

h hidrotermal[®]

Air blower



USER MANUAL

1. Airblower Specifications

Model	Voltage	Current A	Freq.	Max. Air pressure kPa	Max.flux (m3/h)	Max Vacuum Degree Kpa	Power KW	HP	Rotary Speed r/min
AB075	220	4.80	50	20	110	16	0.55	0.75	2800
		5.76	60	24	132	19	0.66	0.88	3400
AB075-110	110	5.76	60	24	132	19	0.66	0.88	3400
AB075M	220V-460V	2.51/1.2	50	20	110	16	0.55	0.75	2800
		3.01/1.44	60	24	132	19	0.66	0.88	3400
AB100	220	6.30	50	22	145	18	0.75	1.00	2800
		7.56	60	25	170	20	0.90	1.20	3400
AB100-110	110	7.56	60	25	170	20	0.90	1.20	3400
AB100M	220V-460V	3.31/1.5	50	22	145	18	0.75	1.00	2800
		3.97/1.8	60	25	170	20	0.90	1.20	3400
AB150	220	8.70	50	25	210	20	1.10	1.50	2800
		10.44	60	30	245	24	1.30	1.73	3400
AB150-110	110	10.44	60	30	245	24	1.30	1.73	3400
AB150M	220V-460V	4.36/2.1	50	25	210	20	1.10	1.50	2800
		5.23/2.52	60	30	245	24	1.30	1.73	3400
AB200	220	11.80	50	26	220	21	1.50	2.00	2800
		14.16	60	31	255	25	1.80	2.40	3400
AB200-110	110	14.16	60	31	255	25	1.80	2.40	3400
AB200-380	Y380	3.44	50	26	220	21	1.50	2.00	2800
		4.74	60	31	255	25	1.80	2.40	3400
AB200M	220V-460V	5.96/2.85	50	26	220	21	1.50	2.00	2800
		7.15/3.42	60	31	255	25	1.80	2.40	3400
AB300	220	14.10	50	36	325	28	2.20	3.00	2800
		16.92	60	43	365	33	2.60	3.47	3400
AB300-380	Y380	4.92	50	36	325	28	2.20	3.00	2800
		5.91	60	43	365	33	2.60	3.47	3400
AB300M	220V-460V	8.52/4.06	50	36	325	28	2.20	3.00	2800
		10.22/4.87	60	43	365	33	2.60	3.47	3400



Model	Voltage	Current A	Freq.	Max. Air pressure kPa	Max.flux (m3/h)	Max Vacuum Degree Kpa	Power KW	HP	Rotary Speed r/min
AB350	220	16.70	50	36	325	28	2.60	3.50	2800
		20.04	60	43	365	33	3.00	4.00	3400
AB350-380	Y380	5.82	50	36	325	28	2.60	3.50	2800
		6.98	60	43	365	33	3.00	4.00	3400
AB350M	220V-460V	10.06/4.8	50	36	325	28	2.60	3.50	2800
		12.07/5.76	60	43	365	33	3.00	4.00	3400
AB400	△220	11.07	50	37	390	30	3.00	4.00	2800
		13.29	60	44	430	35	3.60	4.80	3400
AB400-380	Y380	6.39	50	37	390	30	3.00	4.00	2800
		7.67	60	44	430	35	3.60	4.80	3400
AB400M	220V-460V	11.07/9.14	50	37	390	30	3.00	4.00	2800
		13.28/10.96	60	44	430	35	3.60	4.80	3400
AB550	△220	14.15	50	38	475	28	4.00	5.50	2800
		16.97	60	45	525	33	4.80	6.40	3400
AB550-380	Y380	8.17	50	38	475	28	4.00	5.50	2800
		9.80	60	45	525	33	4.80	6.40	3400
AB550M	220V-460V	14.15/6.75	50	38	475	28	4.00	5.50	2800
		16.98/8.1	60	45	525	33	4.80	6.40	3400
AB750	△220	19.23	50	42	530	34	5.50	7.50	2800
		23.21	60	50	616	38	6.60	8.80	3400
AB750-380	Y380	11.10	50	42	530	34	5.50	7.50	2800
		13.40	60	50	616	38	6.60	8.80	3400
AB750M	220V-460V	19.23/9.17	50	42	530	34	5.50	7.50	2800
		23.07/11	60	50	616	38	6.60	8.80	3400
AB1000	△220	25.98	50	45	550	35	7.50	10.00	2800
		34.19	60	52	640	42	9.00	12.00	3400
AB1000-380	Y380	15.00	50	45	550	35	7.50	10.00	2800
		19.74	60	52	640	42	9.00	12.00	3400
AB1000M	220V-460V	25.98/12.4	50	45	550	35	7.50	10.00	2800
		31.17/14.88	60	52	640	42	9.00	12.00	3400



