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AIR DRYERS & POST-TREATMENT EQUIPMENT



Engineering the Future

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KAISHAN PURITY EQUIPMENT

Kaishan Air Treatment is dedicated to developing compressed air purification and energy-saving equipment based on the exemplary manufacturing base of Kaishan Group and its worldwide distribution network.

Kaishan Air Treatment specialises in R&D and the manufacturing of oxygen generators, nitrogen generators, refrigerated compressed air dryers, adsorption dryers, in line filters, oil-water separators, high-efficiency degreasers, high-efficiency air coolers, self-cleaning air filters and compressed heat regeneration adsorption dryers. According to customer requirements, we can provide air-cooled, water-cooled, high-temperature, instrument, single-chip microcomputer, programmable, variable frequency, high pressure, explosion-proof, environmental protection and other forms and characteristics of air compressor post-treatment equipment. Our products are widely used in electric power, electronics, metallurgy, machinery, automobile manufacturing, petroleum, chemical industry, textile, chemical fiber, papermaking, rubber, instrument, food, air separation, cigarette, medicine, biology, daily chemical amongst other industries. Our products are utilized all over the world, the United States, Canada, Russia, Mexico, East Asia, the Middle East, Australia and Africa amongst others.

With state-of-the-art international advanced production equipment, incorporating advanced design, R&D and production capacity, maintaining a strict ISO quality assurance system. Our range is developed by utilising advanced international technology, from within in the air compression industry, ensuring high performance and reliability of our products.

Kaishan Air Treatment Equipment delivers quality products that outperform the competition and stand the test of time.



Refrigerated Compressed Air Dryer

Selection Guide for Refrigerated Compressed Air Dryer.

To select a refrigerated compressed air dryer correctly, five main factors must be taken into account: the actual flow rate, pressure and temperature of compressed air, as well as the ambient temperature and the required pressure dew point temperature. The handling capacity of a refrigerated compressed air dryer is $Q_s=Q_a \times C_1 \times C_2$, where Q_a represents the actual flow of compressed air.

Example:
The air pressure at the inlet of a refrigerated compressed air dryer is 0.7MPa, with the air temperature at the inlet of 40°C, the ambient temperature of 40°C, the actual flow of compressed air $Q_a=10\text{Nm}^3/\text{min}$, and the required pressure dew point of +20°C, then the handling capacity of the refrigerated compressed air dryer $Q_s=Q_a \times C_1 \times C_2$. According to Table 1 and Table 2, $C_1=0.80$, $C_2=1.22$, resulting in $Q_s=9.76$. In this example, KSAD-10SF should be selected as the most suitable specification.

Table 1 Correction Coefficient for Compressed Air Pressure and Temperature (C,)

INLET TEMPERATURE (°C)	INLET PRESSURE (MPa)						
	0.4	0.5	0.6	0.7	0.8	0.9	1.0
25	0.49	0.43	0.40	0.37	0.35	0.33	0.32
30	0.570	0.52	0.46	0.42	0.40	0.37	0.36
35	0.84	0.77	0.71	0.65	0.62	0.59	0.57
40	0.99	0.91	0.85	0.80	0.77	0.74	0.72
45	1.20	1.11	1.05	1.00	0.97	0.94	0.92
50	1.37	1.30	1.24	1.18	1.14	1.10	1.07

Dew Point Conversion Table

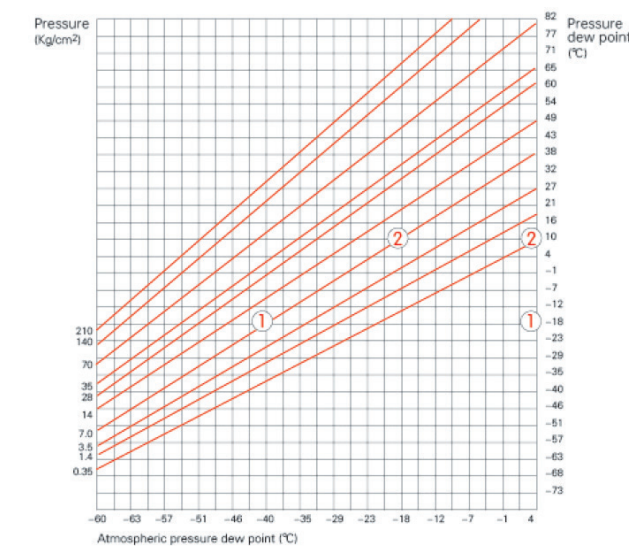


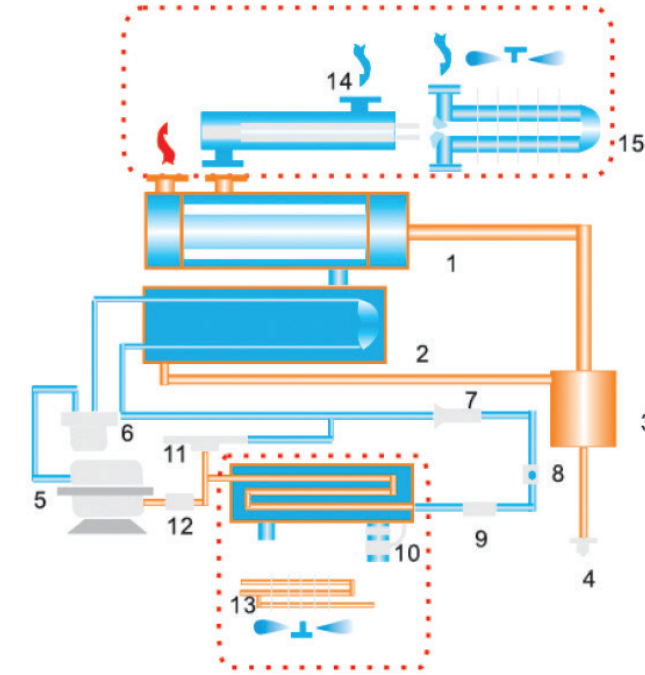
Table 2 Correction Coefficient for Ambient Temperature and Pressure Dew Point (C2)

AMBIENT TEMPERATURE (°C)	PRESSURE DEW POINT	
	2°C	10°C
25	0.65	0.34
30	0.78	0.46
35	1.00	0.66
40	1.22	0.86

Table of Relationship between Atmospheric Dew Point and Moisture Content

DEW POINT (°C)	MOISTURE CONTENT (g/m³)	DEW POINT (°C)	MOISTURE CONTENT (g/m³)	DEW POINT (°C)	MOISTURE CONTENT (g/m³)	DEW POINT (°C)	MOISTURE CONTENT (g/m³)
14	12.07	-5	3.407	-24	0.7678		
13	11.35	-6	3.169	-25	0.7074	-43	0.1298
12	10.66	-7	2.946	-26	0.6463	-44	0.1172
11	10.01	-8	2.737	-27	0.5922	-45	0.1055
10	9.309	-9	2.541	-28	0.5422	-46	0.09501
9	8.919	-10	2.358	-29	0.4960	-47	0.08544
8	8.270	-11	2.186	-30	0.4534	-48	0.07675
7	7.750	-12	2.206	-31	0.4141	-49	0.06886
6	7.260	-13	1.876	-32	0.3779	-50	0.06171
5	6.797	-14	1.736	-33	0.3445	-51.1	0.054
4	6.360	-15	1.605	-34	0.3138	-53.9	0.040
3	5.947	-16	1.483	-35	0.2856	-56.7	0.029
2	5.559	-17	1.369	-36	0.2597	-59.4	0.021
1	5.192	-18	1.261	-37	0.2359	-62.2	0.014
0	4.847	-19	1.165	-38	0.2141	-65.0	0.011
-1	4.523	-20	1.074	-39	0.1940	-67.8	0.008
-2	4.217	-21	0.9884	-40	0.1757	-70.6	0.005
-3	3.930	-22	0.9093	-41	0.1590	-73.3	0.003
-4	3.660	-23	0.8359	-42	0.1438		

Refrigerated Compressed Air Dryer



- 1 Heat Exchanger
- 2 Evaporator
- 3 Gas-liquid Separator
- 4 Automatic Drainer
- 5 Refrigerant Compressor
- 6 Vaporizer
- 7 Thermal Expansion Valve
- 8 Sight Glass
- 9 Dry Filter
- 10 Condenser (water-cooled)
- 11 Hot Gas Bypass Valve
- 12 Oil Content
- 13 Condenser (air-cooled)
- 14 Refrigerator (water-cooled)
- 15 Pre-cooler (air-cooled)

Principles

Based upon the principle of refrigeration dehumidifying, the refrigerated compressed air dryer forces the compressed air to go through evaporator for heat exchange and temperature reduction, so that the gaseous water and oil in the compressed air can experience isobaric cooling and condensed into liquid state water and oil, which will entrain dust and discharged out of the system via automatic drainer, thus obtaining clean compressed air.

Features

The refrigeration compressor adopts high-temperature hermetically sealed refrigerating compressors of France's PERFORMER, KERRY, COPELAND, France's MANEUROP, HIGHLY, INVOTECH, GREE, SANYO and other companies, with stable operation, low noise, reliable performance, power saving and long service life.

Premium quality and high efficiency threaded pipe with high heat transfer coefficient is selected for the heat exchanger and condenser, so they are small in size and compact in structure. Selection of stainless steel or galvanized carbon steel for the cylinder material can avoid secondary contamination to the compressed air.

The refrigeration control elements are all the most advanced refrigeration elements with excellent performance from DANFOSS, ALCO and SPORLAN in the world, which are featured with throttling and depressurization of thermal expansion valve, energy adjustment of hot gas bypass valve, oil separation protection of frozen oil of the oil separator, and high-low pressure protection of refrigerant.

Gas-liquid separation adopts a gas-liquid separator which organically combines cyclone separation with stainless steel wire mesh mist elimination, which has the important functions of thorough gas-liquid separation effect, avoiding secondary evaporation of water and ensuring the drying effect of the refrigerated compressed air dryer. It is much superior to the cyclone separator and lower than the use cost of the filter gas-liquid separator, with a high performance to price ratio.

