

Belt Type
Direct Type
Oil-free Type



hb ar comprimido

AIR COMPRESSOR

ROTARY SCREW COMPRESSORS



***Performance and low power consumption
in energy generating for your company***

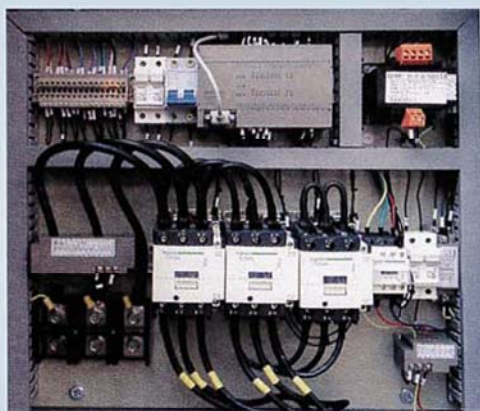
ROTARY SCREW COMPRESSORS

The ideal solution for your company.

Technology, performance and high efficiency are some characteristics of quality which every company is looking for and these can be found in the HB Screw compressors line. For applications where a high demand of compressed air is required, the HB Screw compressors line is the most suitable solution. Know our product line and look how our quality can generate energy for your company.

FEATURES AND BENEFITS OF SCREW AIR COMPRESSOR

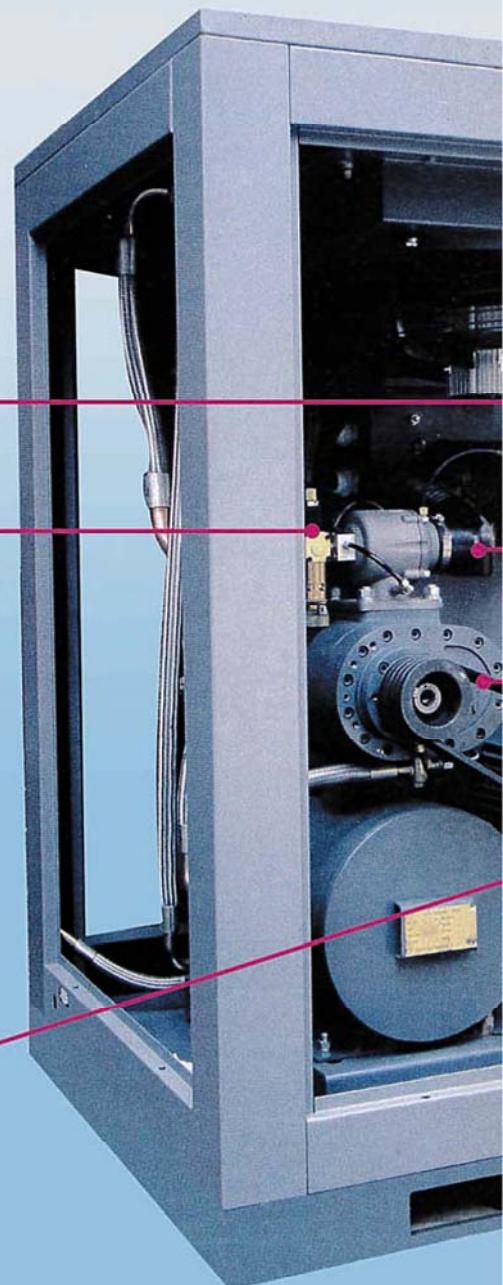
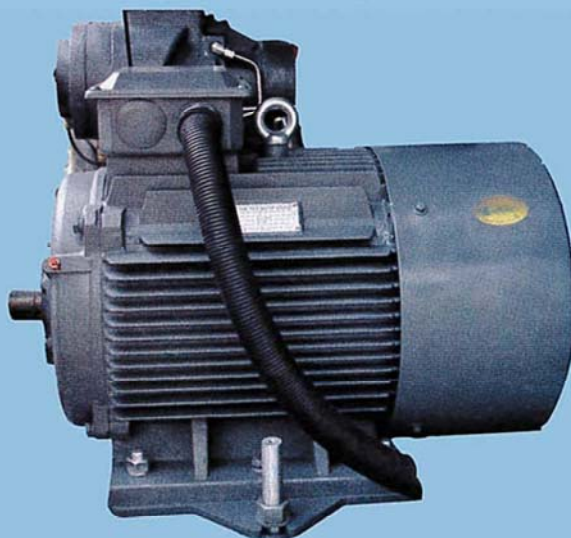
Advanced microcomputer controller which is powerful at troubles diagnosing and protection



Pressure controller and solenoid valve

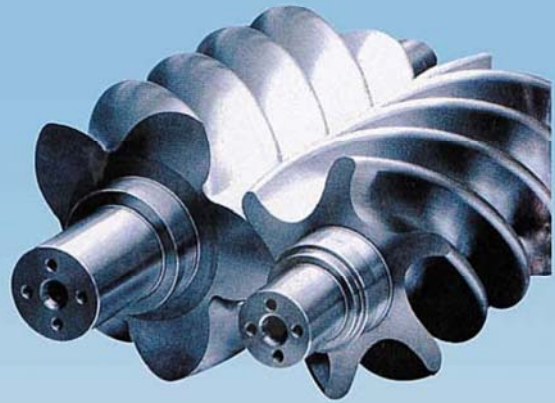


Low consumption and high performance motor which is newly special designed

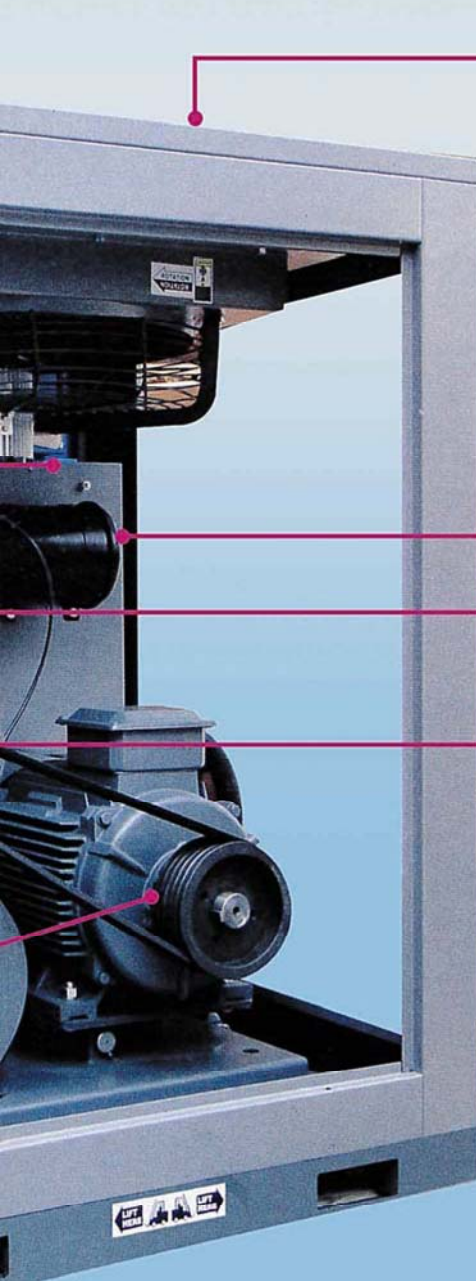
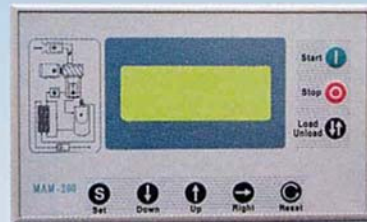


Low Rotating Speed Screw Air End

- Big rotor with good rigidity and small distortion, not easy lock
- Big bearing, relative light load with a big long life
- Low noise frequency with minimum loudness
- Small vibration, low failure rate, long life