2. Installation

-Prior to the first start-up and before any other start-up, the proper operation status of the unit must be inspected by qualified technicians.

-Installation, assembly and operation must only be properly trained and qualified specialists. Operation following incorrect installation, maintenance or unapproved replacement of components constitutes non designated use and renders the warranty void. The resultant risk shall be borne solely by the customer or owner.

2.1 Location

-Set the air blower indoor to protect it from the weather and install it in a horizontal position. If the blower is installed outdoor, should have a rain shelter above it. Do not block the vent, avoid dust or non-air stuff being sucked into the cooling fan. Using in a closed box or room is prohibit.

-Set in a place without vibration. If necessary, vibration-proof equipment or actions must have to avoid damage to the blower.

-The air blower is usually designed with horizontal shaft, lifespan will be shortened when use vertically.

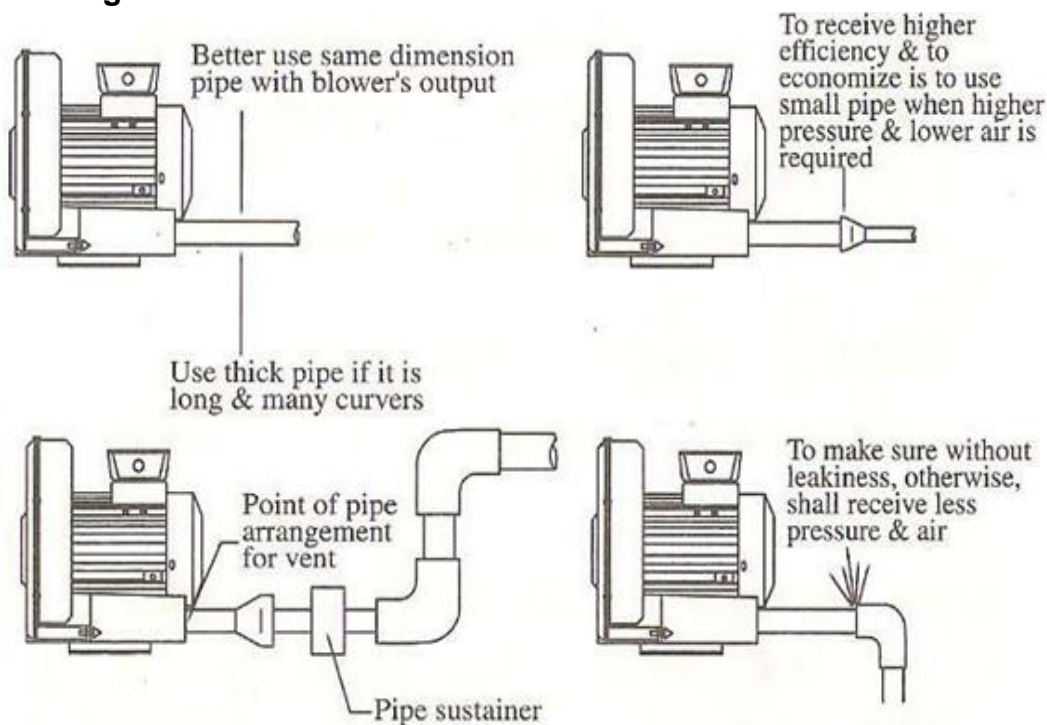
2.2 Safety Working Conditions:

-Surrounding temperature $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$ for 3phase, $-5^{\circ}\text{C} \sim 40^{\circ}\text{C}$ for single phase, Humidity under 80%

-To blow air containing acid, alkali, or something erosive or to blow combustible or explosive air is very dangerous. Hence, not recommend to do it.