Reasonable equipment structural design facilitates maintenance and service, box-type shape presents elegant appearance.

Foundation-free installation.

Real-time display of operation parameters.

Refrigerated Air-cooled Compressed Air Dryer

Working Conditions and Technical Data

Inlet Temperature	Normal Temperature type, 45°C and High Temperature type, 80°C
Cooling Method	Air Cooling
Ambient Temperature	≤38°
Pressure Dew Point	2-10°C
Inlet Pressure	0.6-1.0MPa
Pressure Loss	≤5% of working pressure

Note: Air-cooled compressed air dryers with a volume of 60 cubic meters or more are skid-mounted units without box plates, and other special standards are available on request.



Parameters of Air-cooled Compressed Air Dryer at Normal Temperature

Model	Air Handling Capacity (Nm³/min)	Voltage (V)	Cooling Power (HP)	Fan Power (W)	Diameter of Air Nozzle	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)	Air Volume (Nm³/min)
KSAD-2SF	2.5	220	0.75	1x55	Rp1"	110	650	430	700	965
KSAD-3SF	3.6	220	1	1x150	Rp1"	130	850	450	700	3110
KSAD-4SSF	5	220	1.5	1x250	Rp1 ¹ / ₂ "	150	1000	490	730	5180
KSAD-6SF	6.8	220	2	1x250	Rp1 ¹ / ₂ "	160	1050	550	770	6220
KSAD-8SF	8.5	220	2.5	2x190	Rp2"	200	1200	530	946	8470
KSAD-12SF	12.8	380	3	2x190	Rp2"	250	1370	530	946	8470
KSAD-15SF	16	380	3.5	2x190	DN65	320	1500	780	1526	8470
KSAD-20SF	22	380	4.2	2x190	DN65	420	1540	790	1666	8470
KSAD-25SF	26.8	380	5.3	2x250	DN80	550	1610	860	1610	10560
KSAD-30SF	32	380	6.7	2x250	DN80	650	1610	920	1872	10560
KSAD-40SF	43.5	380	8.3	3x250	DN100	750	2160	960	1863	15840
KSAD-50SF	53	380	10	3x250	DN100	830	2240	960	1863	15840
KSAD-60SF	67	380	13.3	3x410	DN125	1020	2360	1060	1930	21900
KSAD-70SF	78	380	16.6	4x410	DN125	1160	1940	1550	1980	29200
KSAD-80SF	90	380	20	4x640	DN125	1300	2040	1490	1930	38000
KSAD-100SF	110	380	25	6x410	DN150	1600	2400	1900	2019	43800
KSAD-120SF	130	380	30	6x640	DN150	2000	2600	1750	2185	57000

Note: The technical standard of pressure for the above parameters is 0. 7Mpa.

If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Parameters of Air-cooled Compressed Air Dryer at High Temperature

Model	Air Handling Capacity (Nm³/min)	Voltage (V)	Cooling Power (HP)	Fan Power (W)	Diameter of Air Nozzle	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)	Air Volume (Nm³/min)
KSAD-2HF	2.5	220	0.75	2x55	Rp1"	140	845	570	780	1930
KSAD-3HF	3.6	220	1	2x150	Rp1"	160	1020	600	790	6220
KSAD-4SHF	5	220	1.5	4x90	Rp1 ¹ / ₂ "	180	1000	500	990	7560
KSAD-6HF	6.8	220	2	4x150	Rp1 ¹ / ₂ "	210	1100	500	1000	12400
KSAD-8HF	8.5	220	2.5	4x190	Rp2"	250	1200	640	1250	16940
KSAD-12HF	12.8	380	3	4x190	Rp2"	270	1330	650	1250	16940
KSAD-15HF	16	380	3.5	4x190	DN65	360	1625	880	1540	16940
KSAD-20HF	22	380	4.2	4x190	DN65	460	1640	890	1610	16940
KSAD-25HF	26.8	380	5.3	4x250	DN80	600	1860	990	1668	21120
KSAD-30HF	32	380	6.7	4x250	DN80	720	1810	1310	1728	21120
KSAD-40HF	43.5	380	8.3	6x250	DN100	870	2360	1410	2100	31680
KSAD-50HF	53	380	10	6x250	DN100	970	2360	1460	2000	31680
KSAD-60HF	67	380	13.3	7x410	DN125	1200	2460	1560	2160	51100
KSAD-70HF	78	380	16.6	8x410	DN125	1200	2460	1560	2160	58400
KSAD-80HF	90	380	20	8x640	DN125	1460	2540	1640	2200	76000
KSAD-100HF	110	380	25	12x525	DN150	1850	2900	2100	2300	100800
KSAD-120HF	130	380	30	12x525	DN150	2400	3000	2500	2308	100800

Refrigerated Water-cooled Compressed Air Dryer



Working Conditions and Technical Data

Inlet Temperature	Normal Temperature type ≤ 45°C and High Temperature type, 80°C
Cooling Method	Water Cooling
Pressure Dew Point	2-10°C
Inlet Pressure	0.6-1.0MPa
Pressure Loss	≤5% of working pressure
Inlet Temperature of Cooling Water	≤38°
Inlet Pressure of Cooling Water	0.2-0.4MPa
Cooling Water	Industrial Circulating Water

Note: Air-cooled compressed air dryers with a volume of 60 cubic meters or more are skid-mounted units without box plates, and other special standards are available on request.

Parameters of Water-cooled Compressed Air Dryer at Normal Temperature

Model	Air Handling Capacity (Nm³/min)	Voltage (V)	Cooling Power (HP)	Air Volume (Nm³/min)	Diameter of Air Nozzle	Diameter of Cooling water	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)
KSAD-6SW	6.8	220	2	1.2	Rp1 ¹ / ₂ "	Rp1 ³ / ₄ "	155	1200	470	700
KSAD-8SW	8.5	220	2.5	1.6	Rp2"	Rp1"	195	1050	570	1110
KSAD-12SW	12.8	380	3	1.8	Rp2"	Rp1"	240	1050	580	1100
KSAD-15SW	16	380	3.5	3	DN65	Rp1"	300	1420	760	1276
KSAD-20SW	22	3800	4.2	3.6	DN65	Rp1 ¹ / ₂ "	410	1460	760	1456
KSAD-25SW	26.8	380	5.3	4.6	DN80	Rp1 ¹ / ₂ "	530	1580	860	1430
KSAD-30SW	32	380	6.7	5.6	DN80	Rp1 ¹ / ₂ "	640	1530	920	1572
KSAD-40SW	43.5	380	8.3	7.2	DN100	Rp1 ¹ / ₂ "	720	1960	940	1603
KSAD-50SW	53	380	10	9.2	DN100	Rp1 ¹ / ₂ "	880	2240	960	1603
KSAD-60SW	67	380	13.3	10.8	DN125	Rp1 ¹ / ₂ "	1000	2090	980	1810
KSAD-70SW	78	380	15.4	11.5	DN125	Rp1 ¹ / ₂ "	1420	2000	1200	1980
KSAD-80SW	90	380	20	12.4	DN125	Rp2"	1650	2100	1200	2030
KSAD-100SW	110	380	25	14.6	DN150	Rp2"	2430	2360	1180	2020
KSAD-120SW	130	380	30	16.2	DN150	Rp2 ¹ / ₂ "	2500	2560	1210	2190
KSAD-150SW	160	380	40	18.6	DN200	Rp2 ¹ / ₂ "	2800	2960	1460	2313
KSAD-200SF	210	380	50	24.4	DN200	Rp2 ¹ / ₂ "	3500	3310	1510	2470
KSAD-250SF	260	380	65	30.5	DN250	Rp3"	3700	3660	2100	2714
KSAD-300SF	315	380	75	36	DN250	Rp3"	4000	3500	2000	2995
KSAD-350SF	350	380	90	43	DN300	Rp3"	3950	4060	2160	3009
KSAD-400SF	400	380	100	50	DN300	DN100	4200	4260	2160	3009
KSAD-450SF	380	380	110	57	DN350	DN100	4500	4600	2000	3059
KSAD-500SF	500	380	125	62	DN350	DN100	4700	4900	2000	3059
KSAD-550SF	550	380	130	68.5	DN400	DN125	5000	4900	2160	3209
KSAD-600SF	600	380	140	75	DN400	DN125	5300	4900	2260	3309

Note: The technical standard of pressure for the above parameters is 0 .7 Mpa.

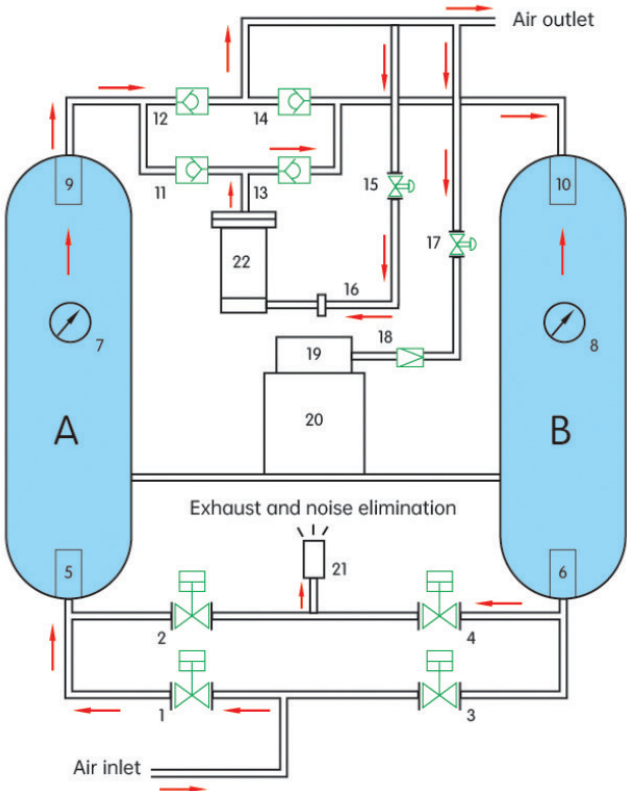
If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Parameters of Water-cooled Compressed Air Dryer at High Temperature

