

LINGYU凌宇

—COMPRESSED AIR SYSTEM—

ZHONGSHAN LINGYU MACHINERY CO., LTD.



Main Product:

- Air cooled/water cooled /energy-saving refrigerated dryer
 - Heatless regeneration / heated regeneration / modular adsorption dryer
 - Zero loss/ micro air consumption adsorption dryer
 - PSA nitrogen generator
 - Filter and accessories
-



Corporate mission:

To provide professional, comprehensive and competitive complete solutions and services for industrial gas separation and purification



Corporate vision:

To be a leading enterprise in the industry and create a world-renowned brand



Corporate development philosophy:

Technology-supported value-driven



Marketing strategy:

To win the market with high-quality products and professional service

CH SERIES

HEATED REGENERATION ADSORPTION AIR DRYER

■ Operating conditions

Applicable fluids: compressed air, non-corrosive air

Rated air inlet pressure: 0.7 MPa

(0.6 MPa ~ 1.0 MPa is allowed, other pressure levels can be customized)

Rated air inlet temperature: 10°C ~ 35°C

(Limit air temperature: ≤ 40°C)

Average regeneration gas consumption: 4% ~ 8%

Outlet pressure dew point: -50°C to -20°C

Ads or bent: activated alumina + high performance molecular sieve

Rated ambient temperature: 35°C (2°C ~ 45°C can be used)



■ Design Features

High-performance pneumatic valves are adopted, offering reliable performance, sensitive response, fast and dependable switching, and long service life;

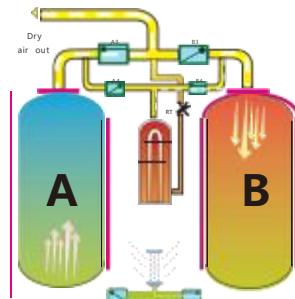
High-efficiency adsorbents are used, featuring strong adsorption capacity and excellent wear resistance, ensuring long-term stable pressure dew point without pulverization.

A fully electronic programmable controller is employed, with a Chinese-language interface that is intuitive and easy to understand, facilitating operation and maintenance.

Low operating noise is achieved through the use of silent-type check valves and high-performance mufflers, ensuring that noise is minimized throughout operation and during exhaust.

An automatic pressurization function is incorporated: before valve switching, the vessels are automatically pressurized and pressure-balanced, allowing switching only after equalization. This ensures stable vessel pressure, prevents pipeline pressure fluctuations from impacting the adsorbent, and effectively extends the service life of the adsorbent.

The heater is equipped with pressure protection to prevent dry heating, thereby enhancing heater safety and extending its service life.



■ Technical Parameters

Model	Capacity (m³/min)	Voltage (V/Hz)	Power (kW)	Inlet/Outlet	Weight (kg)	HEATEED CH SERIES
						Dimensions (mm)
LY-CH10HX	1.5	380/50	0.9	G1"	95	670×580×1695
LY-CH20HX	2.5	380/50	1.7	G1"	125	730×630×1805
LY-CH30HX	3.8	380/50	1.7	G1½"	180	840×570×1690
LY-CH50HX	6.5	380/50	2.5	G1½"	315	1020×610×1710
LY-CH75HX	10.5	380/50	3.7	G2"	448	1160×680×1900
LY-CH100HX	13.5	380/50	3.7	G2"	540	1160×680×2200
LY-CH120HX	17	380/50	3.7	DN65	610	1195×720×2175
LY-CH150HX	21.5	380/50	6.1	DN80	740	1280×980×2310
LY-CH180HX	25	380/50	10	DN80	850	1350×930×2450
LY-CH200HX	28.5	380/50	10	DN80	1040	1460×1060×2320

LY-CH250HX	32	380/50	10	DN80	1150	1460×1060×2510
LY-CH300HX	37	380/50	10	DN100	1280	1580×1080×2460
LY-CH350HX	41.5	380/50	13.1	DN100	1390	1700×1060×2730
LY-CH400HX	45	380/50	13.1	DN100	1460	1765×1160×2550
LY-CH450HX	50	380/50	13.1	DN100	1590	1765×1160×2750
LY-CH500HX	55	380/50	13.1	DN100	1700	1825×1150×2690
LY-CH550HX	60	380/50	20.1	DN100	1830	1825×1150×2790
LY-CH600HX	65	380/50	20.1	DN125	2050	2040×1240×2820
LY-CH650HX	70	380/50	20.1	DN125	2270	2040×1240×2920
LY-CH700HX	75	380/50	20.1	DN125	2380	2136×1240×2930
LY-CH800HX	85	380/50	27.1	DN125	2650	2210×1350×2970
LY-CH900HX	95	380/50	27.1	DN150	2950	2330×1430×3250
LY-CH1100HX	110	380/50	34.1	DN150	3200	2450×1430×2980
LY-CH1300HX	130	380/50	42.1	DN150	4700	2610×1580×3060
LY-CH1500HX	150	380/50	50.1	DN200	5300	2900×1400×3211

Note: If the air flow exceeds 150 m³/min or if special specifications, materials, or temperature requirements are needed, please contact our company or agents for technical consultation. The above data is for reference only and may change without notice. For other specifications, please contact us directly.



HH SERIES

HEATED REGENERATION ADSORPTION AIR DRYER

■ Operating conditions

Applicable fluids: compressed air, non-corrosive air

Rated air inlet pressure: 0.7 MPa

(0.6 MPa~1.0 MPa is allowed, other pressure levels can be

customized) **Rated air inlet temperature:** 10°C ~ 35°C

(Limit air temperature: ≤40°C)

Average regeneration gas consumption: 4% ~ 8%

Outlet pressure dew point: ≤-40°C

Ads or bent: activated alumina + high performance molecular sieve

Rated ambient temperature: 35°C (2°C ~ 45°C can be used)

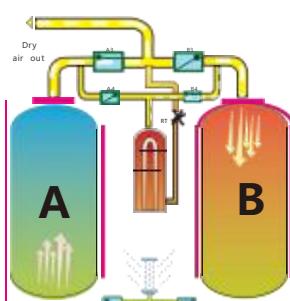


■ Design Features

High-performance pneumatic valves are adopted, offering reliable performance, sensitive response, fast and dependable switching, and long service life;

High-efficiency adsorbents are used, featuring strong adsorption capacity and excellent wear resistance, ensuring long-term stable pressure dew point without pulverization.