-Avoid operation in place where the air is rich of dust, powder or fiber. If in need, add an air filter and clean regularly.

2.3 Pipe Arrangement



Attention: Make sure to install enough sustainers to avoid weight or other burden on the system.

-Use high quality and long lasting pipes and joints to sustaining blower's high pressure and temperature. Ensure no leak and no odds and ends in the pipe. Prevent anything falling into blower.

-Follow the air flow arrows on shell to install inlet and outlet pipes. Impeller should rotate in the same direction, otherwise, efficiency is low.

-Filter need to be added. If inlet tube do not connect with others, need to clean regularly to prevent blockage.

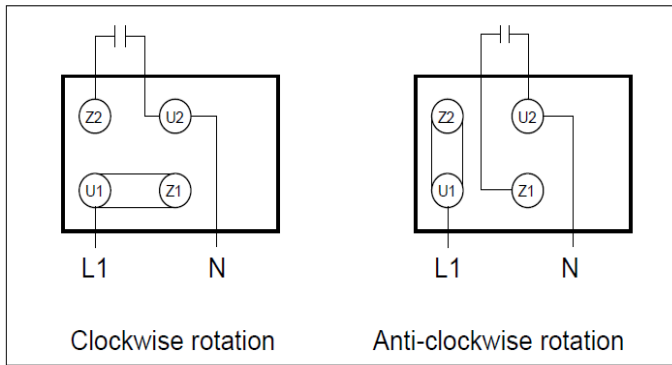
2.4 Cable Connection

A. Make sure power voltage is right with the motor. This motor can be configured for either 220V~240V or 380V~415V. Use the copper plates enclosed with the terminal box and the diagram inside the terminal box cover to configure.

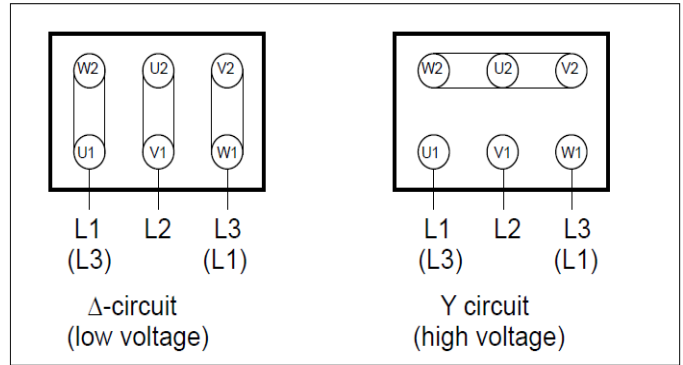
B. All wires should be tightly screwed on terminals, avoid improper shortage.