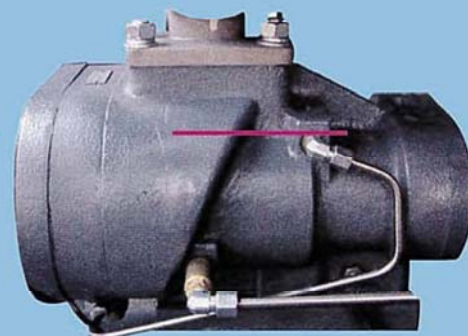
Easy and interactive controller



Filtration system



Air capacity control system



Well-known screw compressor end

Rotary Screw Compressor

TECHNICAL SPECIFICATIONS										
MODEL	MOTOR POWER		MAX. WORKING PRESSURE		CAPACITY FAD		DISCHARGE CONNECTION	NET WEIGHT	NOISE	DIMENSIONS HxWxL
	HP	kW	bar	lbf/inch ²	cfm	l/min	inch (RP)	kg	dB(A)	mm
HB 1010	10	7.5	8	116	42	850	¾	135	65	750x600x820
			10	145	35	765				
			13	189	28	680				
HB 1015	15	11	8	116	60	1570	¾	310	66	1170x730x1000
			10	145	53	1410				
			13	189	42	1189				
HB 1020	20	15	8	116	84	2100	¾	350	66	1170x730x1000
			10	145	77	1890				
			13	189	60	1699				
HB 1030	30	22	8	116	126	3100	1	420	67	1250x800x1120
			10	145	112	2790				
			13	189	95	2510				
HB 1050	50	37	8	116	217	5500	1 ½	580	68	1500x1000x1300
			10	145	200	4950				
			13	189	170	4400				
HB 1075	75	55	8	116	353	8420	2	1350	72	1780x1180x1500
			10	145	307	7570				
			13	189	265	6810				
HB 10100	100	75	8	116	459	11280	2	1500	75	1780x1180x1500
			10	145	353	9996				

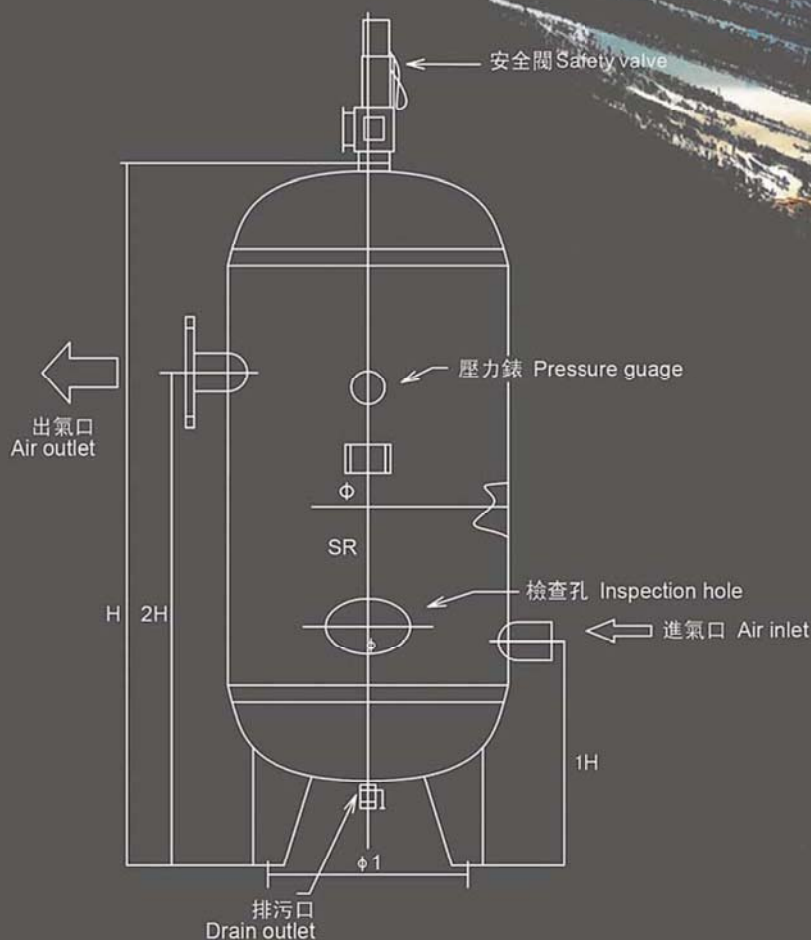


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PRODUCT PRESENTATION

產品介紹

儲氣罐 AIR RECEIVER



作用:

1. 蓄能(備不時之需)
2. 穩定氣壓
3. 緩解脈沖對用氣設備的衝擊
4. 沉澱空氣中的水、油污、粉塵
5. 提高設備輸出氣體的連續和穩定性
6. 減少壓縮機的頻繁啟動，延長壓縮機壽命

Function:

1. Energy storage (for emergency needs)
2. Stable pressure
3. Ease pulse impact on gas equipment
4. To precipitate water, grease & dust in the air
5. Improve the continuity and stability of the equipment for the gas output
6. Reduce the frequent start of the compressor, extend its life



儲氣罐 - 碳鋼低壓 AIR RECEIVER - CARBON STEEL LOW PRESSURE

序號	規格	設計	容器總量	容器內徑	進氣口			出氣口			支座		排汗閥	配套空壓機		
	容積/工作壓力	溫度	H	Φ	H1	公稱直徑	螺紋	H2	公稱直徑	螺紋	Φ1	d		(參考)容量		
	L/MPa	℃	mm	mm	mm	mm	inch	mm	mm	mm	mm	mm	inch	m³/min		
No.	Specification Capacity / Working Pressure	Design Temp.	Total Height	Receiver Diameter	Inlet			Outlet			Support Base		Valve	Additional Air Compressor (Ref.) Capacity		
	H		Φ	H1	Diameter	Thread	H1	Diameter	Thread	Φ1	d					
		L/MPa	℃	mm	mm	mm	mm	inch	mm	mm	mm	mm	mm	inch	m³/min	
1	0.3/0.8	100	1614	550	667	50	Rp1½"	1217	50	Rp1½"	400	20	R1/2"	2.5~3		
2	0.3/1.0		1616		667			1219						2.5~3		
3	0.3/1.3		1628		669			1219						2.5~3		
4	0.5/0.8	100	2050	600	680	50	Rp1½"	1630	50	Rp1½"	420	20	R1/2"	4~5		
5	0.5/1.0		2102		681			1681						4~5		
6	0.5/1.3		2102		681			1681						4~5		
7	0.6/0.8	100	2076	650	693	65	Rp1½"	1643	65	Rp1½"	470	20	R1/2"	4.8~6		
8	0.6/1.0		2078		694			1644						4.8~6		
9	0.6/1.3		2142		695			1706						4.8~6		
10	1.0/0.8	100	2325	800	800	65	Rp1½"	1840	65	Rp1½"	560	25	R1/2"	8~10		
11	1.0/1.0		2327		800			1920						8~10		
12	1.0/1.3		2404		800			1920						8~10		
13	1.5/0.8	110	2574	950	767	65	Rp2"	2067	65	Rp2"	670	25	R1/2"	12~15		
14	1.5/1.0		2575		768			2069						12~15		
15	1.5/1.3		2578		769			2069						12~15		
16	2.0/0.8	110	2810	1000	780	80	Rp2" 或 Rp1½"	2280	80	Rp2" 或 Rp1½"	700	24	R1/2"	16~20		
17	2.0/1.0		2810		780			2280						16~20		
18	2.0/1.3		2810		780			2280						16~20		
19	2.5/0.8	110	2752	1200	880	法蘭 TYPE , 尺寸按客要求		2280	80	法蘭 TYPE , 尺寸按客要求	700	24	R3/4"	20~25		
20	2.5/1.0		2752		881			2280						20~25		
21	2.5/1.3		2754		882			2280						20~25		
22	3.0/0.8	110	2800	1300	905			2180	80		840	24	R3/4"	24~30		
23	3.0/1.0		2802		906			2181						24~30		
24	3.0/1.3		2804		907			2182						24~30		
25	4.0/0.8	110	2896	1450	943			2193	100		1100	30	R3/4"	32~40		
26	4.0/1.0		2898		944			2194						32~40		
27	4.0/1.3		2906		958			2208						32~40		
28	5.0/0.8	110	3752	1400	931			3131	100		1050	24	R3/4"	40~50		
29	5.0/1.0		3754		932			3132						40~50		
30	5.0/1.3		3756		932			3133						40~50		
31	6.0/0.8	110	3856	1500	956			3156	100		1100	30	R3/4"	48~60		
32	6.0/1.0		3858		957			3157						48~60		
33	6.0/1.3		3858		958			3158						48~60		
34	8.0/0.8	110	4552	1600	981			3831	150		1200	30	R1"	64~80		
35	8.0/1.0		4554		982			3832						64~80		
36	8.0/1.3		4560		984			3835						64~80		
37	10/0.8	110	3765	2000	1082			2933	150		1500	30	R1"	80		
38	10/1.0		3766		1083			2933						80		
39	10/1.3		3770		1086			2936						80		
40	12.5/0.8	110	4714	2000	1133			3833	150		1500	30	R1"	80		
41	12.5/1.0		4716		1133			3834						80		
42	12.5/1.3		4722		1136			3836						80		
43	15/0.8	110	5084	2100	1172			4174	150		1550	30	R 1"	80		
44	15/1.0		5090		1174			4175						80		
45	15/1.3		5094		1176			4177						80		
46	20/0.8	110	5236	2400	1298			200	4200		200	1800	36	R1"	80	
47	20/1.0		5240		1300										4200	80
48	20/1.3		5244		1302										4200	80
49	25/0.8	110	6136	2400	1298			200	5095		200	1800	36	R1"	80	
50	25/1.0		6140		1300										5095	80
51	25/1.3		6144		1302										5095	80
52	30/0.8	110	6898	2500	1324			5774	200		1900	36	R1"	80		
53	30/1.0		6900		1325			5775						80		
54	30/1.3		6908		1329			5779						80		
55	40/0.8	110	7748	2700	1424			6424	200		1770	24	DN40	80		
56	40/1.0		7752		1426			6426						80		
57	50/0.8	110	9007	2800	1506			250	6756		250	3000	30	DN40	80	
58	50/1.0		9007		1506										6756	80
59	75/1.0		10257		1800										8200	80
60	75/0.8	110	10256	3200	1800	250		8200	250		3400	30	DN40	80		