A fully electronic programmable controller is employed, with a Chinese-language interface that is intuitive and easy to understand, facilitating operation and maintenance.



Low operating noise is achieved through the use of silent-type check valves and high-performance mufflers, ensuring that noise is minimized throughout operation and during exhaust.

An automatic pressurization function is incorporated: before valve switching, the vessels are automatically pressurized and pressure-balanced, allowing switching only after equalization.

This ensures stable vessel pressure, prevents pipeline pressure fluctuations from impacting the adsorbent, and effectively extends the service life of the adsorbent.

The heater is equipped with pressure protection to prevent dry heating, thereby enhancing heater safety and extending its service life.

■ Technical Parameters

Model	Capacity (m³/min)	Voltage (V/Hz)	Power (kW)	Inlet/Outlet	Weight (kg)	HEATLEED HH SERIES
						Dimensions (mm)
LY-HH10HX	1.5	380/50	1.7	G1"	125	725×630×1795
LY-HH20HX	2.5	380/50	1.7	G1"	180	840×570×1695
LY-HH30HX	3.8	380/50	2.5	G1½"	310	1020×610×1690
LY-HH50HX	6.5	380/50	3.7	G1½"	436	1160×680×1860
LY-HH75HX	10.5	380/50	3.7	G2"	610	1200×720×2180
LY-HH100HX	13.5	380/50	6.1	G2"	720	1260×780×2230
LY-HH120HX	17	380/50	10	DN65	850	1350×930×2440
LY-HH150HX	21.5	380/50	10	DN80	1000	1470×1000×2270
LY-HH180HX	25	380/50	10	DN80	1100	1460×1000×2470
LY-HH200HX	28.5	380/50	10	DN80	1280	1560×1070×2450
LY-HH250HX	32	380/50	13.1	DN80	1350	1600×1050×2650
LY-HH300HX	37	380/50	13.1	DN100	1550	1700×1100×2680
LY-HH350HX	41.5	380/50	13.1	DN100	1700	1830×1150×2700
LY-HH400HX	45	380/50	20.1	DN100	1830	1830×1150×2790
LY-HH450HX	50	380/50	20.1	DN100	2000	2040×1240×2780
LY-HH500HX	55	380/50	20.1	DN100	2170	2040×1240×2875
LY-HH550HX	60	380/50	27.1	DN100	2460	2130×1300×2790
LY-HH600HX	65	380/50	27.1	DN125	2650	2210×1340×2970
LY-HH700HX	75	380/50	27.1	DN125	3100	2350×1380×2920
LY-HH800HX	85	380/50	34.1	DN125	3200	2350×1380×2920
LY-HH900HX	95	380/50	34.1	DN150	4000	2446×1430×3170
LY-HH1100HX	110	380/50	42.1	DN150	4700	2610×1580×3060
LY-HH1300HX	130	380/50	50.1	DN150	5140	2900×1400×3079

Note: If the air flow exceeds 150 m³/min or if special specifications, materials, or temperature requirements are needed, please contact our company or agents for technical consultation. The above data is for reference only and may change without notice. For other specifications, please contact us directly.

HH SERIES

HEATLESS REGENERATION ADSORPTION AIR DRYER

■ Operating conditions

Applicable fluids: compressed air, non-corrosive air

Rated air inlet pressure: 0.7 MPa

(0.6 MPa ~ 1.0 MPa is allowed, other pressure levels can be customized)

Rated air inlet temperature: 10°C ~ 30°C

(**Limit air temperature:** ≤ 40°C)

Average regeneration gas consumption: 8% ~ 14%

Outlet pressure dew point: ≤ 40°C

Ads or bent: High-quality activated alumina

Rated ambient temperature:

35°C (Can be used at 2°C ~

45°C)



■ Design Features

High-performance pneumatic valves are employed, delivering reliable operation, sensitive response, fast and dependable switching, and long service life;

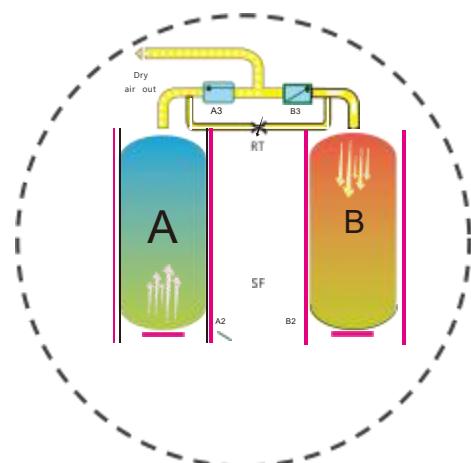
Large-torque aluminum alloy pneumatic actuators are used, providing high torque output with smooth and stable motion.

High-performance adsorbents are applied, featuring strong adsorption capacity and excellent wear resistance, ensuring long-term stable pressure dew point without degradation or pulverization.

A fully electronic programmable controller is adopted, equipped with a Chinese-language interface that is clear, intuitive, and easy to operate and maintain.

Low operating noise is achieved through the use of silent-type check valves and high-performance mufflers, ensuring noise is minimized throughout operation and during exhaust.

An automatic pressurization function is incorporated: prior to valve switching, the vessels are automatically pressurized and pressure-balanced, enabling switching only after equalization. This ensures stable vessel pressure, prevents pipeline pressure fluctuations from impacting the adsorbent, and effectively extends the service life of the adsorbent.