Model	Air Handling Capacity (Nm³/min)	Voltage (V)	Cooling Power (HP)	Air Volume (Nm³/min)	Diameter of Air Nozzle	Diameter of Cooling water	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)
KSAD-15HW	16	380	3.5	3	DN65	Rp1"	350	1630	910	1320
KSAD-20HW	22	380	4.2	3.6	DN65	Rp1 ¹ / ₂ "	480	1050	960	1110
KSAD-25HW	26.8	380	5.3	4.6	DN80	Rp1 ¹ / ₂ "	620	1050	960	1100
KSAD-30HW	32	380	6.7	5.6	DN80	Rp1 ¹ / ₂ "	720	1420	1270	1276
KSAD-40HW	43.5	3800	8.3	7.2	DN100	Rp1 ¹ / ₂ "	870	1460	1325	1456
KSAD-50SW	53	380	10	9.2	DN100	Rp1 ¹ / ₂ "	1100	1580	1430	1430
KSAD-60HW	67	380	13.3	10.8	DN125	Rp2"	1400	1530	1460	1572
KSAD-80HW	90	380	20	12.4	DN125	Rp2"	1950	1960	1740	1603
KSAD-100HW	110	380	25	14.6	DN150	Rp1 ¹ / ₂ "	2600	2240	1780	1603
KSAD-120HW	130	380	30	16.2	DN150	Rp2 ¹ / ₂ "	2900	2900	2370	1810
KSAD-150HW	160	380	18.6	18.6	DN200	Rp2 ¹ / ₂ "	3200	3200	2370	1980
KSAD-200HW	210	380	24.4	24.4	DN200	Rp2 ¹ / ₂ "	3700	3700	2210	2470
KSAD-250HW	260	380	65	30.5	DN250	Rp3"	3880	3660	2600	2714
KSAD-300HW	315	380	75	36	DN250	Rp3"	4300	3760	2410	2560
KSAD-350HW	350	380	90	43	DN300	Rp3"	4200	4060	2660	3009
KSAD-400HW	400	380	100	50	DN300	DN100	4370	4370	2660	3009
KSAD-450HW	450	380	110	57	DN350	DN100	4700	4700	2800	3059
KSAD-500HW	500	380	125	62	DN350	DN100	4900	4900	2800	3059
KSAD-550HW	550	380	130	68.5	DN400	DN125	5300	4900	2970	3209
KSAD-600HW	600	380	140	75	DN400	DN125	5500	4900	3070	3309

Micro-heat Regeneration Adsorption Dryer

Flowchart



- | | |
|-------------|----------------------------|
| A, B | Absorption Drying Cylinder |
| 1,2,3,4 | Pneumatic Valve |
| 5,6,7,8 | Diffuser |
| 7,8 | Pressure Gauge |
| 11,12,13,14 | Check Valve |
| 15,17 | Control Valve |
| 16 | Restriction Orifice |
| 18 | Air Source Regulator |
| 19 | Solenoid Valve Group |
| 20 | Program Control Box |
| 21 | Exhaust Muffler |
| 22 | Electric Heater |

Product Introduction

This series of products have the advantages of heat regeneration and heatless regeneration, and the regeneration gas is slightly heated, thus reducing the gas consumption of regeneration and achieving energy saving. It avoids not only the shortcomings of short switching time and large regenerative air loss of the heatless regeneration adsorption dryer, but also those of large electric energy loss of the heat regeneration adsorption dryer. The dryer, characterized by reasonable switching time and low regeneration gas consumption, is the most economical and energy-saving adsorption dryer in the chemical industry at present. It is widely used in metallurgy, electric power, electronics, food, chemical industry, petroleum, medicine, textile, tobacco, instrumentation, automatic control and other industries.

Micro-heat Regeneration Adsorption Dryer

Working Conditions and Technical Data

Design pressure dew point: standard -20°C (products with pressure dew point of -40°C and -70°C are available)
Inlet temperature: 20-45°C
Working pressure: 0.6-1.0Mpa
Desiccant: combination of standard activated alumina, low dew point product activated alumina and SA molecular sieve
Working mode: continuing alternative working between two towers
Control Mode: microcomputer program control
Inlet oil content: ≤0.1ppm
Pressure Loss: ≤3% of inlet pressure
Purge air: ≤6-8%
Purge Mode: micro-thermal regeneration
Heater Voltage: 1-8Nm3/min, 220V; 10Nm3//min and above, 380V
Working Periods: 1-20Nm3//min, 120min; 25-50Nm3//min, 240min; 60-100Nm3//min, 360min; 100Nm3//min, 480min;
Installation Method: foundation-free installation



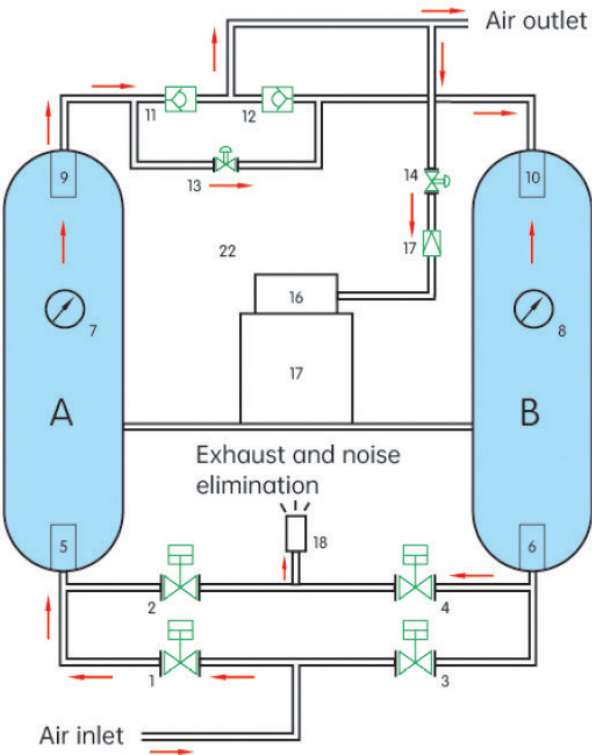
Parameters for Micro-heat Regeneration Adsorption Dryer

Model	Air Handling Capacity (Nm³/min)	Heater Power (KW)	Desiccant Weight (kg)	Diameter of Air Nozzle	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)
KSAD-1MXF	1.2	0.5	26	Rp1"	140	988	450	1079
KSAD-2MXF	2.5	1	50	Rp1"	196	988	450	1552
KSAD3MXF	3.6	1.2	75	Rp1"	220	1096	460	1470
KSAD-4MXF	4.8	1.5	100	Rp1 1/2"	272	1146	460	1821
KSAD-6MXF	6.8	2.1	136	Rp1 1/2"	352	1275	405	1816
KSAD-8MXF	8.5	3	184	Rp2"	443	1275	405	2266
KSAD-10MXF	12.8	4	254	Rp2"	558	1427	463	2300
KSAD-15MXF	16	5	310	DN65	983	1616	498	2362
KSAD-20MXF	22	6	492	DN65	1271	1866	598	2400
KSAD-25MXF	26.8	8	576	DN80	1371	1866	598	2703
KSAD-30MXF	32	10	705	DN80	1550	1962	658	2757
KSAD-40MXF	43.5	12	1008	DN100	2002	2166	762	2819
KSAD-50MXF	53	15	1171	DN100	2393	2236	822	2930
KSAD-60MXF	67	18	1560	DN125	3052	2412	1190	2866
KSAD-70MXF	78		1820	DN125	3243	2620	1288	2866
KSAD-80MXF	90	27	2220	DN125	3698	2960	1440	2914
KSAD-100MXF	110	36	2370	DN150	4926	3124	1600	3108
KSAD-120MXF	130	42	2848	DN150	5694	3420	1725	3162
KSAD-150MXF	160	54	3374	DN200	6140	3824	1920	3396
KSAD-200MXF	210	72	4580	DN200	8638	4224	1970	3533
KSAD-250MXF	260	100	5920	DN250	10960	4324	2060	3692
KSAD-300MXF	310	120	6780	DN250	11843	4824	2335	3819

Note: The technical standard of pressure for the above parameters is 0. 7Mpa.
If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Heatless Regeneration Adsorption Dryer

Flowchart



A, B	Absorption Drying Cylinder
1,2,3,4	Pneumatic Valve
5,6,9,10	Diffuser
7,8	Pressure Gauge
11,12	Check Valve
13,14	Control Valve
15	Air Source Regulator
16	Solenoid Valve Group
19	Solenoid Valve Group
17	Program Control Box
18	Exhaust Muffler

Product Description

Stable and consistent outlet pressure and dew point

- A. Reasonable cylinder design ensures that the contact time between compressed air and desiccant meets the requirements for the finished air dew point.
- B. 30% residual desiccant is used to compensate the natural aging of desiccant and ensure dryness.
- C. Large diffuser ensures the air flow to pass through the desiccant layer evenly and eliminates the channeling phenomenon.

Less than 14% purge air loss

- A. Excellent barrel design saves 95% of the absorbed heat, and the stored heat is used to increase the regeneration gas temperature in the regeneration stage, improve the desorption capacity of the equipment, and make the regeneration more thorough.
- B. Drying and regeneration are carried out in a reversal convection scheme, with the best results achieved when wet air flows over the dried adsorbent.
- C. Adjustment of purge air according to the operating load requirements of the dryer.