儲氣罐 - 碳鋼中壓 AIR RECEIVER - CARBON STEEL MEDIUM PRESSURE

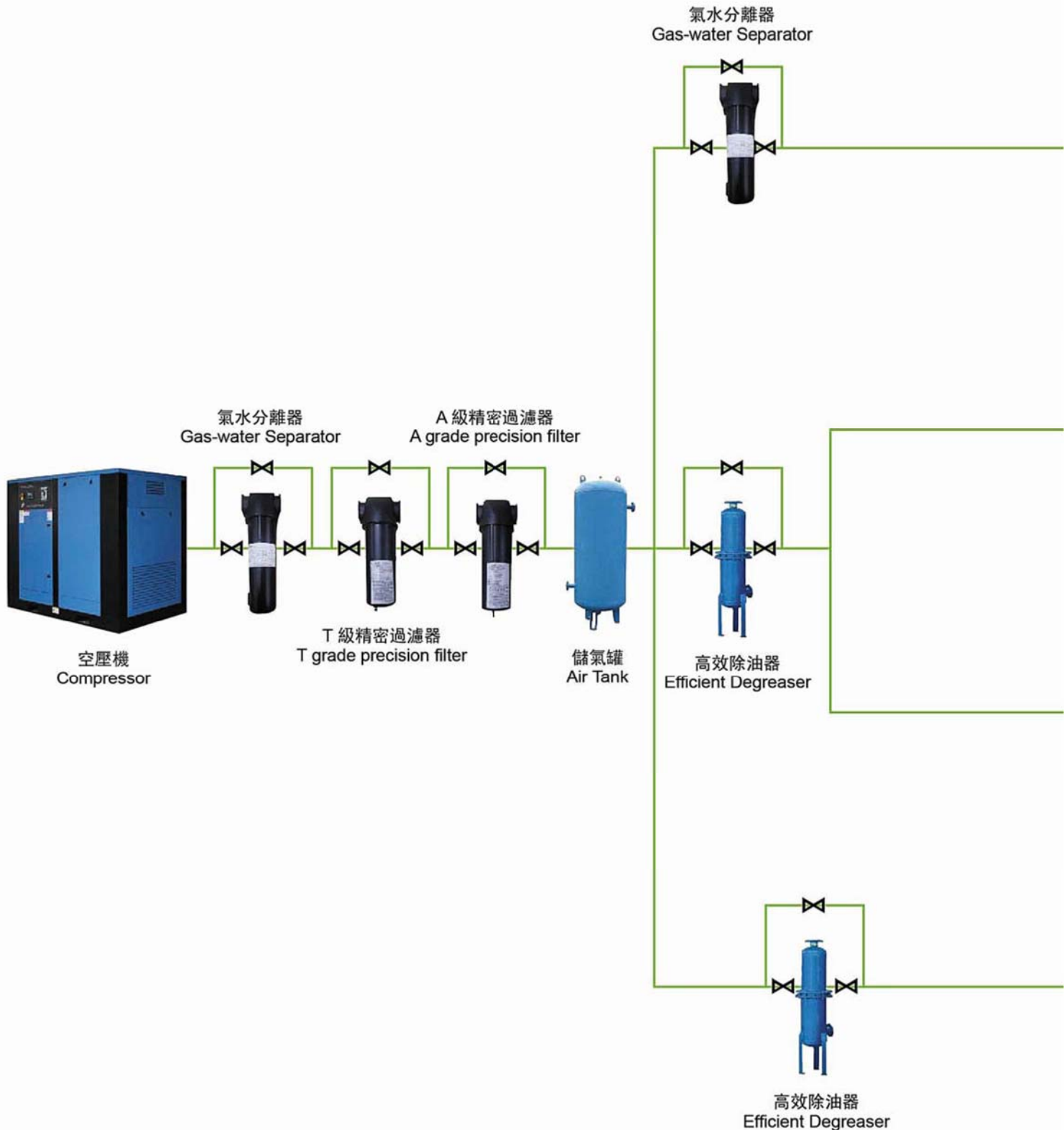
序 號	規格	設計 溫度	容器總量 H	容器內徑 Φ	進氣口		出氣口		支座		排汗閥	配套空壓機 (參考)容量			
	容積/工作壓力				℃	H1	公稱直徑	H2	公稱直徑	Φ1			d	inch	m³/min
No.	Specification	Design Temp.	Total Height	Receiver Diameter	Inlet		Outlet		Support Base		Valve	Additional Air Compressor (Ref.) Capacity			
	H				Φ	H1	Diameter	H1	Diameter	Φ1			d	inch	m³/min
	L/MPa				℃	mm	mm	mm	mm	mm			mm	mm	mm
1	0.3/1.6	110	1626	550	668	50	1217	50	400	20	R1/2"	--			
2	1.3/2.5		1628		670	50	1219	50				420	20	R1/2"	--
3	0.3/3.0		1630		671		1222								--
4	0.3/4.0		1696		673		1222								--
5	0.5/1.6	110	2100	600	680	50	1680	50	420	20	R1/2"	3.0~5			
6	0.5/2.5		2204		697		1697				Rc1/2"	3.0~5			
7	0.5/3.0		2206		700		1700				Rc1/2"	3.0~5			
8	0.5/4.0		2190		685		1685				DN25	3.0~5			
9	0.6/1.6	110	2136	650	693	65	1704	65	470	20	R 1/2"	4.8~6			
10	0.6/2.5		2494	600	697	50	1997	50	420		Rc1/2"	4.8~6			
11	0.6/3.0		2496		698		1998				Rc1/2"	4.8~6			
12	0.6/4.0		2500		635	65	1945	65			DN25	4.8~6			
13	1.0/1.6	110	2406	800	800	65	1920	65	560	25	R1/2"	8~10			
14	1.0/2.5		2420		750	80	1872	80			Rc1"	8~10			
15	1.0/3.0		2422		752		1874				Rc1"	8~10			
16	1.0/4.0		2458		754		1874				Rc1"	8~10			
17	1.5/1.6	110	2578	950	770	65	2070	65	670	25	R3/4"	12~15			
18	1.5/2.5		2666		773	80		80			Rc1"	12~15			
19	1.5/3.0		2670		775						Rc1"	12~15			
20	1.5/4.0		2690		794						Rc1"	12~15			
21	2.0/1.6	110	2846	1000	783	80	2282	80	700	24	R1/2"	16~20			
22	2.0/2.5		2970		835		2335				R1"	16~20			
23	2.0/3.0		2984		854		2364				R1"	16~20			
24	2.0/4.0		2962		856		2351				R1"	16~20			
25	2.5/1.6	110	2756	1200	883	80	2183	80	840	24	Rc1"	20~25			
26	2.5/2.5		2874		902		2202				Rc1"	20~25			
27	2.5/3.0		2878		904		2204				Rc1"	20~25			
28	2.5/4.0		2886		908		2208				Rc1"	20~25			
29	3.0/1.6	110	2808	1300	909	100	2210	100	950	24	R1"	24~30			
30	3.0/2.5		2898		914		2218				DN25	24~30			
31	3.0/3.0		2902		916		2218				DN25	24~30			
32	4.0/1.6	110	2910	1500	961	150	2210	150	1100	30	R1"	32~40			
33	4.0/2.5		3002		966		2216				Rc1"	32~40			
34	4.0/3.0		3006		968		2218				DN25	32~40			
35	5.0/1.6	110	3758	1400	932	150	3134	150	1050	24	R1"	40~50			
36	5.0/2.5		3878		954		3104				DN25	40~50			
37	5.0/3.0		3882		956		3106				DN25	40~50			
38	6.0/1.6	110	4458	1400	932	150	3834	150	1050	24	R1"	48~60			
39	6.0/2.5		4578		954		3804				DN25	48~60			
40	6.0/3.0		4582		956		3806				DN25	48~60			
41	8.0/1.6	110	4564	1600	986	150	3837	150	1200	30	R1"	64~80			
42	8.0/2.5		4652		991		3841				DN25	64~80			
43	8.0/3.0		4656		991		3840				DN25	64~80			
44	10/1.6	110	3772	2000	1087	150	2937	150	1500	30	R1"	80			
45	12/1.6	110	4524	200	1137	150	3638	150	1500	30	Rc1"	80			
46	12.5/1.6	110	4724	200	1137	150	3838	150	1500	30	R1"	80			
47	15/1.6	110	5094	2100	1179	150	4179	150	1550	30	Rc1"	80			
48	20/1.6	110	5248	2400	1254	200	4200	200	1800	36	Rc1"	80			
49	25/1.6	110	6158	2400	1304	200	5094	200	1800	36	DN25	80			
50	30/1.6	110	6982	2500	1331	200	5781	200	1900	36	Rc1"	80			