■ Technical Parameters

Model	Capacity (m³/min)	Voltage (V/Hz)	Power (kW)	Inlet/Outlet	Weight (kg)	HEATLESS HH SERIES	
						Dimensions (mm)	
LY-HH10NX	1.5	220/50	0.1	G1"	175	725×630×1795	
LY-HH20NX	2.5	220/50	0.1	G1"	310	840×570×1695	
LY-HH30NX	3.8	220/50	0.1	G1½"	430	1020×610×1690	
LY-HH50NX	6.5	220/50	0.1	G1½"	522	1160×680×1860	
LY-HH75NX	10.5	220/50	0.1	G2"	580	1200×720×2180	
LY-HH100NX	13.5	220/50	0.1	G2"	720	1260×780×2230	
LY-HH120NX	17.0	220/50	0.1	DN65	820	1350×930×2440	
LY-HH150NX	21.5	220/50	0.1	DN80	1000	1470×1000×2270	
LY-HH180NX	25.0	220/50	0.1	DN80	1100	1460×1000×2470	

LY-HH200NX	28.5	220/50	0.1	DN80	1180	1560×1070×2450
LY-HH250NX	32.0	220/50	0.1	DN80	1350	1600×1050×2650
LY-HH300NX	37.0	220/50	0.1	DN100	1420	1700×1100×2680
LY-HH350NX	41.5	220/50	0.1	DN100	1550	1830×1150×2700
LY-HH400NX	45.0	220/50	0.1	DN100	1670	1830×1150×2790
LY-HH450NX	50.0	220/50	0.1	DN100	1790	2040×1240×2780
LY-HH500NX	55.0	220/50	0.1	DN100	2000	2040×1240×2875
LY-HH550NX	60.0	220/50	0.1	DN100	2120	2130×1300×2790
LY-HH600NX	65.0	220/50	0.1	DN125	2320	2210×1340×2970
LY-HH700NX	75.0	220/50	0.1	DN125	2500	2350×1380×2920
LY-HH800NX	85.0	220/50	0.1	DN125	2850	2350×1380×2920
LY-HH900NX	95.0	220/50	0.1	DN150	3000	2446×1430×3170
LY-HH1100NX	110	220/50	0.1	DN150	4300	2610×1580×3060
LY-HH1300NX	130	220/50	0.1	DN150	5100	2900×1400×3079

Note: Customized models are available for air flow above 130 m³/min or when special materials, specifications, or inlet temperature requirements are needed. All data is subject to change without prior notice.



HRB-E SERIES

LOW GAS CONSUMPTION TYPE BLOWER HEATED ADSORPTION AIR

DRYER ■ Design Features

Communication interfaces support RS-485 (standard) and IoT connectivity to meet diverse user requirements.

A self-developed EBZ200-2 multi-core drive is adopted; compared with fixed-cycle control modes, it reduces overall energy consumption by more than 10%.

Optional dew point energy-saving control extends adsorption time under fluctuating load conditions, reducing total energy consumption by over 30%.

Customized high-performance adsorbents are used, with a 20% filling margin for enhanced reliability and service life.

Branded high-pressure blowers and high-performance pneumatic valves are combined with high-efficiency coolers designed using HTFS software, ensuring reliable performance and long service life. 304 stainless steel control air piping and specially designed flow distributors provide high adsorbent utilization and low pressure drop.

A 7-inch Siemens touchscreen programmable controller enables dynamic monitoring of operating processes. Collected signals



include air outlet temperature, heater temperature, regeneration exhaust temperature, A/B tower pressure, blower pressure, and pressure dew point (optional) .

■ Operating Conditions & Technical Requirements

Applicable Fluids: Compressed air, non-corrosive air

Rated Inlet Pressure: 0.7 MPa (0.6–1.0 MPa, other levels customizable)

Rated Inlet Temperature: 10–30°C (max 40°C)

Inlet Air Dew Point: ≤25°C

Regeneration Gas Consumption: 2–3%

Outlet Pressure Dew Point: -20°C / -40°C optional

Rated Ambient Temperature: 35°C (usable 2–40°C)

■ Technical Parameters

ZERO TYPE SHEET

Model	Capacity (m³/min)	Gas Connection Pipe	Power (kW)	Dimensions (mm)
HRB-E100	13.5	DN50	7.5	1390*970*2297
HRB-E120	17	DN65	10.2	1750*1050*2271

HRB-E150	21.5	DN80	11.8	1750*1050*2471
HRB-E180	25	DN80	14.2	1800*1050*2597
HRB-E200	28.5	DN80	16.8	1900*1100*2454
HRB-E250	32	DN80	18.4	1920*1260*2600
HRB-E300	37	DN100	21.5	2175*1340*2750
HRB-E350	41.5	DN100	25.9	2200*1350*2752
HRB-E400	45	DN100	27.5	2400*1500*2852
HRB-E450	50	DN100	30	2540*1670*2938
HRB-E500	55	DN125	31.5	2650*1700*3138
HRB-E550	60	DN125	33.5	2700*1840*3150
HRB-E600	65	DN125	36.3	2750*1840*2888
HRB-E700	75	DN125	41.1	2750*1840*2888
HRB-E800	85	DN125	47.8	3100*1900*3050
HRB-E900	95	DN150	52.6	3250*2100*2950
HRB-E1000	110	DN150	59	3250*2100*2950
HRB-E1200	120	DN150	63.8	3500*2200*3341
HRB-E1400	140	Dn200	74.1	3700*2400*3420
HRB-E1600	160	DN200	89	3900*2420*3500
HRB-E1800	180	DN200	98.5	4100*2200*3050
HRB-E2100	210	DN200	110.5	4200*2835*3150
HRB-E2600	260	DN250	136.4	5200*2500*3300

Note: For air volumes above **260 m³/min** or special specifications (materials, temperature, or pressure), please contact our company or authorized dealers. Data is for reference only and may change without prior notice.



HRB-Z SERIES

ZERO GAS CONSUMPTION TYPE BLOWER HEATED ADSORPTION AIR

DRYER ■ Design Features

Communication interfaces support RS-485 (standard) and IoT connectivity to meet diverse user requirements.

