm | Nm ³ /min | CFM | mm | kg | -- | mm |
| BF0005(G) | DN20(G-3/4") | 0.8 | 28 | Φ100x270 | 1.1 | BE0005 | 43x95 |
| BF0010(G) | DN20(G-3/4") | 1.8 | 64 | Φ100x270 | 1.4 | BE0010 | 43x95 |
| BF0020(G) | DN25(G1") | 2.8 | 99 | Φ100x270 | 1.5 | BE0020 | 43x150 |
| BF0030(G) | DN25(G1") | 3.8 | 134 | Φ115x340 | 2.6 | BE0030 | 60x185 |
| BF0040(G) | DN40(G1-1/2") | 5.5 | 194 | Φ115x380 | 3.3 | BE0040 | 65x280 |
| BF0060(G) | DN40(G1-1/2") | 6.8 | 240 | Φ115x380 | 3.5 | BE0060 | 65x340 |
| BF0080(G) | DN50(G2") | 8.8 | 311 | Φ135x690 | 4.5 | BE0080 | 70x400 |
| BF0100(G) | DN50(G2") | 11.5 | 406 | Φ135x690 | 4.8 | BE0100 | 70x450 |
| BF0120(G) | DN65(G2-1/2") | 14 | 494 | Φ160x870 | 10 | BE0120 | 85x625 |
| BF0150(G) | DN65(G2-1/2") | 19 | 565 | Φ160x870 | 12 | BE0150 | 85x750 |



Technical Parameters (Flange Air Filters)

| Model | Air Connection | Air Flow Rates | | Dimension (A×H) | N.W | Model (Filter Element) | Element Dimension (B×H) |
|-----------|----------------|----------------------|------|-----------------|-----|------------------------|-------------------------|
| -- | mm | Nm ³ /min | CFM | mm | kg | -- | mm |
| BF0250(F) | DN80(F3) | 28.5 | 1007 | 220x790 | 17 | BE0250 | 115X425 |
| BF0300(F) | DN80(F3) | 35 | 1236 | 400x1036 | 48 | BE0300 | 115X525 |
| BF0400(F) | DN100(F4) | 45 | 1589 | 459x1076 | 51 | BE0400 | 115X645 |
| BF0500(F) | DN100(F4) | 55 | 1943 | 565x860 | 68 | BE0250x2 | 115X425 |



Working conditions:

Max. operating temperature: $<66^\circ\text{C}$

Min. operating temperature: $<1.5^\circ\text{C}$

Max. operating pressure: $<1.6\text{Mpa}$

If need the air filter is not in standard, please contact with the supplier

Standard configuration:

Shell + Filter Element + Auto Drain (conventional type).

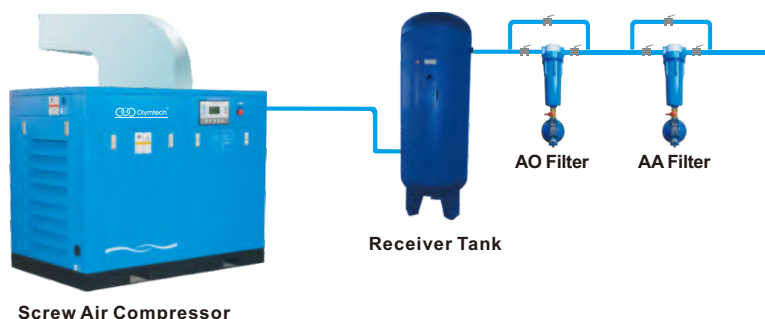
Shell + Filter Element + Electronic Drain (Flange type).

Flow Chart

Program

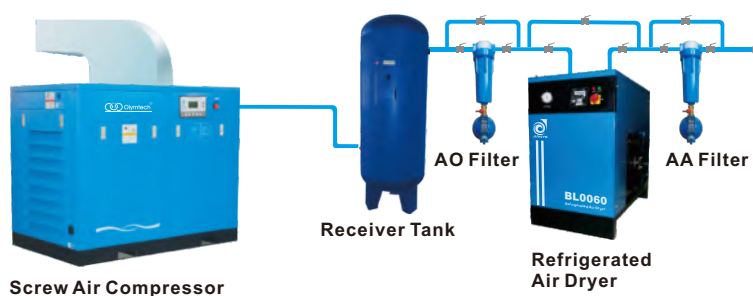
Efficiency

Application Range



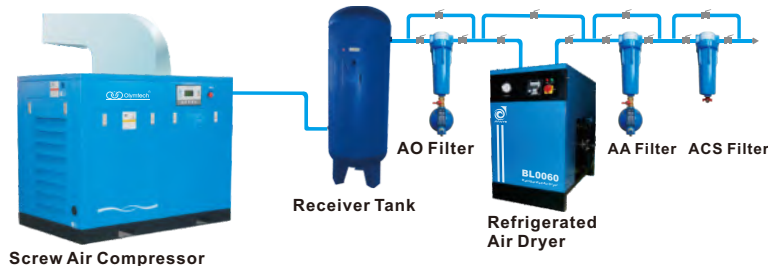
Get rid of 99% moisture contents
Oil content: 0.01ppm
Dust content: <1μm

For swept, general cool and pack



Pressure dew point: 2~10°C
Oil content: 0.01ppm
Dust content: <0.01μm

For spray paint, pneumatic instrument, pneumatic tool, sand blasting, air move and mix, particles products convey



Pressure dew point: 2~10°C
Oil content: 0.003ppm
Dust content: <0.01μm

For diving operation, breathable air, food compound, dentistry, cosmetics, hyperbaric oxygen chamber



Pressure dew point: -20~-70°C
Oil content: 0.001ppm
Dust content: <0.01μm

For print, film industry, nuclear industry, aerospace industry, precision control instrument



Pressure dew point: -20~-70°C
Oil content: 0.003ppm
Dust content: <0.01μm

For bioengineering, fermentating food



After-treatment Equipment for Compressed Air System

(2020.03 Edition)