儲氣罐 - 不銹鋼 AIR RECEIVER - STAINLESS STEEL

序 號	規格	設計	容器總量	容器內徑	進氣口			出氣口			支座		排汗閥	配套空壓機		
	容積/工作壓力	溫度	H	Φ	H1	公稱直徑	螺紋	H2	公稱直徑	螺紋	Φ1	d		(參考)容量		
No.	Specification Capacity / Working Pressure	Design Temp.	Total Height	Receiver Diameter	Inlet			Outlet			Support Base		Valve	Additional Air Compressor (Ref.) Capacity		
	L/MPa	℃	mm	mm	H1	Diameter	Thread	H1	Diameter	Thread	Φ1	d		m³/min		
	L/MPa	℃	mm	mm	mm	mm	inch	mm	mm	mm	mm	mm		inch	m³/min	
	1	0.3/0.8	110	1612	550	666	50	Rp1½"	1116	50	Rp1½"	400	20	R1/2"	2.5~3	
2	0.3/1.0							2.5~3								
3	0.3/1.3	1614		667							2.5~3					
4	0.5/0.8	110	2088	600	678	50	Rp1½"	1678	50	Rp1½"	420	20	R1/2"	4~5		
5	0.5/1.0				679			1679		4~5						
6	0.5/1.3							1680		4~5						
7	0.6/0.8	110	2134	650	691	65	Rp1½"	1702	65	Rp1½"	470	20	R1/2"	4.8~6		
8	0.6/1.0				692					4.8~6						
9	0.6/1.3		2136		693			1703		4.8~6						
10	1.0/0.8	110	2274	850	792	65	Rp1½"	1792	65	Rp1½"	600	24	R1/2"	8~10		
11	1.0/1.0		2276		793			1793		8~10						
12	1.0/1.3		2278		794			1794		8~10						
13	1.5/0.8	110	2848	900	754	65	Rp2"	2254	65	Rp2"	630	24	R1/2"	12~15		
14	1.5/1.0		2750		755			2255		12~15						
15	1.5/1.3		2752		756			2256		12~15						
16	2.0/0.8	110	2838	1000	794	80	Rp2"	2280	80	Rp2"	700	24	R1/2"	16~20		
17	2.0/1.0		2840		795			2281		16~20						
18	2.0/1.3		2844		797			2282		16~20						
19	2.5/0.8	110	2752	1200	880	80	法 蘭 T Y P E ， 尺 寸 按 客 要 求	2180	80	法 蘭 T Y P E ， 尺 寸 按 客 要 求	840	24	R3/4"	20~25		
20	2.5/1.0		2754		881									2183	20~25	
21	2.5/1.3		2758		883									2393	20~25	
22	3.0/0.8	110	2976	1250	893	80			2394		80	950	24	R3/4"	24~30	
23	3.0/1.0		2978		894				2396						24~30	
24	3.0/1.3		2982		896				2431						24~30	
25	4.0/0.8	110	3072	1400	931	100			2431		100	1050	24	R3/4"	32~40	
26	4.0/1.0		3074		932				2433						32~40	
27	4.0/1.3		3078		934				2435						32~40	
28	5.0/0.8	110	3752	1400	931	100			3031		100	1050	24	R3/4"	40~50	
29	5.0/1.0		3754		932				3033						40~50	
30	5.0/1.3		3758		934				3034						40~50	
31	6.0/0.8	110	4452	1400	931	100			3831		100	1050	24	R3/4"	48~60	
32	6.0/1.0		4454		933				3832						48~60	
33	6.0/1.3		4458		934				3834						48~60	
34	8.0/0.8	110	3756	1800	1033	150			2983		150	1350	30	R1"	64~80	
35	8.0/1.0		3760		1035				2985						64~80	
36	8.0/1.3		3764		1037				2984						64~80	
37	10/0.8	110	4040	1950	1070	150			3170		150	1500	30	R1"	80	
38	10/1.0		4044		1072				3172						80	
39	10/1.3		4144	1900	1064				3274						80	
40	10/0.8		3766	2000	1083				2933						80	
41	10/1.0	3770						2935	80							