A self-developed EBZ200-2 multi-core drive is adopted; compared with fixed-cycle control modes, it reduces overall energy consumption by more than 10%.

Optional dew point energy-saving control extends adsorption time under fluctuating load conditions, reducing total energy consumption by over 30%.

Customized high-performance adsorbents are used, with a 20% filling margin for enhanced reliability and service life.

Branded high-pressure blowers and high-performance pneumatic valves are combined with high-efficiency coolers designed using HTFS software, ensuring reliable performance and long service life.



304 stainless steel control air piping and specially designed flow distributors provide high adsorbent utilization and low pressure drop.

A 7-inch Siemens touchscreen programmable controller enables dynamic monitoring of operating processes. Collected signals include air outlet temperature, heater temperature, regeneration exhaust temperature, A/B tower pressure, blower pressure, and pressure dew point (optional).

■ Operating Conditions & Technical Requirements

Applicable Fluids: Compressed air, non-corrosive air
Rated Inlet Pressure: 0.7 MPa (0.6–1.0 MPa, customizable)
Rated Inlet Temperature: 10–30°C (max ≤40°C)
Inlet Air Dew Point: ≤25°C
Regeneration Gas Consumption: 0%
Outlet Pressure Dew Point: -20°C / -40°C optional
Rated Ambient Temperature: 35°C (usable 2–40°C)
Cooling Water Temperature: ≤32°C
Cooling Water Pressure: 0.2–0.6 MPa



■ Technical Parameters

ZERO TYPE SHEET				
Model	Capacity (m³/min)	Gas Connection Pipe	Power (kW)	Dimensions (mm)
HRB-Z100	13.5	DN50	7.5	1390*970*2297
HRB-Z120	17	DN65	10.2	1750*1050*2271
HRB-Z150	21.5	DN80	11.8	1750*1050*2471
HRB-Z180	25	DN80	14.2	1800*1050*2597
HRB-Z200	28.5	DN80	16.8	1900*1100*2454
HRB-Z250	32	DN80	18.4	1920*1260*2600
HRB-Z300	37	DN100	21.5	2175*1340*2750
HRB-Z350	41.5	DN100	25.9	2200*1350*2752
HRB-Z400	45	DN100	27.5	2400*1500*2852
HRB-Z450	50	DN100	30	2540*1670*2938
HRB-Z500	55	DN125	31.5	2650*1700*3138
HRB-Z550	60	DN125	33.5	2700*1840*3150
HRB-Z600	65	DN125	36.3	2750*1840*2888
HRB-Z700	75	DN125	41.1	2750*1840*2888
HRB-Z800	85	DN125	47.8	3100*1900*3050
HRB-Z900	95	DN150	52.6	3250*2100*2950
HRB-Z1000	110	DN150	59	3250*2100*2950
HRB-Z1200	120	DN150	63.8	3500*2200*3341
HRB-Z1400	140	DN200	74.1	3700*2400*3420
HRB-Z1600	160	DN200	89	3900*2420*3500
HRB-Z1800	180	DN200	98.5	4100*2200*3050
HRB-Z2100	210	DN200	110.5	4200*2835*3150
HRB-Z2600	260	DN250	136.4	5200*2500*3300

Note: For air volumes above **260 m³/min** or special specifications (materials, temperature, or pressure), please contact our company or authorized dealers. Data is for reference only and may change without prior notice.

HOC SERIES

LOW GAS CONSUMPTION TYPE COMPRESSION HEATED ADSORPTION AIR DRYER

DRYER ■ Design Features

Communication capabilities support RS-485 (standard) and IoT connectivity to meet diverse user requirements.

Energy saving: A self-developed EBZ200-2 multi-core drive is adopted. Compared with fixed-cycle control modes, it reduces overall energy consumption by more than 10%.

Optional dew point energy-saving control: Under fluctuating load conditions, adsorption time is extended, reducing total energy consumption by over 30%.

Customized high-performance adsorbents are used, with a 20% filling margin for enhanced reliability and extended service life.

High-performance pneumatic valves and high-efficiency coolers designed using HTFS software ensure reliable performance and long service life.

Metal control air piping is adopted, offering a clean and professional appearance.

Specially designed flow distributors provide high adsorbent utilization efficiency and low gas pressure drop.

A Siemens touchscreen programmable controller enables dynamic monitoring of operating processes. Collected signals include air outlet temperature, heater temperature, regeneration exhaust temperature, A/B tower pressure, blower pressure, and pressure dew point (optional).



■ Operating Conditions

Applicable Fluids: Compressed air, non-corrosive air

Rated Inlet Pressure: 0.7 MPa (0.6–1.0 MPa, customizable)

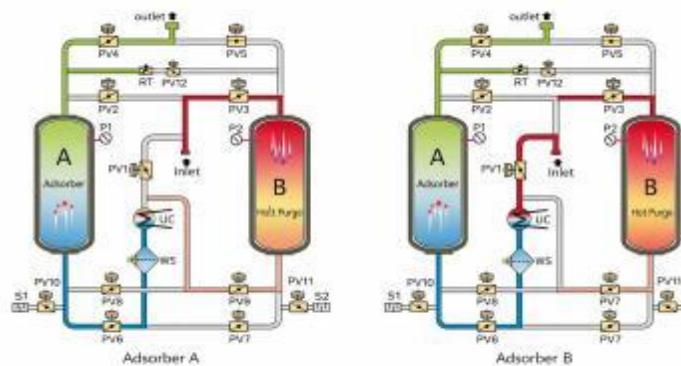
Rated Inlet Temperature: 120°C (allowable 110–180°C)

Regeneration Gas Consumption: ≤ 3%

Outlet Pressure Dew Point: -20°C / -40°C (optional)

Cooling Water Temperature: ≤ 32°C

Cooling Water Pressure: 0.2–0.6 MPa



■ Technical Parameters

Model	Capacity (m³/min)	Cooling Water Flow (T/h)	Cooling Water Connection	Gas Connection	ZERO TYPE SHEET	
					Dimensions (mm)	
HOC-E100	13.5	5.8	G1.2"	DN50	1600*1100*2380	
HOC-E120	17	7.3	G1.2"	DN65	1750*1200*2450	
HOC-E150	21.5	9.2	G1-1/2"	DN80	1850*1300*2480	