C. Configuration for single-phase air blower



D. Configuration for three-phase air blower



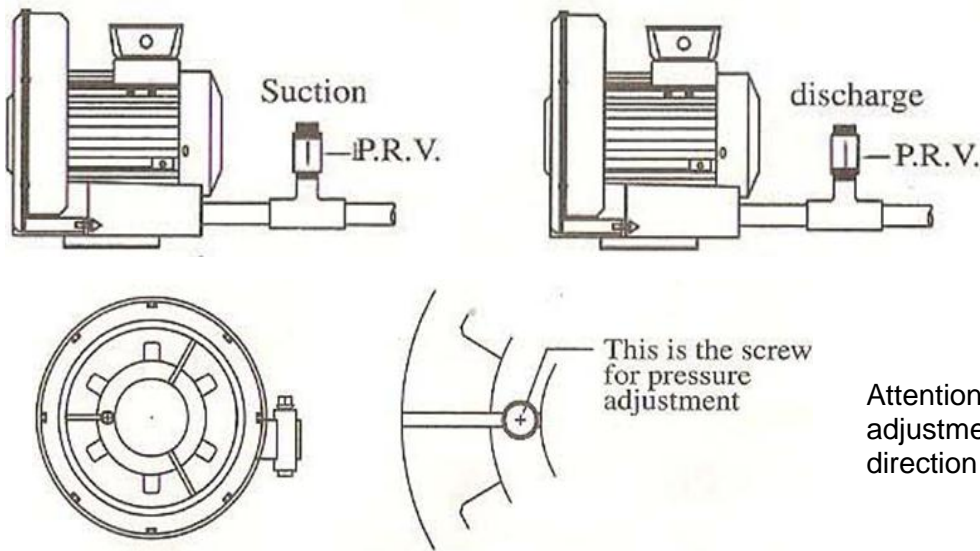
E. Checking the direction of rotation

Switch on the air blower, the running direction of the impeller should correspond to the direction arrow on the housing. The direction of the air flow must also match the directional arrows on the silencer housing. If the impeller rotates in the wrong direction, then interchange L1 and L3.

3. Caution

1. Blower running produces high temperature. Keep off its shell from being burned.
2. Current will change with the air pressure. Overload protection should be wired into power line-in to avoid burn. (Refer to the nameplate on the motor of full loading amperes)
3. Refer to pressure curve in catalogue for the proper continuing operation. Do not operate over the range. When operation is always close to either pressure limit (high or low) it is better to have a pressure relief valve in pipe line, so that the pressure relief valve will operate to adjust the air in or out thus to prevent damage to blower. Refer the illustration bellow.

Blower's temperature will rise rapidly if air flow is blocked. Shut down blower immediately to avoid damage. On the other hand, if the air should be under the continuing operation range or air should flow by timing intervals, it is better to switch pressure relief valve on and off by the timing intervals.



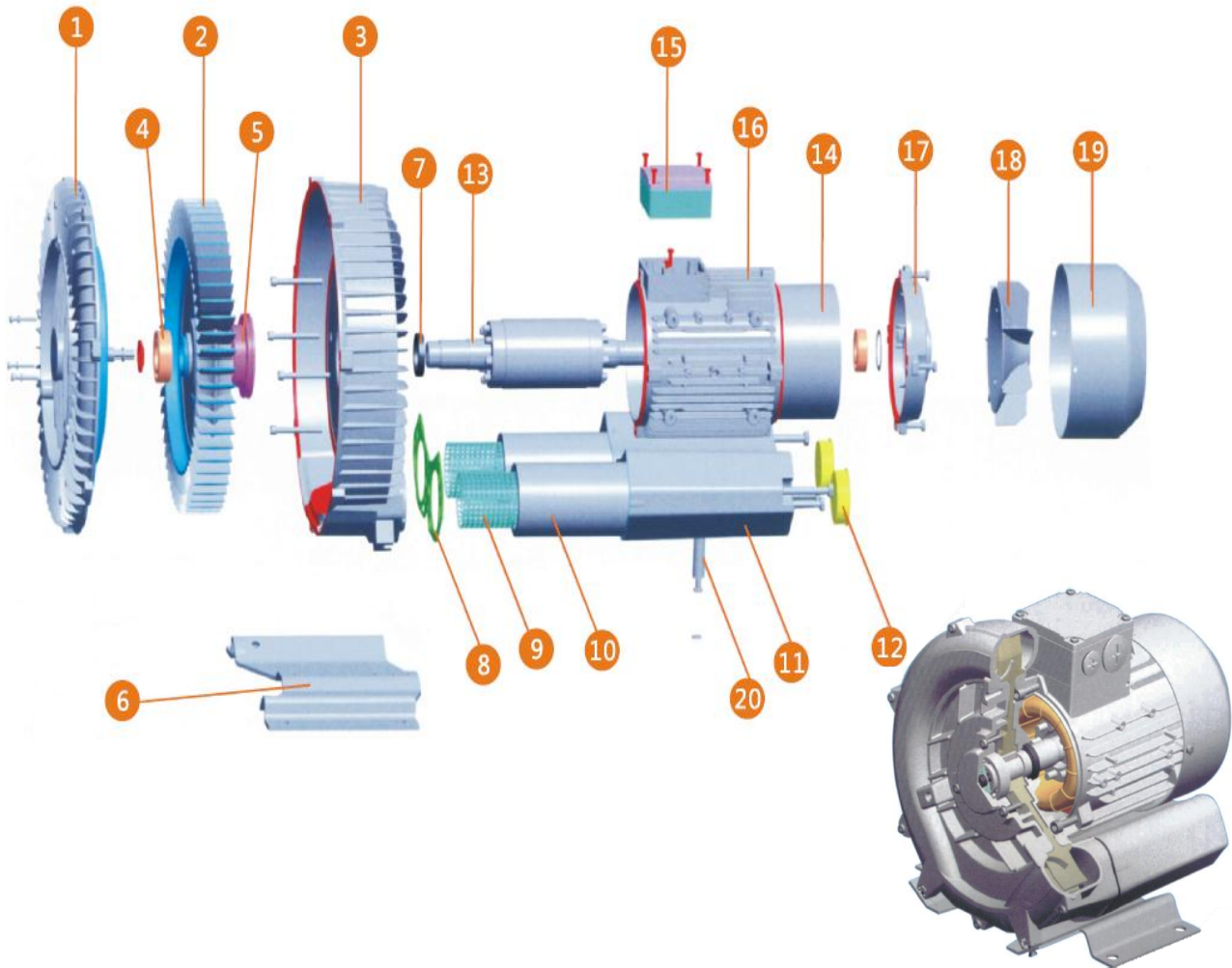
4. The temperature will rise rapidly when air flowing is nearly blocked. Pay special attention to this situation. Do not operate in a room without ventilation if the temperature rises.
5. Use "dust collecting bag" to remove solids, dust, granule, fiber and water bead before flowing into blower. Should a filter in pipe be installed, use filter of larger area to avoid loss of pressure and clean up the filter regularly.
6. Accumulated dust will lessen heat dispersion and will result in less air flow, more vibration, high temperature and more malfunctions.
7. Bearings, seals and silencers are wearing parts. They should be changed regularly. Also life of impeller, shell, net, etc. depends on working environment. They may need to change regularly.
8. Turn off power to check the repair when unexpected noise or rough running happens.