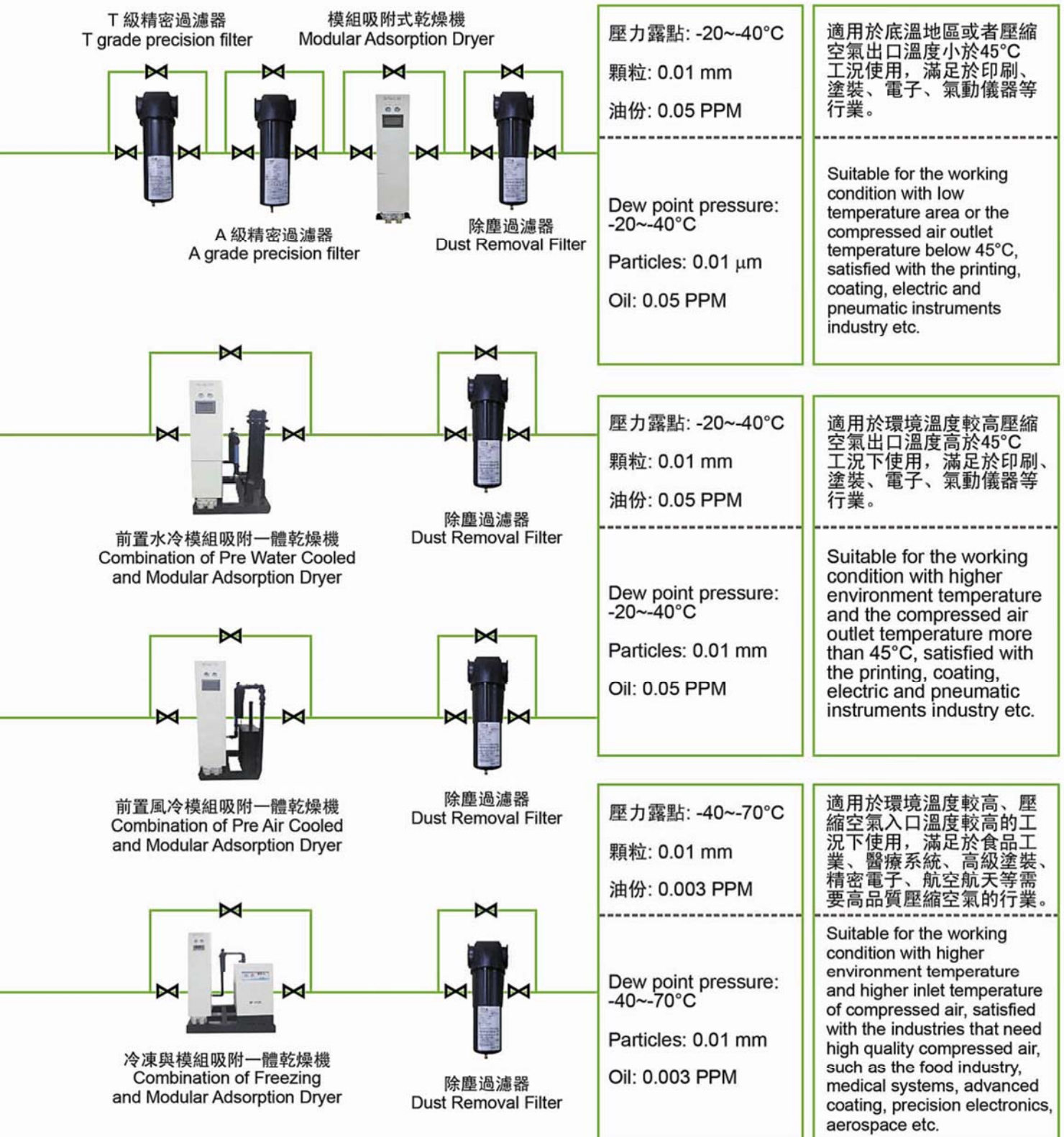
壓縮空氣淨化系統流程圖

Compressed Air Purification System Flowchart



我們依照 ISO9001 國際質量標準體系的要求，從產品開發、生產製造到銷售及售後服務等過程，已建立了一套成熟有效的品質保證體系，結合國內、國外先進技術及管理模式，生產效率與設備品質均處於世界領先水平，使可能影響產品質量和工作質量的所有環節均處於嚴格而有效監控之下。

We have set up a mature and effective quality ensuring system, under the guidance of ISO9001 international Quality Standard System, covering the whole process of development, manufacture and sale as well as after-sales services. With absorption of advanced technology and management modes at home and abroad, we have reached the top level in producing efficiency and product quality. Every link, probably affecting the product and produce, are strictly and effectively monitored.



模組式吸附式乾燥機 MODULAR ADSORPTION DRYER



hb ar comprimido



模組式吸附式乾燥機具有外型美觀、結構優異、吸附性強、壓差低、穩定性高、維護簡單等特點。

Modular Adsorption Dryer has such features like appealing appearance, excellence structure, outstanding adsorption performance, low pressure differential, stable working and easy to maintenance.

模組式吸乾機採用鋁合金箱體式結構，突破了傳統雙塔式外型設計，整體設備的外形美觀大方，防氧防腐處理，結構件耐用，避免碳鋼管道生鏽給氣體帶來的二次污染。

吸附腔的多管道設計，使機身變得更緊湊合理，體積更小更輕，科學的流體分配設計，減緩了氣體在吸附腔內的流速，提高了吸附劑與壓縮空氣的接觸時間和面積，使吸附劑充分吸附壓縮空氣中的水份，讓壓縮空氣更潔淨，露點更穩定。

1. 更純淨的壓縮空氣 - 低露點

模組吸乾機整體使用鋁合金材質、不鏽鋼螺栓，完全杜絕碳鋼材料在壓縮空氣接觸中存在的鏽鐵導致的二次污染問題。高利用率的機器整體設計，讓每一顆乾燥劑都得到充分利用，保證了持續而穩定的壓力露點，使壓縮空氣更加純潔，為用戶解決生產中空氣品質問題的煩惱。

2. 更低成本的壓縮空氣 - 低氣耗

模組吸乾機改變了傳統的機器結構，化整為零，讓體積變得更緊湊，每組模組都有單獨的擴散功能。新型吸附劑結合自主研发的智慧控制器能最大程度的減少再生氣的消耗，達到更節能的效果，為用戶大大的降低使用成本。

3. 持續穩定的壓縮空氣 - 長壽命

國際知名品牌的氣動元器件為保障，更科學的結構與密封設計，標準的統一的結構件，防氧防腐處理，可使用 30 年。質量為根本的生產理念，為用戶提供更持續穩定的壓縮空氣。

4. 工作原理

模組式吸乾機由多個高強度鋁腔體構成。每個腔體有兩個腔，每個腔中填滿吸附劑，以乾燥經過的潮濕壓縮空氣。當一個腔在工作（乾燥）時，與其相對的另一側則利用變壓吸附再生 PSA 方式再生。再生時，一部分乾燥的壓縮空氣從工作壓力膨脹到大氣壓力，經過含水已飽和的吸附劑，將它吸附的水份帶走，吸附劑得以再生。如果配合使用冷東乾燥機、旋風分離器與精密過濾器將增強吸乾機的運行性能和可靠性。

The modular adsorption dryer adopts aluminum alloy box structure and breaks through the traditional double tower design, with the features of elegant appearance, anti-oxidation corrosion resistance and durable structure parts to avoid the carbon steel pipeline rust bringing secondary pollution for gases.

The design of adsorption cavity with multiple pipelines makes the body more compact and reasonable and the volume smaller and lighter. Scientific fluid distribution design slows down the air flow rate in the adsorption chamber, improves the contact time and area for the adsorbent and compressed air and makes the adsorbent fully adsorb the moisture in compressed air, the compressed air cleaner and the dew point more stable.

1. More clean compressed air - Low dew point

Modular adsorption dryer generally uses aluminum alloy and stainless steel bolts. It helps perfectly to avoid secondary pollution of carbon steel rust in contact with compressed air. The high utilization of the machine design allows every desiccant in full use and ensures the equipment in constant and stable pressure dew point. We make compressed air cleaner to solve customers' worry about gas quality problem in production.

2. Lower cost compressed air - Low gas consumption

Modular adsorption dryer adopts a new structure differently from tradition. It divides the whole into parts to make the machine more compact and every modular has separate diffusion function. New type adsorbent combined with independently developed smart controller will reduce regenerative gas consumption to reach a better energy saving effect and greatly cut down the use cost of customers.

3. Constant and stable compressed air - Long service life

We use pneumatic components of globally reputed brands as a guarantee. More scientific structure and sealing design, standard uniform construction parts as well as anti-oxidation and anti-corrosion treatment jointly contribute to its 30-year service. We stick to quality-based production idea to provide customers more lasting and stable compressed air.

4. Working Principle

Modular adsorption dryer consists of multiple high strength aluminum cavities. Each cavity has two Chambers which filled with adsorbent to make the wet compressed air achieve dry after passing. When one cavity works, another corresponding cavity will use the regeneration way of variable pressure adsorption to achieve regeneration. When regenerating, a part of dry compressed air from work pressure expands to atmospheric pressure, then goes through the water-saturation adsorbent, and takes away the moisture, makes the absorbent regeneration. If equipped with the refrigerated dryer, cyclone separator and precision filter, the running performance and reliability will be strengthened.