Long service life of desiccant

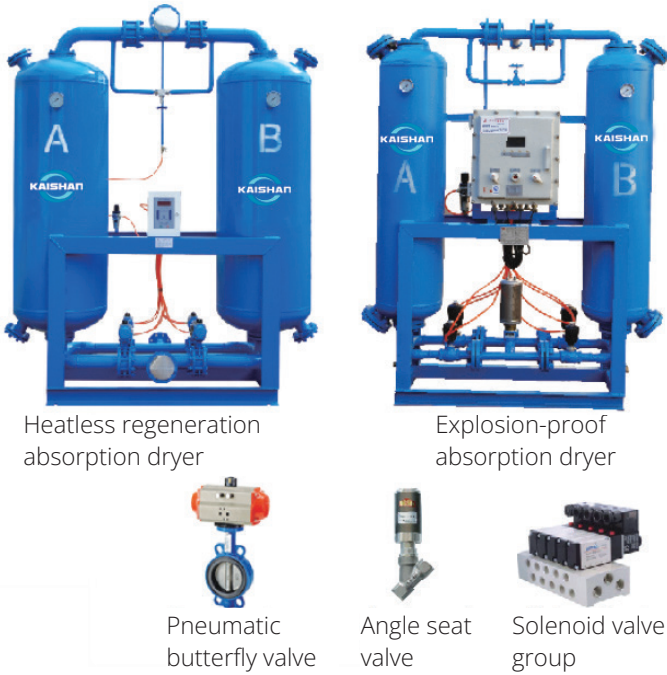
- A. Appropriate barrel size can keep the flow rate and time of gas passing through desiccant layer in the best state and give full play to the performance of desiccant.
- B. Reasonable system configuration ensures that the oil content and heavy pollutants contained in the gas can be eliminated immediately after efficient degreasing treatment before the gas enters the cylinder, so as to avoid the desiccant layer from being damaged.

Equipped with a novel pneumatic valve and advanced and an reliable microcomputer program controller, the equip· ment achieves stable and reliable automatic timing and automatic switching work.
Scientific and reasonable switching time design ensures the stability and no fluctuation of outlet pressure.

Heatless Regeneration Adsorption Dryer

Working Conditions and Technical Data

Inlet Temperature: 20-45°C
Inlet Oil Content: ≤0.1ppm
Working Pressure: 0.6-1.0Mpa
Design Pressure Dew Point: standard ·20°C (products with pressure dew point of ·40°C and · 70°C are available)
Purge Air: ≤14%
Desiccant: combination of standard activated alumina, low dew point product activated alumina and 5A molecular sieve
Purge Mode: heatless regeneration
Working Mode: continuing alternative working between two towers
Working Periods: T=10min
Power Supply: 220V/50HZ
Control Mode: microcomputer automatic control
Installation Method: foundation-free installation



Parameters for Heatless Regeneration Adsorption Dryer

Model	Air Handling Capacity (Nm³/min)	Desiccant Weight (kg)	Diameter of Air Nozzle	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)
KSAD-1WXF	1.2	26	Rp1"	127	988	450	1071
KSAD-2WXF	2.5	50	Rp1"	179	988	450	1554
KSAD3WXF	3.6	75	Rp1"	202	1096	460	1466
KSAD-4SWXF	4.8	100	Rp1 1/2"	239	1146	460	1820
KSAD-6WXF	6.8	136	Rp1 1/2"	317	1275	405	1816
KSAD-8WXF	8.5	184	Rp2"	443	1275	405	2266
KSAD-10WXF	12.8	254	Rp2"	505	1427	463	2296
KSAD-15WXF	16	310	DN65	749	1616	498	2365
KSAD-20WXF	22	492	DN65	1100	1866	598	2400
KSAD-25WXF	26.8	576	DN80	1246	1866	598	2703
KSAD-30WXF	32	705	DN80	1445	1966	658	2747
KSAD-40WXF	43.5	1008	DN100	1967	2166	762	2819
KSAD-50WXF	53	1171	DN100	2309	2252	822	2947
KSAD-60WXF	67	1334	DN125	2620	2418	924	2827
KSAD-80WXF	90	1834	DN125	3417	2720	1040	3148
KSAD-100WXF	110	2370	DN150	4573	3060	1200	3179
KSAD-120WXF	130	2786	DN150	4923	3120	1360	3378
KSAD-150WXF	160	3374	DN200	6497	3620	1360	3359
KSAD-2000WXF	210	4580	DN200	7714	4024	1660	3490
KSAD-250WXF	260	5280	DN250	8600	4324	2660	3472
KSAD-300WXF	310	6340	DN250	8896	4824	2335	3699

Note: The technical standard of pressure for the above parameters is 0. 7Mpa.
If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Compression Heat Regeneration Adsorption Dryer

Product Description

The main working principle of regeneration adsorption dryer with compressed heat is to heat the adsorbent in the drying tower through the heat generated by gas compression to make it desorbed.

Product Features

1. High Efficiency and Energy Saving
2. Standard Cycle Time of 8h
- 3 Pressure Loss $\leq 3\%$ of Inlet Pressure
4. Three-stage Drainage Function

Working Conditions and Technical Data

Inlet Pressure	0.6-1.0Mpa	Cooling Water temperature	$\leq 32^{\circ}\text{C}$
Inlet Oil Content	0.lppm	Purge Air Consumption	$\leq 1.5\%$
Air Inlet Temperature	110°C-150°C	Adsorption Periods	8h
Cooling Water Pressure	0.2-0.4Mpa	Air Handling Capacity	10-600Nm ³ /min
Design Atmospheric Dew Point	-40°C (optional -60°C)		



Compression Heat Regeneration Adsorption Dryer

Model Specifications and Performance Parameters (With Air Consumption)

Model	Air Handling Capacity (Nm ³ /min)	Length (mm)	Width (mm)	High (mm)	Inlet/outlet Flange Dimensions	Net Weight (KG)	Absorbant Weight (KG)	Cooling water Circulation (Nm ³ /min)
KSAD-40YXF	40	2500	1900	2700	DN100	2350	1050	15
KSAD-45YXF	45	2500	2000	2700	DN100	2500	1080	17.3
KSAD-50YXF	50	2500	2000	2900	DN100	2800	1200	19
KSAD-60YXF	60	3000	2000	2900	DN125	3250	1425	23
KSAD-80YXF	80	3200	2200	3200	DN125	4350	20202	31
KSAD-90YXF	90	3500	2200	3200	DN150	5000	2520	35
KSAD-100YXF	100	3900	2200	3200	DN150	6500	2650	39
KSAD120YXF	120	3900	2200	3500	DN150	7800	2740	46
KSAD-150YXF	150	4500	2700	3400	DN200	9700	3240	58
KSAD-180YXF	180	4800	2800	3500	DN200	12500	3240	68
KSAD-200YXF	200	4800	2800	3800	DN200	13100	4320	78
KSAD-220YXF	220	5100	3000	3700	DN200	13700	5200	84
KSAD-250YXF	250	5300	3100	3600	DN250	14500	9240	90
KSAD-300YXF	300	5800	3400	3900	DN250	17000	9240	115

Model Specifications and Performance Parameters (Zero Air Consumption)

Model	Air Handling Capacity (Nm ³ /min)	Length (mm)	Width (mm)	High (mm)	Inlet/outlet Flange dimensions	Net Weight (KG)	Absorbant Weight (KG)	Coolingwater Circulation (Nm ³ /min)	Heating Power (kw)
KSAD-40YXF-L	40	2500	1900	2700	DN100	2350	1050	30	12
KSAD-45YXF-L	45	2500	2000	2700	DN100	2500	1080	34.6	12
KSAD-50YXF-L	50	2500	2000	2900	DN100	2800	1200	38	15
KSAD-60YXF-L	60	3000	2000	2900	DN125	3250	1425	46	18
KSAD-80YXF-L	80	3200	2200	3200	DN125	4350	20202	62	27
KSAD-90YXF-L	90	3500	2200	3200	DN150	5000	2520	70	27
KSAD-100YXF-L	100	3900	2200	3200	DN150	6500	2650	78	36
KSAD120YXF-L	120	3900	2200	3500	DN150	7800	2740	92	36
KSAD-150YXF-L	150	4500	2700	3400	DN200	9700	3240	116	42
KSAD-180YXF-L	180	4800	2800	3500	DN200	12500	3240	136	42
KSAD-200YXF-L	200	4800	2800	3800	DN200	13100	4320	156	54
KSAD-220YXF-L	220	5100	3000	3700	DN200	13700	5200	168	54
KSAD-250YXF-L	250	5300	3100	3600	DN250	14500	9240	180	72
KSAD-300YXF-L	300	5800	3400	3900	DN250	17000	9240	230	100

Note: 1. The exhaust temperature of compressed air must be >110°C to prevent the air from dehydrating the desiccant in an inadequate depth.
2. Other special standard requirements are available on request.

Blower Purge Regeneration Adsorption Dryer

Product Description

The blower purge regeneration adsorption dryer belongs to the heating regeneration dryer. As far as its working principle is concerned, the blower is used to extract the ambient air, and the desiccant of the adsorption tower is regenerated after heating, thus avoiding the gas consumption loss of the micro-heat regeneration adsorption dryer in the heating stage. The compressed air enters the fixed adsorption bed of the adsorber, and the water in the air is adsorbed in the holes of the adsorbent by using the porous surface of the adsorbent to selectively adsorb certain components, so as to achieve the purpose of drying the air. When the adsorbent works for a certain period of time, the adsorption reaches a saturated balance, and it is necessary to regenerate the adsorbent with hot air to restore the adsorption capacity of the adsorbent. The adsorption, regeneration and recycling of the adsorbent ensures the safe and reliable long-term operation of the blower purge regeneration adsorption dryer.

Working Conditions and Technical Data

Inlet Pressure	0.6-1.0Mpa	
Inlet Oil Content	0.lppm	
Air Inlet Temperature	≤45℃	
Cooling Water Pressure	0.2-0.4Mpa	
Design Atmospheric Dew Point	-40℃ (optional -60℃)	
Cooling Water Temperature	≤32℃	
Purge Air Consumption	≤2% (with air consumption)	
	or 0 (zero air consumption)	
Air Handling Capacity	20-300 Nm³/min	
Adsorption Periods	20-50 Nm³/min	4h
	60-100 Nm³/min	6h
	100 Nm³/min	8h



Working Principle

The technological process of the blower purge regeneration adsorption dryer is that compressed air from compressor system passes through pre-precision filter (oil removal) to preliminarily remove trace oil, liquid water and other media entrained in the gas, and then enters the local system. First, the compressed air enters one of the adsorbers through air inlet valve for adsorption and drying to remove water, and then goes to post-precision filter through air outlet valve to filter out a very small amount of adsorbent dust possibly carried out by the adsorber, so as to obtain dry air and leave the system for subsequent processes.