4. Trouble Shooting Guide

Problem	Reason (Incident)	Solution
Air blower can not work	1 Power off	1 Power on
	2 Motor can not work	2 Check the connection of motor line or change the new motor
	3 Pump head was damaged	3 Repair or change the air blower
	4 Foreign matter inside the air blower	4 Clean the foreign matter
Noise increase	1 Bearing lubrication is dry	1 Add some grease to the bearing
	2 Bearing was broken	2 Change the new bearing
	3 Impeller was worn	3 Change the impeller or pump head
	4 Solid pieces fall off	4 Tighten the solid pieces
	5 Foreign matter inside the air blower	5 Clean the foreign matter or change the pump head
Vibration increase	1 Bearing was broken	1 Change the new bearing
	2 Impeller was unbalanced	2 Clean the foreign matter or make the it be balanced
	3 Deformation of the principal axis	3 Change the principal axis or pump head
	4 Working state into the turbulent region	4 Adjust the working status, avoid the turbulent region
	5 Air inlet and outlet for the silencer net was blocked	5 Clean the silencer net
Temperature rising	1 Air inlet temperature was high	1 Reduce the air inlet temperature
	2 Bearing lubrication is dry	2 Add some grease to the bearing
	3 Air blower efficiency was reduced	3 Clean the impeller or change pump head
	4 Work status was changed	4 Adjust the working status
	5 The environment temperature was increased	5 Increasing environmental ventilation to make it cooling
Pressure was reduced	1 Pump's rotate speed was reduced	1 Power supply voltage is low or the motor failure
	2 Silencer net's obstruction was increased	2 Reduced the obstruction of the silencer net
	3 Work status was changed	3 Adjust the working status
	4 Motor work reversed	4 Motor rewiring
Flow was reduced	1 Air inlet and outlet for the silencer net was blocked	1 Clean the silencer net
	2 Pump's rotate speed was reduced	2 Power supply voltage is low or the motor failure
	3 Silencer net's obstruction was increased	3 Reduced the obstruction of the silencer net
	4 Work status was changed	4 Adjust the working status
	5 Motor work reversed	5 Motor rewiring