HOC-E180	25	10.8	G1-1/2"	DN80	1900*1350*2580
HOC-E200	28.5	12.3	G1-1/2"	DN80	1900*1350*2760
HOC-E250	32	13.8	G2"	DN80	2000*1450*2630
HOC-E300	37	16	G2"	DN100	2200*1500*2700
HOC-E350	41.5	17.2	G2"	DN100	2200*1500*2830
HOC-E400	45	19.4	G2.5"	DN100	2200*1600*2880
HOC-E450	50	21.5	G2.5"	DN100	2400*1700*2750
HOC-E500	55	23.7	G2.5"	DN125	2400*1700*2850
HOC-E550	60	26	G2.5"	DN125	2400*1700*2950
HOC-E600	65	28	G2.5"	DN125	2650*1800*2800
HOC-E700	75	32.3	G2.5"	DN125	2650*1800*2900
HOC-E800	85	36.6	DN80	DN125	2650*1900*2950
HOC-E900	95	41	DN80	DN150	2800*2000*2900
HOC-E1000	110	47.3	DN100	DN150	3500*2300*2900
HOC-E1200	120	51.6	DN100	DN150	3800*2300*2950
HOC-E1400	140	60.3	DN125	DN150	4200*2400*2900
HOC-E1600	160	69	DN125	DN200	4450*2450*2950
HOC-E1800	180	77.5	DN150	DN200	4750*2500*2980
HOC-E2100	210	90.4	DN150	DN200	5000*2700*2950
HOC-E2600	260	112	DN150	DN250	5300*2900*3000

Note: For air volumes exceeding **260 m³/min** or for special specifications, including materials or temperature requirements, please contact our company or authorized distributors. All data are for reference and may change without prior notice.



HOC SERIES

ZERO GAS CONSUMPTION TYPE COMPRESSION HEATED ADSORPTION AIR

DRYER ■ Design Features

Equipped with a dew point transmitter, adjustable between atmospheric dew point and pressure dew point, ensuring stable and accurate dew point control.

The display controller adopts a Siemens touchscreen with an RS-485 communication interface and provides the corresponding communication protocol.

The pneumatic valve control solenoid valves use a dual-coil design in combination with double-offset, high-temperature-resistant, high-performance butterfly valves, and are equipped with valve position feedback switches. In the event of abnormal shutdown or power failure, the valves can maintain their operating position; short-term maintenance does not interrupt airflow, providing enhanced reliability.

The opening of the flow distribution valve is automatically adjusted based on airflow rate and heating temperature, enabling fully automatic intelligent control. The system can adapt to load variations from 30% to 110%, ensuring stable overall performance.



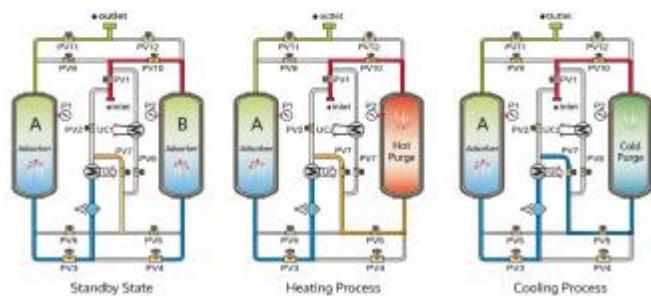
A liquid level sensor is added for condensate drainage. When the accumulated water reaches the alarm level, forced sludge discharge and drainage are automatically activated. The water level of the storage tank is dynamically displayed on the touchscreen. Manual forced drainage and timed automatic forced drainage are supported, ensuring reliable and secure drainage performance.

A seamless switching mode between split-flow and full-flow operation is adopted. The cooling purge air provides a certain desorption effect, allowing a reduction in heating temperature, improving operational safety and reducing energy consumption to a certain extent.

Inlet and outlet differential pressure display and alarm functions are provided. When the differential pressure exceeds the preset value, the system enters an emergency mode with both towers operating in parallel, ensuring a high level of safety.

The piping adopts a hot-dip galvanizing process, providing up to 10 years of corrosion and rust resistance, significantly extending the service life of the unit while preventing drain valve blockage.

For connection pipelines larger than DN 150, the system is integrated with the pressure vessels to form a skid-mounted pressure-bearing assembly, with inspection and certification documentation provided.



Operating Conditions

Applicable Fluids: Compressed air, non-corrosive air

Rated Inlet Pressure: 0.7 MPa (customizable 0.6–1.0 MPa)

Rated Inlet Temperature: 120°C (allowable 110–180°C)

Outlet Pressure Dew Point: -20°C / -40°C optional

Cooling Water Temperature: ≤32°C

Cooling Water Pressure: 0.2–0.6 MPa

Technical Parameters

ZERO TYPE SHEET

Model	Capacity (m³/min)	Inlet Temp (°C)	Cooling Water Flow (T/h)	Inlet/Outlet	Gas Connection	Dimensions (mm)
HOC-Z100	13.5	110–180	8	G1"	DN50	1600×1150×2380
HOC-Z120	17	110–180	10	G1"	DN65	1750×1600×2550
HOC-Z150	21.5	110–180	13	G1½"	DN80	1950×1450×2450
HOC-Z180	25	110–180	15	G1½"	DN80	2200×1650×2450
HOC-Z200	28.5	110–180	17	G1½"	DN80	2200×1700×2620
HOC-Z250	32	110–180	19	G2"	DN80	2300×1700×2750
HOC-Z300	37	110–180	25	G2"	DN100	2400×1800×2780
HOC-Z350	41.5	110–180	26	G2"	DN100	2500×1900×2850
HOC-Z400	45	110–180	27	G2½"	DN100	2500×2400×3350
HOC-Z450	50	110–180	30	G2½"	DN100	2600×1950×2850
HOC-Z500	55	110–180	33	G2½"	DN125	2650×1980×2850
HOC-Z550	60	110–180	36	G2½"	DN125	2800×2150×2950
HOC-Z600	65	110–180	40	G2½"	DN125	2800×2100×2950
HOC-Z700	75	110–180	45	DN80	DN125	2900×2200×3050
HOC-Z800	85	110–180	51	DN80	DN125	2950×2250×3250
HOC-Z900	95	110–180	57	DN80	DN150	3200×2400×3350
HOC-Z1000	110	110–180	65	DN100	DN150	3500×2400×2950
HOC-Z1200	120	110–180	72	DN100	DN150	3800×2600×2950
HOC-Z1400	140	110–180	78	DN125	DN150	4200×2750×2900
HOC-Z1600	160	110–180	86	DN125	DN200	4450×3000×2950