Meanwhile, another adsorber enters the regeneration state, and the regeneration process is mainly composed of heating and blowing cold. During the heating period, the regeneration gas source is ambient air, and its flow path is pressurized by a blower, and then enters an electric heater through a gas one-way valve to heat the air to 190℃. Then, the heated regeneration gas enters the adsorber through a regeneration gas inlet valve to heat and desorb the saturated adsorbent, and the water desorbed from the heated adsorbent is taken out of the system by the regeneration gas, and the adsorbent is regenerated to regain its adsorption capacity. After the regeneration gas comes out of the adsorber, it passes through the regeneration gas outlet valve and the vent muffler to eliminate noise and exhaust the atmosphere. When the regenerative heating is over, dry air should be used to cool the adsorption bed before the adsorber is switched, so as to obtain a stable dew point. During the cooling period, the regeneration gas source is also ambient air, and PLC is informed to control automatic switching. Its flow path is that the effluent from the blower is cooled by aftercooling, and then depressurized to a very low regeneration pressure through the purge air cut-off valve,purge air control valve and restriction orifice plate, and then enters the adsorber to blow the adsorption bed.

Blower Purge Regeneration Adsorption Dryer

Model Specifications and Performance Parameters (With Air Consumption)

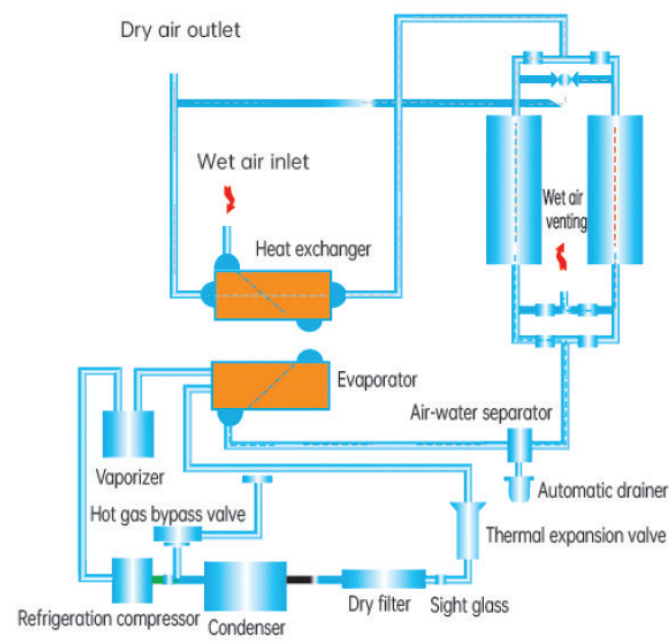
Model	Air Handling Capacity (Nm³/min)	Length (mm)	Width (mm)	High (mm)	Inlet/outlet Flange Dimensions	Net Weight (KG)	Absorbant Weight (KG)	Heating Power Power	Blower Power (KW)
KSAD-20GXF	22	1835	1180	2410	DN65	1350	500	12	4
KSAD-25GXFL	26	1835	1180	2710	DN80	1500	625	15	5.5
KSAD-30GXF	32	2200	1205	2830	DN80	1680	750	18	7.5
KSAD-40GXF	43.5	2400	1320	2850	DN100	2250	1000	22	7.5
KSAD-500GXF	53	2400	1450	2850	DN100	2800	1250	27	7.5
KSAD-60GXF	67	2400	1800	2850	DN125	3850	1500	36	9
KSAD-70GXF	78	2400	1800	2850	DN125	4150	1750	42	12.5
KSAD80GXF	90	2750	1900	2900	DN125	4450	2000	42	12.5
KSAD-100GXF	110	2900	2050	3050	DN150	5850	2500	54	15
KSAD-120GXF	130	3200	2050	3050	DN150	6550	3000	72	15
KSAD-150GXF	160	3600	2100	3050	DN200	7700	3750	84	15
KSAD-200GXF	210	4200	2100	3100	DN200	9700	5000	96	25

Model Specifications and Performance Parameters (Zero Air Consumption)

Model	Air Handling Capacity (Nm³/min)	Length (mm)	Width (mm)	High (mm)	Inlet/Outlet Flange dimensions	Net Weight (KG)	Absorbant Weight (KG)	Cooling water Circulation (Nm³/min)	Heating Power (KW)	Blower Power (KW)
KSAD-20GXF	22	1835	1180	2410	DN65	1350	500	3.3	12	4
KSAD-25GXFL	26	1835	1180	2710	DN80	1500	625	5.3	15	5.5
KSAD-30GXF	32	2200	1205	2830	DN80	1680	750	5.3	18	7.5
KSAD-40GXF	43.5	2400	1320	2850	DN100	2250	1000	6	22	7.5
KSAD-500GXF	53	2400	1450	2850	DN100	2800	1250	8	27	7.5
KSAD-60GXF	67	2400	1800	2850	DN125	3850	1500	9.3	36	9
KSAD-70GXF	78	2400	1800	2850	DN125	4150	1750	12	42	12.5
KSAD80GXF	90	2750	1900	2900	DN125	4450	2000	12	42	12.5
KSAD-100GXF	110	2900	2050	3050	DN150	5850	2500	16	54	15
KSAD-120GXF	130	3200	2050	3050	DN150	6550	3000	18	72	15
KSAD-150GXF	160	3600	2100	3050	DN200	7700	3750	24	84	15
KSAD-200GXF	210	4200	2100	3100	DN200	9700	5000	30	96	25

Combined Air Dryer

Flowchart



Working Conditions and Technical Data

Inlet Pressure	0.6-0.95MPa
Pressure Loss	≤0.05MPa
Air Inlet Temperature	20-45°C
Cooling Method	Water or Air Cooling
Design Pressure	Standard -20°C (products
Dew Point	with pressure dew point of
	-40°C and -70°C are available)
Purge Air	3-5%
Control Mode	Micro-computer Program Control
Installation Method	Foundation-free Installation

Product Description

First, the high-temperature and high-humidity compressed air from the compressor will exchange heat with low temperature compressed air which has been dried already in the heat exchanger to reduce the temperature, and then the air will enter the evaporator to be further cooled to about 2°C. At this pressure dew point, most of the gaseous water will become liquid water and be drawn out. Next, the compressed air with low humidity will be further dried and dehumidified in the adsorption cylinder to obtain the finished air with lower dew point. Finally, the low-temperature dried compressed air will enter the heat exchanger to cool the high-temperature and high-humidity air. Meanwhile, the finished air's temperature is higher than before to prevent dew condensation on the sub-conveying pipeline. And a little of the heated compressed air is used for adsorbent regeneration, thus improve the regeneration efficiency and reducing energy consumption.

Product Description

There are two types of compressed air dryer commonly used: refrigerated compressed air dryer and adsorption dryer. The refrigerated compressed air dryer has the advantages of no gas loss and low energy consumption, but it has the limitation of dew point temperature, while the adsorption dryer has the advantages of low dew point, but it has the disadvantages of large purge air loss and high energy consumption. This low dew point combined compressed air dryer developed by Kaishan Purify Equipment integrates the respective advantages of the above two types. We bring into play their advantages by reasonable pipeline connection and capacity matching, thus achieving the best economic operation point and high-quality low dew point finished air.

Product Description

Integrated design, compact and reasonable structure, favourable drying effect, high quality of the finished air, and extended service life of the desiccant by more than three times than the case of using the adsorption dryer alone. Microcomputer program control with adjustable timing.



Combined Air Dryer

Model Specifications and Performance Parameters (Heatless Air-cooling Type)

Model	Air Handling Capacity (Nm³/min)	Desicant Weight (KG)	Diameter of Air nozzle	Cooling Power (HP)	Air Volumn (Nm³/min)	Voltage (V)	Net Weight (KG)	Length (mm) (Nm³/min)	Width (mm) (KW)	High (mm) (KW)
KSAD-3WF	3.6	60	Rp1"	1	3110	220	510	1100	850	1808
KSAD-6WF	6.8	112	Rp1 1/2"	2	6220	220	775	1470	970	1689
KSAD-8WF	8.5	155	Rp2"	2.5	8470	220	920	1500	1060	2031
KSAD-10WF	10.9	198	Rp2"	3	8470	380	1060	1570	1100	2454
KSAD-15WF	16	275	DN65	3.5	8470	380	1325	1800	1400	2204
KSAD-20WF	22	395	DN65	4.2	8470	380	1740	1960	1440	2470
KSAD-25WF	26.8	490	DN80	5.3	10560	380	2060	2030	1480	2473
KSAD-30WF	32	600	DN80	6.7	10560	380	2375	2220	1640	2542
KSAD-40WF	43.5	845	DN100	8.3	15840	380	2960	2340	1710	2872
KSAD-50WF	53	1008	DN100	10	15840	380	3320	2340	1800	2961
KSAD-60WF	67	1170	DN125	13.3	18000	380	3445	2520	2000	2991
KSAD-80WF	90	1335	DN125	20	40000	380	3550	3020	2140	2872

Note: The technical standard of pressure for the above parameters is 0. 7Mpa.
If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Model Specifications and Performance Parameters (Micro-heat Air-cooling Type)

Model	Air Handling Capacity (Nm³/min)	Desicant Weight (KG)	Diameter of Aair nozzle	Cooling Power (HP)	Air Volumn (Nm³/min)	Voltage (V)	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)	Heating Power (KW)
KSAD-3MF	3.6	60	Rp1"	1	3110	220	510	1100	850	1808	1
KSAD-6MF	6.8	112	Rp1 1/2"	2	6220	220	775	1470	970	1689	1.5
KSAD-8MF	8.5	155	Rp2"	2.5	8470	220	920	1500	1060	2031	2.1
KSAD-10MF	10.9	198	Rp2"	3	8470	380	1060	1570	1100	2454	3
KSAD-15WF	16	275	DN65	3.5	8470	380	1325	1800	1400	2204	3
KSAD-20MF	22	395	DN65	4.2	8470	380	1740	1960	1440	2470	4
KSAD-25MF	26.8	490	DN80	5.3	10560	380	2060	2030	1480	2473	5
KSAD-30MF	32	600	DN80	6.7	10560	380	2375	2220	1640	2542	6
KSAD-40MF	43.5	845	DN100	8.3	15840	380	2960	2340	1710	2872	8
KSAD-50MF	53	1008	DN100	10	15840	380	3320	2340	1800	2961	10
KSAD-60MF	67	1170	DN125	13.3	18000	380	3445	2520	2000	2991	12
KSAD-80MF	90	1335	DN125	20	40000	380	3550	3020	2140	2872	18