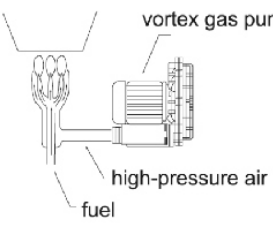
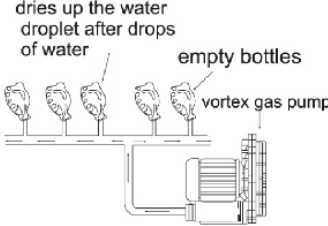
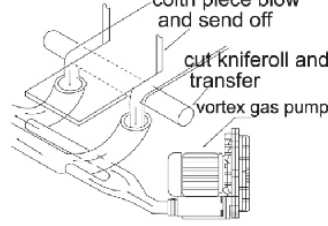
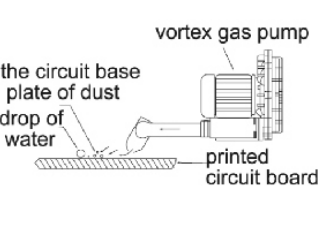
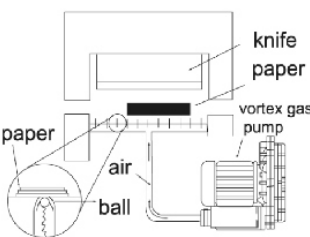
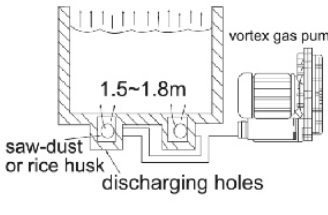
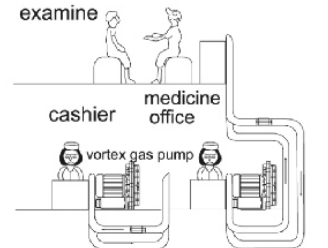
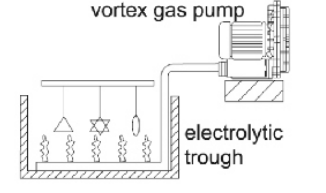
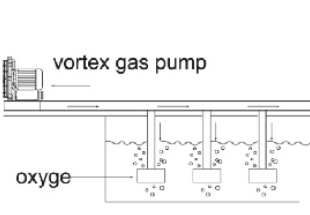
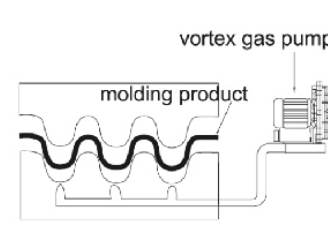
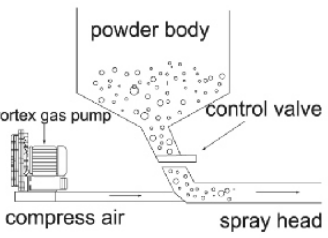
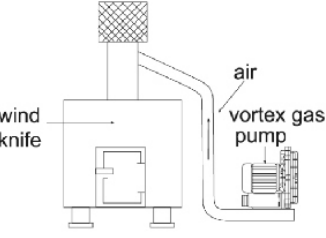
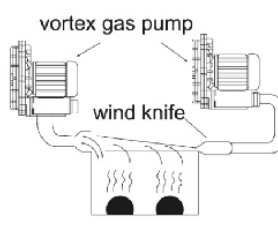
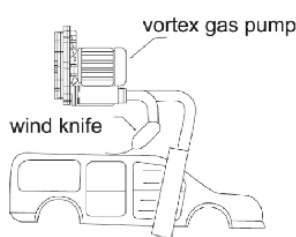
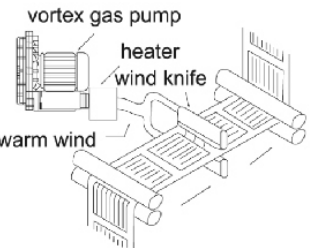
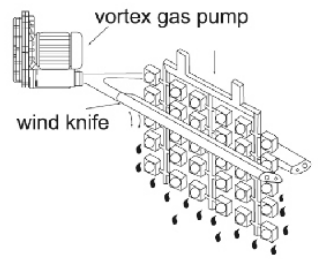