HOC-Z1800	180	110-180	100	DN125	DN200	4750×3100×2980
HOC-Z2100	210	110-180	116	DN125	DN200	5000×3200×2950
HOC-Z2600	260	110-180	145	DN125	DN250	5300×3300×3000

Note: For air volumes exceeding **260 m³/min** or for special specifications, including materials or temperature requirements, please contact our company or authorized distributors. All data are for reference and may change without prior notice.



M SERIES

LOW ENERGY CONSUMPTION MODULAR ADSORPTION AIR

DRYER ■ Design Features

Energy saving, regeneration gas consumption is 5%

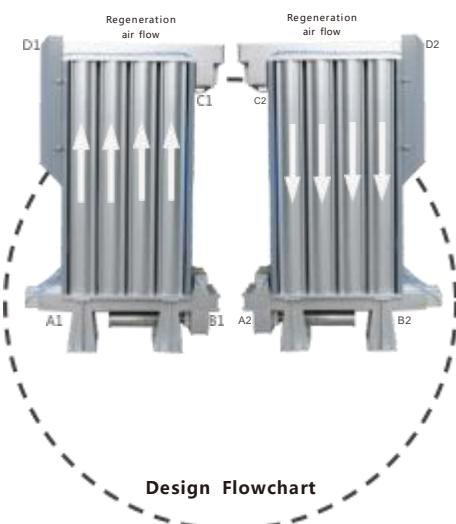
~8%; The compressed air contact surface has been oxidized and anti-rust treated to effectively.

Stable performance, selected high-quality adsorbents;

Economical and affordable, a full-flow standby machine can be realized at a low cost, and the maintenance cost is low;

prevent secondary pollution of the finished gas. It is especially suitable for the food and pharmaceutical industry and has a service life of up to 30 years;

The overall structure is exquisite and made of aviation magnesium-aluminum extrusion alloy. It can enter and exit standard doors and is widely used in various venues.



■ Technical Parameters

Model	Capacity (m ³ /min)	Connection size	Weight (Kg)	Voltage (V/Hz)	Dimension(L*W* H)
LY-M10N X	1.5	G1"	35	220/50	460×300×752
LY-M20N X	2.5	G1"	60	220/50	460×300×1246
LY-M30N X	3.8	G1"	70	220/50	460×300×1546
LY-M50N X	6.5	G1-2"	190	220/50	400×778×1735
LY-M70N X	10.5	G2"	285	220/50	400×952×1735

LY-M100N X	13.5	G2-12"	375	220/50	400×1126×1735
LY-M120N X	17	G2-2"	470	220/50	400×1300×1735
LY-M150N X	21.5	G2-2"	565	220/50	400×1474×1735
LY-M180N X	25	G2-12"	660	220/50	400×1648×1735
LY-M200N X	28.5	DN80	755	220/50	762×1126×1760
LY-M300N X	37	DN100	940	220/50	762×1300×1760

LY-M350N X	41.5	DN100	1130	220/50	762×1474×1760
LY-M450N X	50	DN100	1320	220/50	762×1648×1760
LY-M500N X	55	DN125	1510	220/50	762×1884×1760

Note: If the air volume is greater than 55m³/min or special specifications, materials, or temperature requirements are required, please contact our company or dealer for technical information. The above data is for reference only and is subject to change without prior notice. For other specifications, please contact our company directly.



DH SERIES

COMBINED COMPRESSED AIR DRYER

■ Operating conditions

Applicable Fluid: Compressed air; non-corrosive air

Rated Inlet Pressure: 0.7 MPa

(Usable range: 0.6 MPa–1.0 MPa; other pressure ratings available on request)

Rated Inlet Temperature: 50 °C (Maximum inlet temperature: ≤ 80 °C)

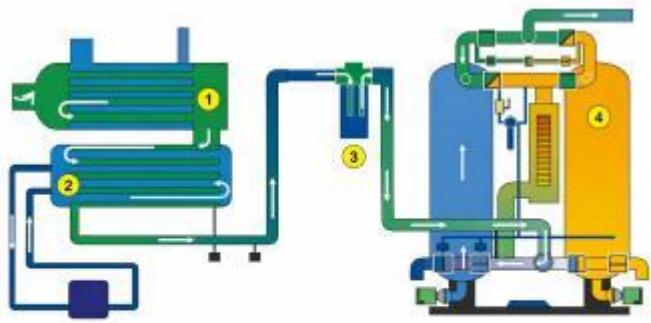
Regeneration Mode: Heatless / Heat-regenerated (low heat)

Cooling Method: Air-cooled / Water-cooled

Outlet Pressure Dew Point: ≤ -40 °C

Adsorbent: Activated alumina + high-performance molecular sieve

Rated Ambient Temperature: 35 °C (Usable range: 2 °C–45 °C)



Working Principle

Note: Standard units are equipped with one middle filter; additional filters can be configured as needed.

■ Design Features

Energy Efficiency

By using a refrigerated air dryer to reduce the moisture content of the inlet air to the desiccant dryer, the load on the desiccant dryer is significantly reduced. This lowers regeneration air consumption and extends the service life of the adsorbent. While ensuring a more stable and lower outlet pressure dew point, the combined dryer system achieves higher overall efficiency and improved energy savings.