Note: The technical standard of pressure for the above parameters is 0. 7Mpa.
If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Combined Air Dryer

Model Specifications and Performance Parameters (Heatless Air-cooling Type)

Model	Air Handling Capacity (Nm³/min)	Desicant Weight (KG)	Diameter of Air nozzle	Diameter of Cooling water pipe	Cooling Power (HP)	Cooling Water Flow (Nm³/min)	Voltage (V)	Net Weight (KG)	Length (mm)	Width (mm)	High (mm)
KSAD-15WW	16	275	DN65	Rp1½"	3.5	3	380	1325	1800	1400	2204
KSAD-20WW	22	395	DN65	Rp1½"	4.2	3.6	380	1740	1960	1440	2470
KSAD-25WW	26.8	490	DN80	Rp1½"	5.3	4.6	380	2060	2030	1480	2473
KSAD-30WW	32	600	DN80	Rp1½"	6.7	5.6	380	2375	2220	1640	2542
KSAD-40WW	43.5	845	DN100	Rp1½"	8.3	7.2	380	2960	2340	1710	2872
KSAD-50WW	53	1008	DN100	Rp1½"	10	9.2	380	3320	2340	1800	2961
KSAD-60WW	67	1170	DN125	Rp1½"	13.3	10.8	380	3445	2520	2000	2991
KSAD-80WW	90	1335	DN125	Rp2"	20	12.4	380	4250	2620	2140	2872
KSAD-100WW	110	1940	DN150	Rp2"	25	14.6	380	5910	2960	2400	3045
KSAD-120WW	130	2370	DN150	Rp2½"	30	16.2	380	7600	3064	2450	2624
KSAD-150WW	160	2790	DN200	Rp2½"	40	18.6	380	9980	4000	3100	3029
KSAD-200WW	210	3380	DN200	Rp2½"	50	24.4	380	12000	4200	3160	2830
KSAD-250WW	260	4580	DN200	Rp3"	65	30.2	380	12300	4224	3700	3510
KSAD-300WW	315	5354	DN250	Rp3"	75	36	380	13200	4700	3350	3749

Note: The technical standard of pressure for the above parameters is 0.7Mpa.
If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Model Specifications and Performance Parameters (Micro-heat and Water-cooling Type)

Model	Air Handling Capacity	Desicant Weight (Nm³/min)	Diameter of Air (KG)	Diameter of Cooling nozzle	Cooling Power water pipe	Cooling Water Flow (HP)	Voltage (V) (Nm³/min)	Net Weight	Length (mm) (KG)	Width (mm)	High (mm)	Heating Power (kw)
KSAD-15MW	16	275	DN65	Rp1½"	3.5	3	380	1325	1800	1400	2204	3
KSAD-20MW	22	395	DN65	Rp1½"	4.2	3.6	380	1740	1960	1440	2470	4
4zKSAD-25MW	26.8	490	DN80	Rp1½"	5.3	4.6	380	2060	2030	1480	2473	5
KSAD-30MW	32	600	DN80	Rp1½"	6.7	5.6	380	2375	2220	1640	2542	6
KSAD-40MW	43.5	845	DN100	Rp1½"	8.3	7.2	380	2960	2340	1710	2872	8
KSAD-50MW	53	1008	DN100	Rp1½"	10	9.2	380	3320	2340	1800	2961	10
KSAD-60MW	67	1170	DN125	Rp1½"	13.3	10.8	380	3445	2520	2000	2991	12
KSAD-80MW	90	1335	DN125	Rp2"	20	12.4	380	4250	2620	2140	2872	18
KSAD-100MW	110	1940	DN150	Rp2"	25	14.6	380	5910	2960	2400	3045	27
KSAD-120MW	130	2370	DN150	Rp2½"	30	16.2	380	7600	3064	2450	2624	36
KSAD-150MW	160	2790	DN200	Rp2½"	40	18.6	380	9980	4000	3100	3029	42
KSAD-200MW	210	3380	DN200	Rp2½"	50	24.4	380	12000	4200	3160	2830	54
KSAD-250MW	260	4580	DN200	Rp3"	65	30.2	380	12300	4224	3700	3510	72
KSAD-300MW	315	5354	DN250	Rp3"	75	36	380	13200	4700	3350	3749	100

Note: The technical standard of pressure for the above parameters is 0.7Mpa.
If the working pressure is less than 0.6Mpa or more than 1Mpa, please ask Kaishan Purify Equipment for product technical data.

Zero Air Consumption Waste Heat Regeneration Adsorption Dryer

Product Description

The most obvious advantage of zero air consumption heat regeneration adsorption dryer is that it heats and regenerates the adsorption desiccant with the heat of the air compressor oil temperature, which reduces the electric heating power of the micro-heat regeneration adsorption dryer and saves the consumption of electric energy. It ends the era when traditional adsorption dryers, such as heatless regeneration adsorption dryers and micro-heat regeneration adsorption dryers, require air consumption for cold blowing and purging.

Working Conditions and Technical Data

Inlet Pressure	0.6-1.0Mpa
Inlet Oil Content	0.lppm
Air Inlet Temperature	≤80℃
Cooling Water Pressure	0.2-0.4Mpa
Design Atmospheric Dew Point	-40℃ (optional -60℃)
Cooling Water Temperature	≤32℃
Purge Air Consumption	0
Adsorption Periods	8h
Air Handling Capacity	20-120 Nm³/min



Working Principle

The high-temperature and unsaturated wet air is discharged from the compressor and then enter into the dryer directly. Firstly, the air flows into the first tower of the dryer to heat and regenerate the desiccant, and the regenerated gas enters the rear cooler for cooling. Then, liquid water is separated by the gas-liquid separator. Finally, the air enters another tower for drying and adsorption to obtain dry gas. After 170min, the heated tower is bypassed by the bypass valve, and the high-temperature and unsaturated wet air directly enters the rear cooler for cooling. Then, liquid water is separated by the gas-liquid separator. Finally, the air enters the other tower for drying and adsorption, and the dried compressed air is discharged from the outlet and enters the use pipe network; At this stage, we introduce cold air from the air compressor after air cooling, remove water by gas separation, remove oil by filter and enter the regeneration tower to complete cold blowing and cooling. After 68min, the cold blowing ends and the booster begins; Two minutes later, the pressure of the two towers is balanced, and four hours later, the two-tower dryer carries out the regeneration process of another tower. The most remarkable advantage of the zero-loss energy-saving dryer is that it heats and regenerates the adsorption desiccant with the heat of the air compressor oil temperature, and eliminates the electric heater of the micro-heat regeneration adsorption dryer. In this way, both heating and cold blowing are taken from the heat source and cold source of the air compressor itself, which saves the consumption of electric energy. Meanwhile, energy is saved to the greatest extent as there is no air consumption during heating regeneration.

Model Specifications and Performance Parameters

Model	Air Handling Capacity (Nm³/min)	Length (mm)	Width (mm)	High (mm)	Inlet/Outlet Flange Dimensions	Net Weight (KG)	Absorbant Weight (KG)	Heating Power (KW)	Cooling Water Power (Nm³/h)
KSAD-20LXF	22	2120	1250	2465	DN65	1530	500	12	12
KSAD-25LXF	26	2120	1250	2765	DN80	1730	625	15	15
KSAD-30LXF	32	2180	1350	2775	DN80	2500	750	18	18
KSAD-40LXF	43.5	2450	1650	2925	DN100	2750	1000	27	24
KSAD-50LXF	53	2650	1950	2950	DN100	3250	1250	36	30
KSAD-60LXF	67	3050	2000	2885	DN125	4150	1500	42	35
KSAD80LXF	90	3390	2200	2950	DN125	5200	2000	54	45
KSAD-100LXF	110	3680	2200	2950	DN150	7000	2500	72	60
KSAD-120LXF	130	3950	2200	2950	DN150	7500	3000	100	75

Compressed Air Precision Filter

The most obvious advantage of zero air consumption heat regeneration adsorption dryer is that it heats and regenerates the adsorption desiccant with the heat of the air compressor oil temperature, which reduces the electric heating power of the micro-heat regeneration adsorption dryer and saves the consumption of electric energy. It ends the era when traditional adsorption dryers, such as heatless regeneration adsorption dryers and micro-heat regeneration adsorption dryers, require air consumption for cold blowing and purging.

Working Conditions and Technical Data

The high-end filter is equipped with a sight glass to detect whether the drainer is blocked. The well-designed die-casting mold ensures the uniform thickness and safe use of the product. The raw materials are grade A aluminum ingots to ensure the willfulness of the products.

Favourable anti-corrosion performance

The filter shell is anodised in the inner cavity and comes with an epoxy resin dry powder coating on the exterior.

Excellent performance of filter material

The filter element is tested by the special leak-proof online testing technology of PSI in the UK to ensure the filtration precision. The US brand L YDALL borosilicate nano-glass fibres with high dust holding capacity and long service life are used, which are specially treated with an oleophobic and hydrophobic chemistry to ensure high efficiency and low pressure drop during filtration.

The folding filter element greatly increases the filtering area and reduces the pressure drop by up to 50% and increases the carrying capacity of particles, while the stainless steel internal and external support net enhances the stability of the filter element. Human-centered design

Indication of air flow direction is convenient for operators to install and maintain products. Flange filter shell adopts humanized design, which is convenient for easy replacement of filter element. Fastening markings enable the operator to clearly know whether the product is tightened in place to prevent improper force and air leakage.