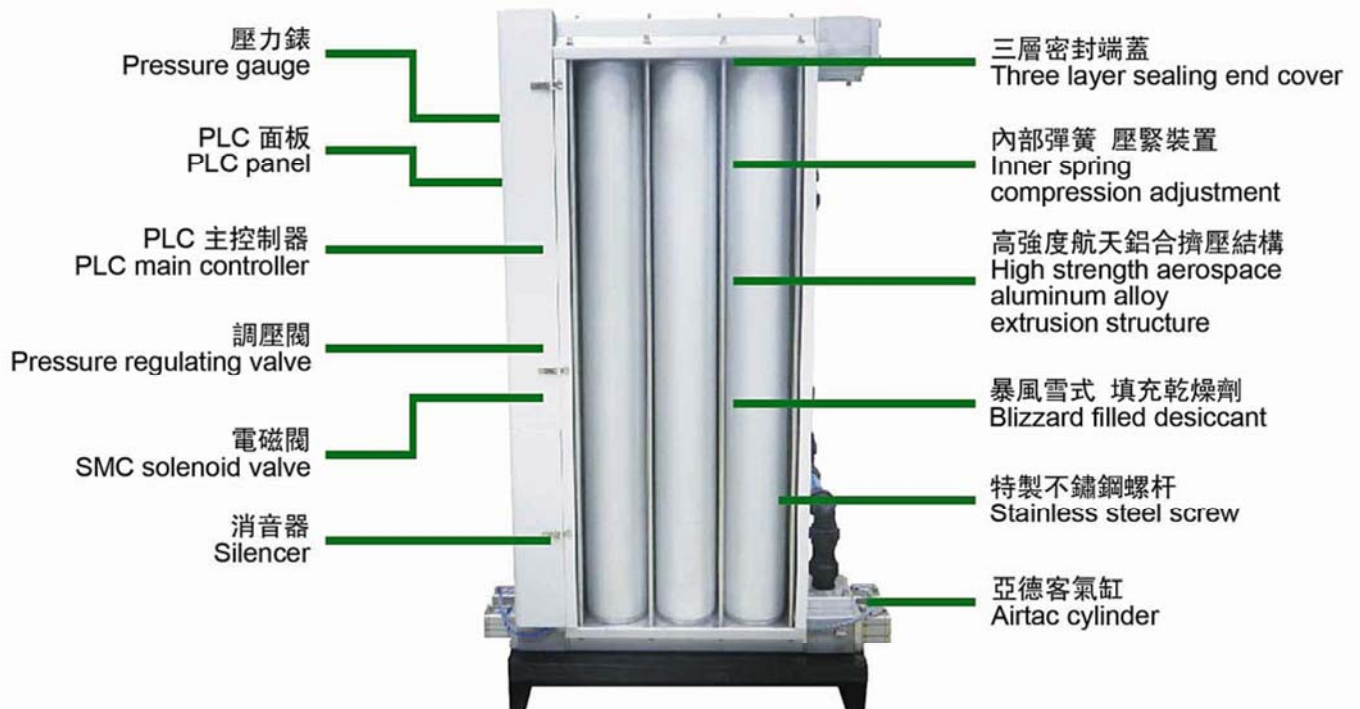
ISO8573.1 對壓縮空氣質量等級的標準

ISO8573.1 Standard for the Compressed Air Quality Level

國際標準 ISO8573.1 對壓縮空氣品質有一個簡單的分類標準體系，就是根據壓縮空氣系統中存在的三種主要污染物：塵、水和油的殘餘含量分別進行品質等級劃分。

The national standard ISO8573.1 has a simple classification standard system for the compressed air quality, which is according to the residual content of three main pollutants: dust, water and oil in the compressed air system to divide the quality level.

等級 Level	固體顆粒 Solid Particles			水 Water	油 Oil
	每立方米最大粒子含量 The largest particle content for per cube meter			壓力露點 (°C) Pressure Dew Point (°C)	包含油蒸氣 (mg/m³) Contain Oil Vapor (mg/m³)
	0.1-0.5微粒 0.1-0.5Molecule	0.5-1微粒 0.5-1Molecule	1-5微粒 1-5Molecule		
1	100	1	0	-70	0.01
2	100,000	1,000	10	-40	0.1
3	-	10,000	500	-20	1
4	-	-	1,000	3	5
5	-	-	20,000	7	-
6	-	-	-	10	-



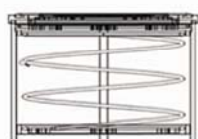
細節之處彰顯品質內涵

Details Highlight Quality Connotation



鋁合金腔體：整機採用鋁合金結構，防氧防腐處理，結構體可使用 30 年以上，相比傳統碳鋼管道，避免生鏽造成的氣體二次污染。

Aluminum alloy cavity: The machine adopts aluminium alloy structure with anti-oxidation corrosion resistance. Compared to traditional carbon steel pipe, it avoids rust bringing secondary pollution for gases and could be used over 30 years.



壓緊裝置：模組頂端增加壓緊彈簧裝置，時刻讓吸附床保持最緊密狀態，防止乾燥劑在循環切換過程中的摩擦與脫離，增加吸附劑與腔體使用壽命。

Hold-down gear: Add the spring compression adjustment at the top, make the adsorption bed keep the most close state all the time, prevent the desiccant friction and separation in the circular switching process, increase the service life of the adsorbent and cavity.



擴散與密封：每組模組都有單獨的擴散器，氣流分佈達到最均衡的狀態，讓每一顆吸附劑都發揮最大的吸附能量。端蓋部位採用雙端蓋四道密封，讓性能達到最佳狀態，避免出現漏氣現象。

Diffusion and sealing: Each module with separate diffuser and air flow distribution to achieve the equilibrium state make every adsorbent play its maximum adsorption energy. End cover part adopts double end cover four seals, makes sealing performance achieve the best condition and avoids gas leaking in running.

控制器：自主研發的控制器與軟件，工作狀態、遠程監控、露點溫度，在線檢測一目了然，普通模式與節能模式簡單切換。

Controller: The self-developed controller and software make the working condition, long distance regulating, dew point temperature as well as online testing all clear at one glance. You can shift easily between Normal mode and ECO mode.



吸附劑：與廣東石油化工學院合作研發特製吸附劑，集分子篩的吸附能力與氧化鋁的再生性能於一體，保證露點保持最佳狀態。

Adsorbent: Cooperation with Guangdong University of Petrochemical Technology to research and develop the special adsorbent, that is collection of the adsorption ability of molecular sieve and the regeneration properties of alumina, ensure that the dew point keeps the best state.



知名品牌的氣動元件：氣動元件的穩定性是吸幹機中最重要的一環，所以我們採用 SMC 的電磁閥，Airtac 的氣動氣缸，確保機器最佳的穩定性能。

Well-known brand of pneumatic components: The stability of pneumatic components is one of the most important parts for the adsorption dryer, so we use SMC solenoid valve and Airtac pneumatic cylinder to ensure that the machine keeps the best stable performance.



模塊化設計：採用模塊化設計，截面積增大，減緩氣體在吸附腔內的流速，增加了吸附劑與壓縮空氣的接觸時間和面積，讓吸附更徹底，在配備前置冷凍式乾燥機的工況下，壓力露點可達到 -40°C 至 -70°C 。

Modular design: Adopt modular design, increase the cross-sectional area, slow down the air flow rate in the adsorption cavity, improve the contact time and area for the adsorbent and compressed air and make the adsorption more thoroughly. In condition of equipment with pre freezing dryer, the pressure dew point can reach from -40°C to -70°C .



露點儀(選配)：露點儀採用國際知名品牌：維薩拉或密析爾。在線顯示露點溫度，結合自主研發 PLC，可根據使用現場需要， -20°C 至 -70°C 可選，根據露點自動切換再生時間達到最小耗氣量，達到最佳節能效果。

Dew point meter (optional accessory): Dew point meter is the product of international well-known brands Vaisala and Michell. It can indicate the dew point temperature online. Linked with our independently developed PLC, it allows you to select between -20°C and -70°C according to the working needs. It can automatically switch regenerative time according to dew point to reach lowest air consumption in order to get the best energy saving effect.



壓力修正係數 CFP: Pressure Correction Coefficients

最低進氣壓力	Bar	4	5	6	7	8	9	10	11	12	13
The lowest pressure of inlet air	CFP	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75

溫度修正係數 CFT: Temperature Correction Coefficients

最高進氣溫度	°C	25	30	35	40	45	50
The highest temperature of inlet air	CFT	1	1	1	0.97	0.88	0.73

露點修正係數 CFD: Dew Point Correction Coefficients

要求露點 PDP	°C (°F)	-20 (-4)	-40 (-40)	-70 (-100)
Requirements of dew point	CFD	1.1	1	0.7

選擇乾燥器最小壓力修正係數(CFP) (在決定乾燥器最小工作壓力時，必須考慮系統中前置設備的壓力損失)

選擇乾燥器最高進氣溫度修正係數(CFT)

選擇露點修正係數(CFD)

計算乾燥器應滿足的流量如下：

Choose the smallest pressure correction coefficients of dryer (CFP) (when choose the smallest working pressure, need to consider the pressure loss of front equipment in the system)

Choose the highest inlet temperature correction coefficients of dryer (CFT)

Choose the dew point correction coefficients

Calculate the flow rate of need to meet for the dryer as below:

$$\frac{\text{進氣流量 Inlet flow rate}}{\text{CFT} \times \text{CFP} \times \text{CFD}} = \text{乾燥器應滿足的最小流量 The smallest flow rate need to meet for the dryer}$$

根據乾燥器應滿足的最小流量從表格中選出乾燥器型號，確保所選型號的流量至少與此相等或更大。

Choose the model from the form according to the smallest flow rate of need to meet for the dryer, ensure the flow rate of selected model at least with equal or larger.