Advanced Refrigeration and Adsorption Drying System Design

The refrigeration drying system is engineered to increase both the contact area and contact time between compressed air and refrigerant, ensuring more thorough heat exchange. High-precision refrigeration components, advanced expansion and throttling devices, and automatic temperature and capacity modulation systems adjust dynamically to actual operating conditions, effectively reducing the power consumption of the refrigeration compressor and further improving energy efficiency.

The adsorption drying system employs high-efficiency adsorbents with optimized adsorption cycles. Featuring high mechanical strength and excellent abrasion resistance, the system delivers superior adsorption performance. Moisture adsorption is carried out at low temperatures using an optimized process, significantly increasing adsorption depth and achieving ultra-low pressure dew points.

Integrated Design

The unit features a compact footprint and easy installation. Backed by years of technical research and manufactured using modern processes and equipment, each product undergoes rigorous testing and inspection and is released from the factory only after meeting all operational standards.



■ Working Principle

Moist compressed air first enters the precooler of the refrigeration drying system, where it exchanges heat with dry, low-dew-point air from the adsorption drying system. This process raises the temperature of the low-dew-point air while simultaneously reducing the temperature of the compressed air entering the evaporator, removing part of the moisture and lowering it to near ambient temperature, thereby reducing the load on the evaporator.

The air then enters the evaporator for further heat exchange, where the compressed air is cooled to a pressure dew point of approximately 2–10°C. At this stage, most of the moisture, oil vapor, and some impurities in the compressed air condense and are separated from the air by a gas–water separator, achieving preliminary drying.

The pre-dried compressed air then passes through an oil removal filter and enters the adsorption drying system. Within the adsorption bed, high-efficiency molecular sieves perform deep adsorption, producing low-dew-point compressed air. The low-dew-point compressed air is subsequently filtered through a precision filter to remove fine particles, ultimately delivering ultra-low dew point, clean compressed air.

■ Technical Parameter

AH Series Refrigerated Air Dryer + HH Series Heatless Desiccant Air Dryer

Model	Capacity m³/min	Voltage V/Hz	Power kW	Inlet/Outlet	Weight (kg)	Dimensions (mm)
LY-DH10AHN	1.5	220/50	0.9	G1"	182	1260×762×1803
LY-DH20AHN	2.5	220/50	1	G1"	263	1260×940×1700
LY-DH30AHN	3.8	220/50	1.2	G1½"	420	1345×1030×1773
LY-DH50AHN	6.5	220/50	1.6	G1½"	574	1455×1160×1847
LY-DH75AHN	10.5	220/50	2.3	G2"	782	1665×1295×2175
LY-DH100AHN	13.5	380/50	2.8	G2"	980	1665×1356×2225
LY-DH120AHN	17	380/50	2.9	DN65	1072	1725×1346×2384
LY-DH150AHN	21.5	380/50	5.2	DN80	1399	1955×1459×2265
LY-DH180AHN	25	380/50	5.3	DN80	1554	1950×1459×2465
LY-DH200AHN	28	380/50	5.6	DN80	1820	2070×1560×2448
LY-DH250AHN	32	380/50	6.3	DN80	2010	2115×1600×2642
LY-DH300AHN	37	380/50	7.9	DN100	2336	2140×1760×2680
LY-DH400AHN	45	380/50	10.6	DN100	2750	2270×1830×2801

AH Series Refrigerated Air Dryer + HH Series Heat-Regenerated (Low-Heat) Desiccant Air Dryer

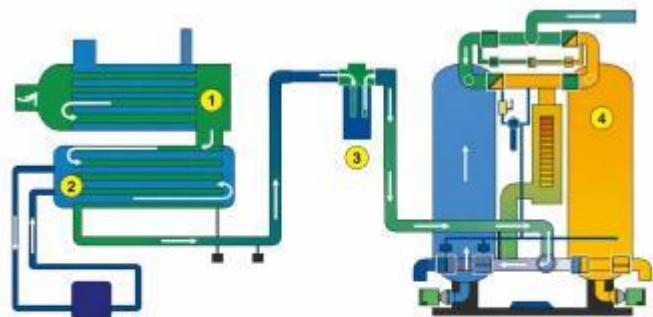
Model	Capacity m³/min	Voltage V/Hz	Power kW	Inlet/Outlet	Weight (kg)	Dimensions (mm)
LY-DH10AHH	1.5	380/50	2.3	G1"	187	1260×762×1803
LY-DH20AHH	2.5	380/50	2.5	G1"	270	1260×940×1700
LY-DH30AHH	3.8	380/50	3.6	G1½"	430	1345×1030×1773
LY-DH50AHH	6.5	380/50	5	G1½"	580	1455×1160×1847
LY-DH75AHH	10.5	380/50	5.7	G2"	890	1665×1295×2175
LY-DH100AHH	13.5	380/50	9.1	G2"	1090	1665×1356×2225
LY-DH120AHH	17	380/50	13	DN65	1255	1725×1346×2384
LY-DH150AHH	21.5	380/50	15.1	DN80	1420	1955×1459×2265
LY-DH180AHH	25	380/50	15.3	DN80	1720	1950×1459×2465
LY-DH200AHH	28.5	380/50	15.8	DN80	1970	2070×1560×2448
LY-DH250AHH	32	380/50	19.2	DN80	2070	2115×1600×2642
LY-DH300AHH	37	380/50	21.1	DN100	2540	2140×1760×2680
LY-DH400AHH	45	380/50	27	DN100	2830	2270×1830×2801

DC SERIES

COMBINED COMPRESSED AIR DRYER

■ Operating conditions

Applicable Fluids: Compressed air, non-corrosive air
Rated Inlet Pressure: 0.7 MPa (0.6–1.0 MPa, customizable)
Rated Air Inlet Temperature: 50 °C (max 80 °C)
Regeneration Method: No heat / Micro-heat
Cooling Method: Air-cooled and Water-cooled
Outlet Pressure Dew Point: ≤ -40 °C
Adsorbent: Activated alumina
Rated Ambient Temperature: 35 °C (usable 2–45 °C)



Working Principle

Note: Standard units are equipped with one middle filter; additional filters can be configured as needed.