Performance Parameters

Filter element Level	Filter Type	Filtration Precision	Residual Oil	Initial Pressure Drop
HC	Primary pre-filtration, filtering out dust particles, water mist and oil mist	3μm	5ppm	0.007Mpa
HT	Efficient universal filtration, filtering out dust particles, water mist and oil mist	3μm	1ppm	0.007Mpa
HA	Efficient universal filtration, filtering out dust particles, water mist and oil mist	3μm	0.01ppm	0.01Mpa
HF	Ultra high efficiency filtration, filtering out dust particles, water mist and oil mist	3μm	0.003ppm	0.017Mpa
HH	Activated carbon filtration, filtering off peculiar smell, water mist and oil mist	3μm	0.003ppm	0.017Mpa



Compressed Air Precision Filter

Model Specifications and Performance Parameters (Micro-heat and Water-cooling Type)

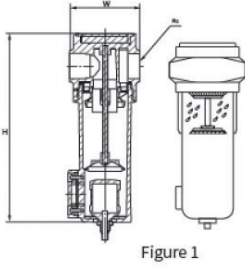
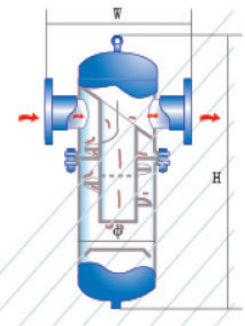
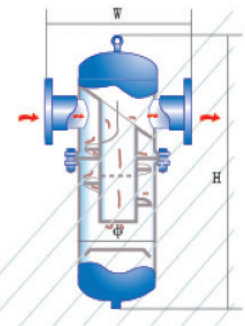
Model	Nozzle Size	Flow Rate (Nm³/min)	Number of Filter Elements	Outline Dimensions			Weight KG	Outside View
				ø	W	H		
KSAF - 1	G ³ / ₄ "	1.2	1		96	200	2.8	 Figure 1
KSAF - 2	G1"	2.5	1		96	235	3.8	
KSAF - 3	G1"	3.6	1		138	331	5.8	
KSAF - 5	G1 ¹ / ₂ "	5.5	1		138	432	5.8	
KSAF - 6	G1 ¹ / ₂ "	6.8	1		138	432	5.8	
KSAF - 12	G2"	12	1		174	533	7	
KSAF - 15	G2 ¹ / ₂ "	16	1		254	710	10.5	
KSAF - 20	G2 ¹ / ₂ "	22	1		254	790	11.3	
KSAF - 25	DN80	26.8	1	159	399	1250	59	
KSAF - 30	DN80	32	2	219	459	985	76	
KSAF - 40	DN100	43.5	2	219	459	1130	76	 Figure 2
KSAF - 50	DN100	53	3	273	513	1190	106	
KSAF - 60	DN125	67	3	273	513	1190	106	
KSAF - 80	DN125	90	4	325	565	1220	135	
KSAF - 100	DN150	110	5	412	637	1290	181	
KSAF - 120	DN150	130	5	412	637	1445	181	
KSAF - 150	DN200	160	7	462	762	1630	213	
KSAF - 200	DN200	210	9	462	762	1630	244	
KSAF - 250	DN250	250	11	512	832	1750	274	
KSAF - 300	DN250	300	13	562	832	1800	312	
KSAF - 350	DN300	350	16	662	962	1835	371	
KSAF - 400	DN300	300	18	662	962	1915	427	
KSAF - 450	DN350	450	21	712	1012	1915	427	
KSAF - 500	DN350	500	23	712	1012	1980	427	
KSAF - 550	DN4000	550	26	812	116	2000	493	
KSAF - 600	DN400	600	28	812	1116	2000	493	

Compressed Air Oil-water Seperator

l-water separator is a kind of purified compressed air product without built-in filter element, which is installed at the front end of the compressed air filter to protect the filter from a large amount of liquid pollution from gas storage tanks and transmission pipelines.

Aluminum alloy die-casting shell, with long service life.
Maintain the separation effect of liquid water above 99%.
Equipped with automatic drainer, imported material level gauge and small manual drainer.
Maximum working pressure: 1.6MPa. Maximum working temperature: 80°C. Minimum working temperature: 1.5°C. Pressure difference: 0.007MPa.

Outline Dimension Table of Oil-water Separator

Model	Nozzle Size	Flow rate (Nm³/min)	Outline Dimensions			Weight KG	Outside view
			Ø	W	H		
KSYF - 1	Rp ³ /4"	1.2		80	200	2.8	
KSYF - 2	Rp1"	2.4		89	233	4.8	
KSYF - 3	Rp1"	3.6		89	233	7	
KSYF - 6	Rp1 ¹ /2"	6.8		120	308	7	
KSYF - 12	Rp2"	14		162	496	12	
KSYF - 15	Rp2"	18		162	496	12	
KSYF - 20	Rp2"	24		162	496	12	
KSYF - 25	Rp2"	29		162	496	12	
KSYF - 30	Rp2 ¹ /2"	36		200	576	25	
KSYF - 40	Rp3"	48		200	576	30	
KSYF - 50	Rp3"	58		312	576	30	
KSYF - 60	DN125	66		312	850	35	
KSYF - 80	DN125	90		279	948	35	
KSYF - 15	DN65	18	159	360	660	50	
KSYF - 20	DN65	24	219	420	665	60	
KSYF - 25	DN80	29	219	420	830	70	
KSYF - 30	DN80	36	219	420	830	70	
KSYF - 40	DN100	48	273	520	956	81	
KSYF - 50	DN100	58	273	520	956	81	
KSYF - 60	DN125	66	325	615	1063	108	
KSYF - 80	DN125	90	325	615	1063	108	
KSYF - 100	DN150	110	377	677	1303	189	
KSYF - 120	DN150	130	412	716	1318	228	
KSYF - 150	DN200	160	462	862	1580	253	
KSYF - 200	DN200	210	562	962	1754	377	
KSYF - 250	DN250	250	612	1012	2100	453	
KSYF - 300	DN250	300	662	1062	2180	496	
KSYF - 350	DN300	350	662	1062	2200	504	
KSYF - 400	DN300	400	712	1112	2240	570	
KSYF - 450	DN350	450	812	1212	2490	742	
KSYF - 500	DN350	500	812	1212	2500	751	



High Efficiency Air Cooler

Product Description

The KSHL series high-efficiency air cooler is the main supporting equipment of air compressor, which can cool the high-temperature compressed air generated by compressor. Using high-efficiency finned copper tube, the product has the characteristics of small volume, high cooling efficiency and convenient use, and can be used in high temperature, high humidity and heavy dust environment.

Working Conditions and Technical Data

Inlet pressure	0.6-1.0Mpa
Inlet temperature	≤140℃
Outlet Temperature	≤45℃ca
Cooling water inlet temperature	≤32℃
Cooling water inlet pressure	0.2~0.4MPa
Initial pressure drop	≤0.02MPa

Model	Air Handling Capacity (Nm³/min)	Water Consumption (m³/h)	Diameter of Air Nozzle	Diameter of Cooling Water Pipe	Width (mm) (KG)	Cylinder Diameter (mm)	Net Weight (kg)
KSHL-1W	1.2	0.5	Rp1"	Rp1"	1055	Ø89	29
KSHL-2W	2.5	1	Rp1"	Rp1"	1305	Ø108	34
KSHL-3W	3.6	1	Rp1"	Rp1"	1305	Ø108	34
KSHL-4.5W	5.5	1.5	Rp1 ¹ /2"	Rp1"	1330	Ø159	58
KSHL-6W	6.8	1.5	Rp1 ¹ /2"	Rp1"	1330	Ø159	58
KSHL-8W	8.5	3	Rp2"	Rp1 ¹ /2"	1780	Ø159	73
KSHL-10W	10.9	3	Rp2"	Rp1 ¹ /2"	1780	Ø159	73
KSHL-12W	12.8	3	Rp2"	Rp1 ¹ /2"	1780	Ø159	73
KSHL-15W	16	4.5	DN65	Rp2"	1657	Ø219	110
KSHL-20W	22	6	DN65	Rp2"	1657	Ø219	125
KSHL-25W	26.8	9	DN80	Rp2"	1633	Ø273	182
KSHL-30W	32	9	DN80	Rp2"	1633	Ø273	182
KSHL-40W	43.5	12	DN100	Rp2 ¹ /2"	DN125	Ø219	213
KSHL-50W	53	15	DN100	Rp2 ¹ /2"	DN125	Ø325	218
KSHL-60W	67	30	DN125	Rp2 ¹ /2"	2087	Ø325	240
KSHL-80W	90	24	DN125	Rp2 ¹ /2"	2287	Ø325	263
KSHL-100W	110	30	DN150	6x640	2413	Ø362	315
KSHL-120W	130	35	DN150	3x410	2520	Ø412	370
KSHL-150W	160	45	DN200	DN100	2620	Ø412	495
KSHL-200W	210	60	DN200	DN100	2845	Ø462	637
KSHL-250W	260	75	DN250	DN125	2910	Ø512	772
KSHL-300W	310	90	DN250	DN125	3210	Ø512	850



High Efficiency Air Cooler

Product Description

This series of products take fine fiber as the main filter material, and adopt cyclone separation, prefilter and condensed fine filtration for three-stage purification. When matched with lubricated compressor, the products can obtain a gas quality level lower than that measured by oil-free lubricated compressor, and it has quite high dust removal power and certain dehumidification and drying ability. They are widely used in pneumatic instruments, automatic control and food, medicine, chemical industry, textile, petroleum, painting, telecommunications, metallurgy, rubber and other industries.