型號 Model	處理風量 Flow Rate (m³/min)	出入口徑 Inlet&Outlet	重量 Weight (KG)	外形尺寸 Dimensions (mm)
HB-015MA	1.5	G1"	57	687x355x990
HB-025MA	2.5	G1"	92	862x355x990
HB-035MA	3.5	G1-1/2"	95	687x355x1665
HB-070MA	7.0	G1-1/2"	142	862x355x1665
HB-105MA	10.5	G2"	202	1037x355x1665
HB-140MA	14.0	G2"	262	1212x355x1665
HB-175MA	17.5	G2-1/2"	320	1387x355x1665
HB-210MA	21.0	G2-1/2"	382	1562x355x1665
HB-245MA	24.5	G2-1/2"	440	1737x355x1665
HB-280MA	28.0	G2-1/2"	502	1912x355x1665
HB-315MA	31.5	DN80	640	1387x750x1665
HB-350MA	35.0	DN80	640	1387x750x1665
HB-420MA	42.0	DN100	764	1562x750x1665
HB-490MA	49.0	DN100	880	1737x750x1665
HB-560MA	56.0	DN125	1004	1912x750x1665
HB-630MA	63.0	DN150	1146	1562x1150x1665
HB-735MA	73.5	DN150	1320	1737x1150x1665
HB-840MA	84.0	DN150	1506	1912x1150x1665

注意事項：

標準工況：T ≤ 35°C, P = 7bar

技術指標：壓力露點 ≤ -40°Ctd，微熱機型再生能耗 ≤ 3%，無熱機型再生能消耗 ≤ 5%，

壓力損失 ≤ 0.012MPa，排放噪點 ≤ 75dB

建議選配：進氣溫度 35°C ≤ T ≤ 55°C，進氣溫度超高時，請在前端增加冷凍式乾燥機

Note:

Standard condition: T ≤ 35°C, P = 7bar

Technical indicator: Dew point pressure ≤ -40°Ctd, Heatless model of regeneration consumption ≤ 3%, Heat model of regeneration consumption ≤ 5%

Pressure loss ≤ 0.012MPa, Release of noise points ≤ 75dB

Suggested matching: the inlet temperature 35°C ≤ T ≤ 55°C, if the temperature very high, please equipped with refrigerated air dryer at before

風冷式高溫型冷凍式乾燥機 AIR COOLED HIGH TEMPERATURE REFRIGERANT DRYER



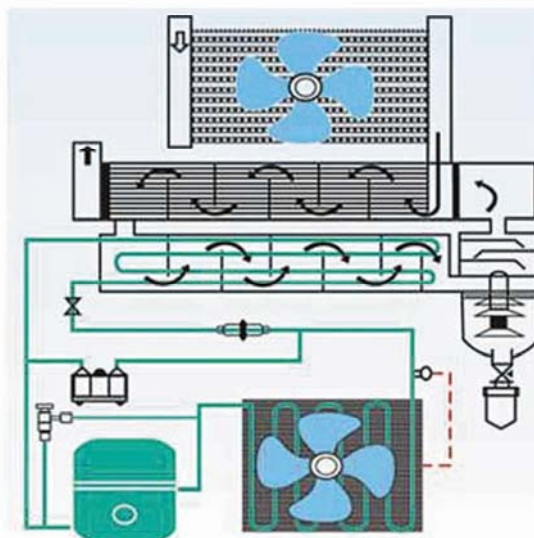
工作原理

壓縮空氣中水蒸氣的量是由壓縮空氣的含水量決定的：在保持壓縮空氣壓力基本不變的情況下，降低壓縮空氣的溫度可減少壓縮空氣中的水蒸氣含量，而多餘的水蒸氣會凝結成液體，冷凍式乾燥機就是根據水的飽和蒸氣壓力和溫度之間的對應關係；利用制冷裝置使壓縮空氣冷卻到一定的露點溫度，析出所含的水份，通過氣水分離器與電動排水器將水排出，從而使壓縮空氣得到乾燥。風冷式高溫型冷凍式乾燥機的製冷散熱裝置是風冷式冷凝器。

產品特點

- 嚴格按照 ISO9001、GB150 標準、ISO7183 冷幹機標準、QS、壓力容器檢驗規範進行設計製造生產和測試，確保產品安全、可靠運行；
- 採用全新全封閉製冷壓縮機，超強製冷，運轉穩定，噪音低，性能可靠，省電，使用壽命長；
- 熱交換器，冷凝器選用優質材料製作，傳熱系數高，體積小，結構緊湊；
- 製冷零部件、控制元件均採用國際優質品牌，性能優良，提高使用壽命；
- 設備結構設計合理，便於維護保養，箱式外形，美觀大方；
- 加大尺寸的蒸發器傳熱面積，傳熱效率更佳，保證機器露點的穩定性；
- 特殊設計的冷熱交換器，完美利用出口冷源與入口熱空氣換熱。避免管路結露，並達到更節能的效果；
- 高效率的氣水分離裝置配合良好的排水系統設計，不堵塞，帶過濾網可定期清洗，持續穩定的將冷凝水排出機外；
- 散熱系統帶自動壓力開關自動控制風機電源，做到最大限度的省電效果；
- 獨特的製冷系統設計，溫度低且不結冰，良好的冷媒過濾系統，無冰堵現象；徹底去除壓縮空氣水份；
- 運行成本低，易耗品少，避免易耗品的費用。

風冷式高溫型乾燥機流程圖



工況與技術指標

進氣溫度 IAT.	≤ 80 °C
冷卻方式 Cooling	風冷 Air Cooled
環境溫度 Ambient Temp.	2~45 °C
壓力露點 Pressure Dew Point	2~10 °C
工作壓力 Working Pressure	0.6~1.0 MPa

注：其他特殊標準可定制



(圖只供參考，具體以實物為準。)

根據 DIN ISO7183，冷乾機設計基於以下參數，工作壓力 7bar，環境溫度 45°C。
對於不同的工作壓力和溫度，需考慮以下校正系數。

表一：壓縮空氣進氣溫度、進氣壓力修正系數 (C1)

進氣溫度(°C)	0.4	0.5	0.6	0.7	0.8	0.9	1.0
25	0.72	0.9	1.08	1.20	1.32	1.44	1.56
30	0.66	0.83	0.99	1.1	1.21	1.32	1.44
35	0.6	0.75	0.9	1	1.1	1.2	1.3
40	0.54	0.68	0.81	0.9	0.99	1.08	1.17
45	0.48	0.61	0.72	0.8	0.88	0.96	1.04
50	0.42	0.53	0.63	0.7	0.77	0.84	0.91

表二：環境溫度修正系數 (C2) (只用於風冷型)

環境溫度 (°C)	20	25	30	35	38	40	45	50
修正系數	1.16	1.12	1.08	1.03	1.00	0.98	0.80	0.52

表三：壓力露點修正系數 (C3) (只用於風冷型)