■ Design Features

Advanced refrigeration drying system and adsorption drying system design

The refrigeration drying system is engineered to maximize the contact area and contact time between compressed air and refrigerant, ensuring more thorough heat exchange. High-precision refrigeration components, advanced expansion throttling devices, and automatic temperature control and capacity modulation systems automatically adjust to optimal operating conditions based on actual application requirements. This effectively reduces the power consumption of the refrigeration compressor and further improves energy efficiency.

The adsorption drying system adopts high-efficiency adsorbents and optimized adsorption cycles. With high mechanical strength and excellent abrasion resistance, the system delivers superior adsorption efficiency. Moisture adsorption is carried out at low temperatures using an optimal process, significantly increasing adsorption depth and achieving ultra-low pressure dew points.

Integrated design

The unit features a compact footprint and easy installation. Backed by years of technical research and manufactured using modern processes and equipment, each product undergoes strict testing and inspection to ensure it meets operational standards before leaving the factory.



■ Working Principle

Moist compressed air first enters the precooler in the refrigeration drying system, where it exchanges heat with dry, low-dew-point air from the adsorption drying system. This process raises the temperature of the low-dew-point air while simultaneously reducing the temperature of the compressed air entering the evaporator, removing part of the moisture and lowering it to near ambient temperature, thereby reducing the load on the evaporator.

The air then flows into the evaporator for further heat exchange, where the compressed air is cooled to a pressure dew point of approximately 2–10°C. At this stage, most of the moisture, oil vapor, and some impurities in the compressed air condense and are separated from the air by a gas–water separator, achieving preliminary drying.

The pre-dried compressed air then passes through an oil removal filter and enters the adsorption drying system. Within the adsorption bed, high-efficiency molecular sieves perform deep adsorption, producing low-dew-point compressed air. The low-dew-point compressed air is subsequently filtered through a precision filter to

remove fine particles, ultimately delivering ultra-low dew point, clean compressed air.

■ Technical Parameter

AH Series Refrigerated Air Dryer + CH Series Heatless Desiccant Air Dryer

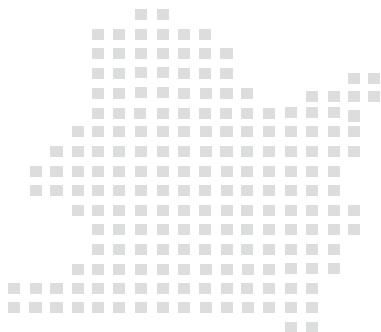
Model	Capacity m³ min	Voltage V Hz	Power kW	Inlet/Outlet	Weight (kg)	Dimensions (mm)
LY-DC10AHN	1.5	380/50	0.9	G1"	154	1150x680x1692
LY-DC20AHN	2.5	380/50	0.9	G1"	208	1260x940x1700
LY-DC30AHN	3.8	380/50	1.2	G1½"	320	1270x980x1691
LY-DC50AHN	6.5	380/50	1.6	G1½"	460	1340x1030x1713
LY-DC75AHN	10.5	380/50	2.2	G2"	622	1630x1260x1892
LY-DC100AHN	13.5	380/50	2.8	G2"	850	1665x1304x2162
LY-DC120AHN	17.0	380/50	2.9	DN65	930	1665x1355x2175
LY-DC150AHN	21.5	380/50	5.3	DN80	1150	1815x1265x2307
LY-DC180AHN	25.0	380/50	5.3	DN80	1330	1925x1450x2384
LY-DC200AHN	28.5	380/50	5.6	DN80	1630	2045x1559x2311
LY-DC250AHN	32.0	380/50	6.3	DN80	1800	2100x1600x2510
LY-DC300AHN	37.0	380/50	7.9	DN100	2000	2165x1700x2448
LY-DC400AHN	45.0	380/50	10.6	DN100	2750	2200x1842x2541

AH Series Refrigerated Air Dryer + CH Series Heat-Regenerated (Low-Heat) Desiccant Air Dryer

Model	Capacity m³ min	Inlet/Outlet	Dimensions (mm)
LY-DC10AHH	1.5	G1"	1150x680x1692
LY-DC20AHH	2.5	G1"	1260x940x1700
LY-DC30AHH	3.8	G1½"	1270x980x1691
LY-DC50AHH	6.5	G1½"	1340x1030x1713
LY-DC75AHH	10.5	G2"	1630x1260x1892
LY-DC100AHH	13.5	G2"	1665x1304x2162
LY-DC120AHH	17.0	DN65	1665x1355x2175
LY-DC150AHH	21.5	DN80	1815x1265x2307
LY-DC180AHH	25.0	DN80	1925x1450x2384
LY-DC200AHH	28.5	DN80	2045x1559x2311
LY-DC250AHH	32.0	DN80	2100x1600x2510
LY-DC300AHH	37.0	DN100	2165x1700x2448
LY-DC400AHH	45.0	DN100	2200x1842x2541

OUR SERVICES

■ LINGYU Services





**Strive to improve
customer satisfaction**



**National coverage
fast response**

LINGYU

■ Service Content

- **Provide free after-sales consultation;**
- Debug, repair, and maintenance of Lingyu equipment during the warranty period;
- Survey the site of other brands outside the warranty period of Lingyu and formulate plans.

■ Complete Accessories

○ **Refrigerated air dryer**

Fans, compressors, condensers, evaporators, dry filters, expansion valves, bypass valves, pressure gauges, various drains, etc.

○ **Adsorption air Dryers**

Valves, electrical boxes, adsorbents, diffusers, silencers, solenoid valves, check valves, etc.

○ **Other accessories**

Various filter elements, differential pressure gauges, etc.



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