Working Conditions and Technical Data

Inlet Pressure	0.6-0.95MPa
Inlet Temperature	0-50℃
Initial Pressure Drop	≤0.02MPa
Outlet Oil Content	≤0.1PPM-0.01PPM

Model	Air Handling Capacity (Nm³/min)	Diameter of Air Nozzle	Width (mm)	Cylinder Diameter (mm)	Net Weight (kg)
KSGX-1N	0.5	Rp1"	1055	Ø133	34
KSGX-2N	2.5	Rp1"	1057	Ø133	34
KSGX-3N	3.6	Rp1"	1066	Ø159	46
KSGX-4.5N	5.5	Rp1 1/2"	1246	Ø159	51
KSGX-6N	6.8	Rp1 1/2"	1246	Ø159	51
KSGX-8N	8.5	Rp2"	1495	Ø219	74
KSGX-10N	10.9	Rp2"	1495	Ø219	74
KSGX-12N	12.8	Rp2"	1495	Ø219	75
KSGX-15N	16	DN65	1590	Ø219	86
KSGX-20N	22	DN65	1720	Ø273	90
KSGX-25N	26.8	DN80	1846	Ø273	144
KSGX-30N	32	DN80	1846	Ø325	139
KSGX-40N	43.5	DN100	2022	Ø400	179
KSGX-50N	53	DN100	2238	Ø400	243
KSGX-60N	67	DN125	2238	Ø400	247
KSGX-80N	90	DN125	2238	Ø450	247
KSGX-100N	110	DN150	2363	Ø450	295
KSGX-150N	160	DN200	2363	Ø450	305
KSGX-200N	210	DN200	2363	Ø450	306
KSGX-250N	260	DN250	2363	Ø450	315
KSGX-300N	310	DN250	2376	Ø500	346

Compressed Air Pre-cooler

Working conditions and Technical Data

Air Inlet Pressure	0.4-4.5MPa
Air Inlet Temperature	≤40℃ (depending on the actual situation)
Air Outlet Temperature	5℃-8℃
Pressure Loss	≤0.008MPa
Cooling Water Pressure	≤32℃
Water Inlet Pressure	0.2-0.4MPa
Cooling Power	1.5-150HP
Air-Cooling Environment	≤38℃
Power Supply	380V/220V/50HZ, 460V/230V/60HZ
Refrigerating Medium	R-22 or environmentally friendly refrigerant



Product Description

1. The refrigeration compressor are all international famous brand refrigeration compressors of France's PERFORMER, France's MANEUROP, KERRY and Italy's FRASCOLD.
2. The refrigeration control components are all imported international famous brand accessories such as Danfoss from Denmark and Alco from the United States.
3. Electrical appliances adopt famous brand products such as Siemens in Germany and Schneider in France.
4. Adopt Japanese "SMC" floating ball type or Dutch "JORC" electromagnetic valve automatic drainer.
5. Adopt high-efficiency and high-quality shell-and-tube or plate evaporator.
6. High-quality main engine, accessories and control elements, as well as advanced energy adjustment mode make the whole machine run stably and reliably with low noise.
7. Closed box structure, hot plastic spraying on the surface, beautiful appearance and no rust.
8. The equipment runs smoothly without vibration, and its foundation-free installation mode enables convenient installation.
9. Dynamic display of working parameters intuitively and clearly.

Technical Parameter List

Model	Air Handling Capacity (Nm³/min)	Air Pressure (KW)	Cooling Power (MPa)	Cooling Water Circulation (M³/h)	Refrigeration Capacity (KW)	Weight (kg)
KSYL-660/7	660	0.7	3.4	2.6	10	477
KSYL-1200/7	1200	0.7	6.7	4.7	18	673
KSYL-1320/7	1300	0.7	8.3	5.6	21.5	667
KSYL-1800/7	1800	0.7	10.1	7.3	28	870
KSYL-2400/7	2400	0.7	13.1	9.2	35.25	946
KSYL-2600/7	2600	0.7	15	10	39	985
KSYL-3000/7	3000	0.7	20	14	54	1036
KSYL-3600/7	3600	0.7	25	16.7	64	1063
KSYL-4200/7	4200	0.7	30	17.5	67	1102
KSYL-4800/7	4800	0.7	35	21.3	81.9	1278
KSYL-7000/7	7000	0.7	50	30	118	1474
KSYL-9000/7	9000	0.7	70	42	166	1689
KSYL-12000/7	12000	0.7	100	58	235	2500
KSYL-13800/7	13800	0.7	100	58	235	2650

Waste Oil Filtration

Product Description

The waste oil collected by the waste oil collector generally refers to the waste oil with water or the waste water with a lot of oil. The waste oil collector is an industrial device that separates waste oil by using the different densities of water and oil, and belongs to the environmental protection primary oil-water separation device.

Technical Parameter List

Model	Internal Volume (M3)	Height (mm)	Cylinder Diameter (mm)	Weight (kg)
KSFS-0.3	0.3	2128	Ø610	177
KSFS-0.4	0.4	2378	Ø710	244
KSFS-0.5	0.5	2378	Ø710	244
KSFS-0.8	0.8	2430	Ø910	310
KSFS-1.0	1.0	2730	Ø910	353
KSFS-2.0	2.0	3030	Ø1210	528
KSFS-3.0	3.0	3602	Ø1310	617
KSFS-4.0	4.0	3640	Ø1510	860



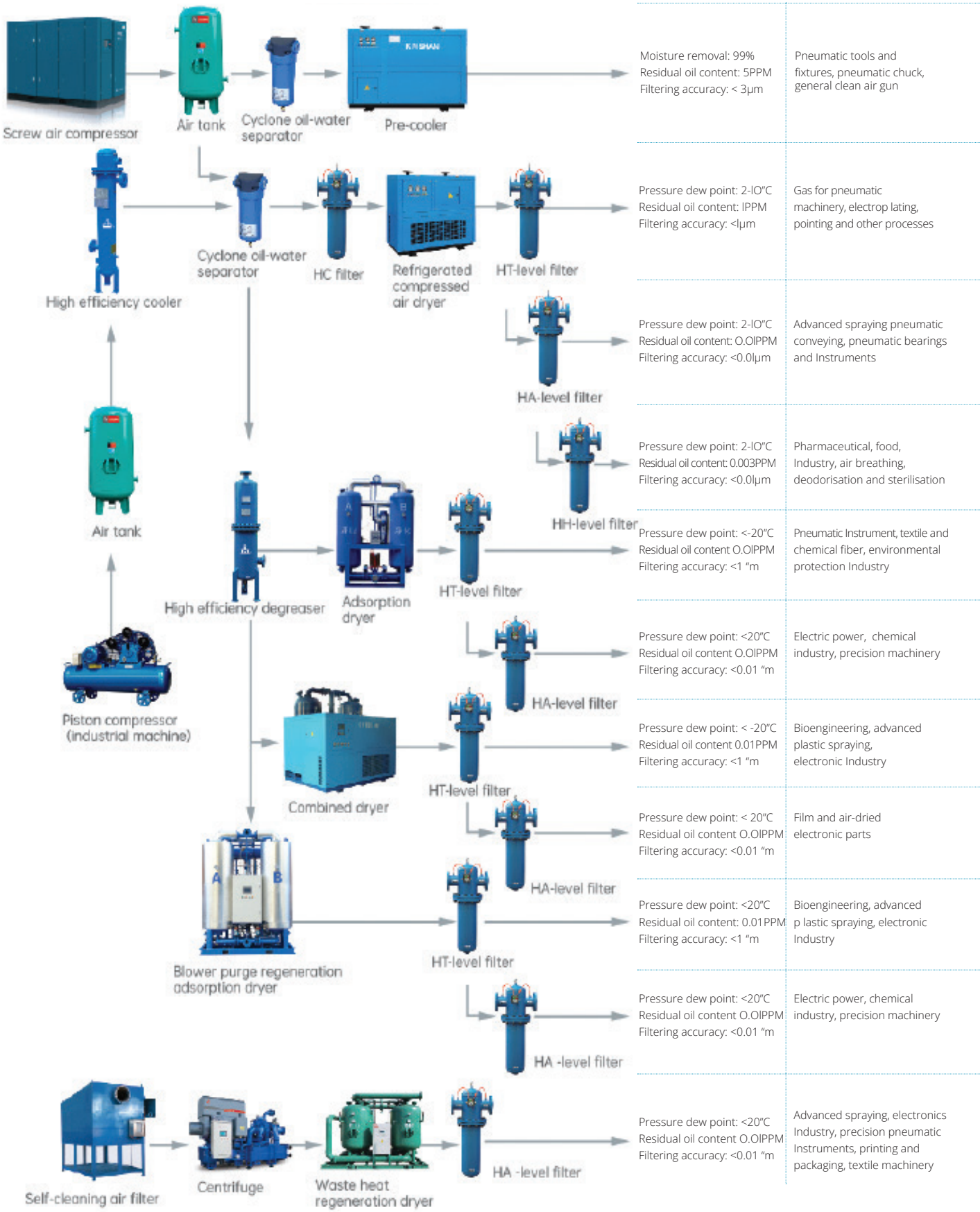
Vacuum Filter

Technical Parameter List

Model	Air Handling Capacity (Nm³/h)	Volume (M³)	Diameter (mm)	Height (mm)	Diameter of of Air nozzle	Number of Filter elements	Weight
KSZK-100/1	100	1	Ø812	2270	DN100	5	495
KSZK-200/1	200	1	Ø812	2270	DN100	10	495
KSZK-300/1	300	1	Ø812	2270	DN100	15	495
KSZK-100/1.5	100	1.5	Ø1012	2480	DN100	5	565
KSZK-200/1.5	200	1.5	Ø1012	2480	DN100	10	565
KSZK-300/1.5	300	1.5	Ø1012	2480	DN100	15	565
KSZK-400/1.5	400	1.5	Ø1012	2480	DN100	20	565
KSZK-100/2	100	2	Ø1112	2810	DN150	5	720
KSZK-200/2	200	2	Ø1112	2810	DN150	10	720
KSZK-300/2	300	2	Ø1112	2810	DN150	15	720
KSZK-400/2	400	2	Ø1112	2810	DN150	20	720
KSZK-100/3	100	3	Ø1312	2940	DN150	5	852
KSZK-200/3	200	3	Ø1312	2940	DN150	10	852
KSZK-300/3	300	3	Ø1312	2940	DN150	15	852
KSZK-400/3	400	3	Ø1312	2940	DN150	20	852



Configuration of Compressed Air Drying and Purification System



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