環境溫度 (°C)	3	5	7	10
修正系數	0.66	0.78	0.91	1.0

不同工況下的空氣流量可以通過將規格參數表中的名義流量與修正系數相乘獲得，
實際乾燥機處理量 = 名義流量 x (系數C1 x 系數C2 x 系數C3)。

風冷式高溫型冷凍式乾燥機規格參數表

型號 Model	處理風量 Flow Rate (Nm³/min)	壓縮機 Refrigeration Compressor Power (KW)	電源 Power Supply	管徑 Inlet/Outlet	建議匹配 空壓機功率 Matched Air Compressor Power (KW)	重量 Weight (KG)	外型尺寸 Dimensions (mm)		
							L	W	H
HB-010AH	1.0	0.585	Single-Phase	G-3/4"	5.5	66	730	420	740
HB-015AH	1.5	0.59	Single-Phase	G-1"	7.5	78	730	420	740
HB-020AH	2.0	0.705	Single-Phase	G-1"	11	82	730	420	740
HB-026AH	2.6	0.75	Single-Phase	G-1"	15	89	780	450	840
HB-038AH	3.8	0.88	Single-Phase	G1-1/2"	22	102	900	540	930
HB-069AH	6.9	1.235	Single-Phase	G-2"	37	122	1000	540	1010
HB-110AH	11.0	1.73	Single-Phase	G2-1/2"	55	182	1250	650	1140
HB-140AH	14.0	2.6	Three-Phase	G2-1/2"	75	182	1250	650	1140
HB-180AH	18.0	2.8	Three-Phase	DN80	90	235	1450	700	1260
HB-220AH	22.0	3.0	Three-Phase	DN80	110	305	1450	700	1390
HB-280AH	28.0	3.75	Three-Phase	DN80	150	366	1450	700	1390
HB-320AH	32.0	4.66	Three-Phase	DN80	160	398	1500	800	1400
HB-380AH	38.0	6.49	Three-Phase	DN100	200	580	1950	950	1568
HB-460AH	46.0	8.85	Three-Phase	DN100	250	655	1950	950	1568
HB-550AH	55.0	9.98	Three-Phase	DN125	315	815	2100	1000	1740
HB-670AH	67.0	10.5	Three-Phase	DN150	355	1106	2300	1100	2000
HB-750AH	75.0	11.25	Three-Phase	DN150	400	1223	2350	1100	400
HB-850AH	85.0	13.5	Three-Phase	DN150	450	1685	2450	1200	2200

風冷式高溫型冷凍式乾燥機使用條件：電源 220V~380V/50Hz 製冷劑的具體種類以機器設備銘牌為準。
自 HB-670AH 型起標配為敞開式設計，以上技術數據與規格，如有更改，恕不另行通知，具體數據以實際為準。

壓縮空氣精密過濾器 COMPRESSED AIR PRECISION FILTER



壓縮空氣精密過濾器規格參數表

The Specification Parameter Sheet of Compressed Air Precision Filter

型號 Model	處理風量 Flow Rate (Nm ³ /min)	接口尺寸 Inlet / Outlet	高 Height (mm)	寬 Width (mm)	濾芯 Filter Element		重量 Weight (KG)
					型號 Type	數量 Qty	
HB-001(+ 級別)	1.5	G3/4"	295	105	K-017	1	0.95
HB-002(+ 級別)	2.6	G1"	295	105	K-030	1	1.85
HB-004(+ 級別)	3.8	G1-1/2"	370	125	K-030	1	1.9
HB-007(+ 級別)	7.0	G1-1/2"	495	125	K-145	1	2.3
HB-010(+ 級別)	11.0	G2"	630	140	K-180	1	5
HB-014(+ 級別)	14.0	G2"	630	140	K-220	1	5.5
HB-018(+ 級別)	18.0	G2-1/2"	920	150	E-40	1	13.5
HB-022(+ 級別)	22.0	G2-1/2" 或 DN65	925/1050	150/370	E-44	1	13.8/22
HB-028(+ 級別)	28.0	DN80	847	435	K-430	1	33.5
HB-033(+ 級別)	33.0	DN80	1000	435	E-40	2	35
HB-038(+ 級別)	38.0	DN100	1020	435	E-44	2	40
HB-046(+ 級別)	46.0	DN100	1120	435	E-48	2	45
HB-055(+ 級別)	55.0	DN100	1020	465	E-44	3	60
HB-067(+ 級別)	67.0	DN125	1150	465	E-48	3	65
HB-090(+ 級別)	90.0	DN150	1210	520	E-44	5	96
HB-110(+ 級別)	110.0	DN150	1210	580	E-44	6	145
HB-130(+ 級別)	130.0	DN150	1210	620	E-44	7	175
HB-160(+ 級別)	160.0	DN200	1210	665	E-44	8	215
HB-180(+ 級別)	180.0	DN200	1396	665	E-48	8	225
HB-200(+ 級別)	200.0	DN200	1396	680	E-48	9	250
HB-250(+ 級別)	250.0	DN250	1396	705	E-48	12	300

注：壓縮空氣精密過濾器過濾等級分為 C, T, A, AA, H, 詳見下述說明介紹。更多過濾內容，請詳詢我司。以上技術參數與規格，如有變化，恕不另行通知，以產品實標為準。

Note: The grade of compressed air precision filter is divided into C, T, A, AA and H, please refer to the instructions as below. To know more, please enquire from us. The above technical parameters and specification are subject to change without notice.

壓縮空氣精密過濾器說明介紹

The Introduction of Precision Filter

過濾器等級 Filter Level	性能數據 Performance Data	說明 Instruction	使用圖例 Using Legend
C 級 (E9) 預過濾器 C level (E9) pre-filter	• 濾除 3 微米以上的液態和固態矮粒 • 殘留油份含量: 5 PPM (21°C 時) • 初始降壓: 0.007 MPa • 飽和水氣降壓: 0.01 MPa • Filtering the liquid and solid particles more than 3 micron • Residual oil content: 5 PPM (at 21°C) • Initial drop pressure: 0.007 MPa • Drop pressure of saturated water vapour: 0.01 MPa	• 後冷卻器的下游 • 直接用於工作 • The downstream of the after cooler directly used in working point	
T 級 (E7) 主管路過濾器 T level (E7) Main pipeline filter	• 可濾除 1 微米和更大的液態和固態顆粒 • 殘留油份含量: 0.5 PPM (21°C 時) • 初始降壓: 0.007 MPa • 飽和水氣降壓: 0.014 MPa • 在此級前應裝 C 級過濾器 • Filtering the liquid and solid particles more than 1 micron • Residual oil content: 0.5 PPM (at 21°C) • Initial drop pressure: 0.007 MPa • Drop pressure of saturated water vapour: 0.014 MPa • C level filter shall be installed before this	• 高效除油過濾器的上游 • 吸附式乾燥機的下流 • 如果上游安裝後冷卻器/分離器, 則用於工作點 • Upstream of efficient degreaser • Downstream of adsorption type dryer • If installed after cooler or separator at upstream, will be used in working point	
A 級 (E5) 高級除油過濾器 A level (E5) Efficient oil removal filter	• 可濾除 0.01 微米和更大的固態與液態顆粒 99.99%+ 的油霧 • 殘留油份含量: 0.01 PPM (21°C 時) • 初始降壓: 0.01 MPa • 飽和水氣降壓: 0.02 MPa • 在此級前應裝 T 級過濾器 • Filtering the 0.01 micron or larger liquid and solid particles and the 99.99% oil mist • Residual oil content: 0.01 PPM (at 21°C) • Initial drop pressure: 0.01 MPa • Drop pressure of saturated water vapour: 0.02 MPa • T level filter shall be installed before this	• 吸附式乾燥機的上游 • 淨凍式乾燥機的下流 • 變壓吸附式乾燥機的下流用於濾除細小顆粒 • 用於工作點 • Upstream of adsorption dryer • Downstream of refrigerated dryer • At the downstream of variable pressure adsorption dryer is used to filter tiny particles. • Used in working point.	
AA 級 (E3) 超高效除油過濾器 AA level (E3) Super-efficient oil removal filter	• 可濾除 0.01 微米和更大的固態與液態顆粒 99.999%+ 的油霧 • 殘留油份含量: 0.001 PPM (21°C 時) • 初始降壓: 0.015 MPa • 飽和水氣降壓: 0.04 MPa • 在此級前應裝 A 級過濾器 • Filtering the 0.01 micron or larger liquid and solid particles and the 99.999% oil mist. • Residual oil content: 0.001PPM (at 21°C) • Drop pressure of saturated water vapor: 0.04 MPa • A level filter shall be installed before this	• 吸附式乾燥機的上游; 如果有大量液體負載, 應使用 T 級過濾作為前置過濾器 • 冷凍式乾燥機的下流 • Adsorption type dryer upstream; if there is a lot of liquid load, T level filter should be used as a pre-filter. • Refrigerated dryer downstream	
H 級 (E1) 活性炭過濾器 H level (E1) Active carbon filter	• 可濾除壓縮空氣中殘餘油蒸汽及其它異味 • 殘留油份含量: 0.003 PPM (21°C 時) • 初始降壓: 0.01 MPa • 在此級前應裝 AA 級過濾器 • Can filter out the residual oil vapor in compressed air and other peculiar smell. • Residual oil content: 0.003PPM (at 21°C) • Drop pressure of saturated water vapor: 0.01 MPa • AA level filter shall be installed before this	• 超高效除油過濾器的下游 • At the downstream of Super-efficient oil removal filter	



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