5. Explosion Drawing

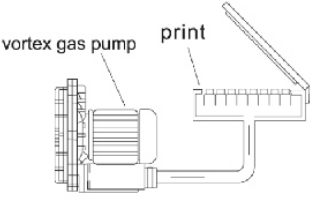
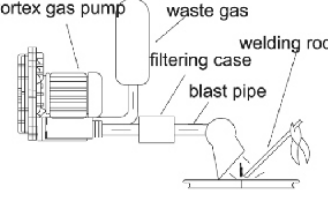
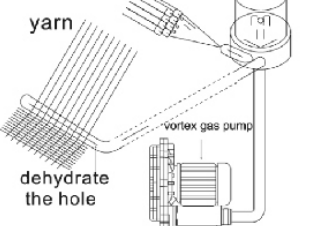
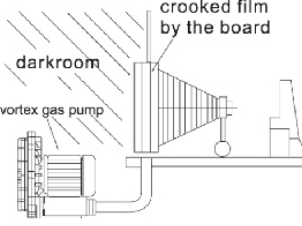
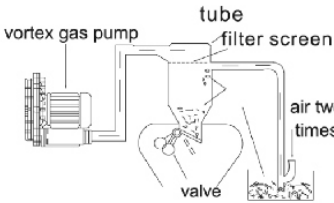
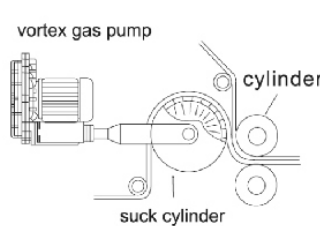
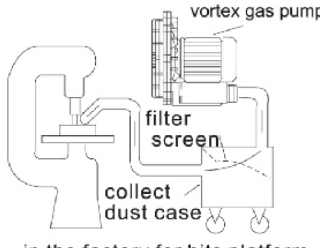
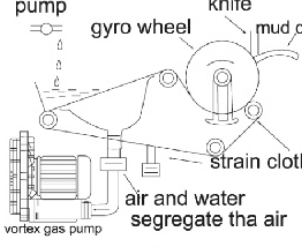
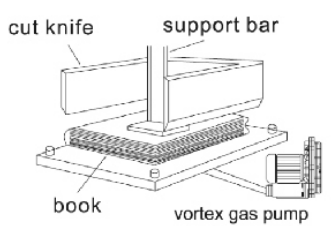
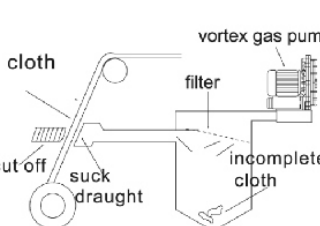
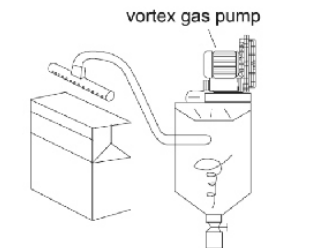
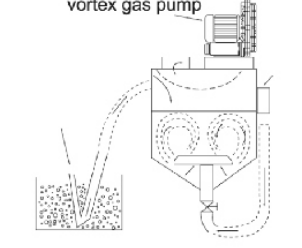
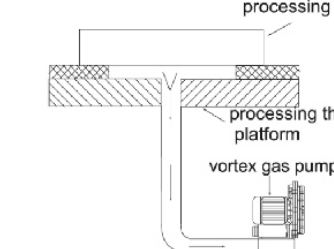
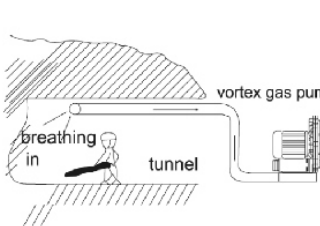
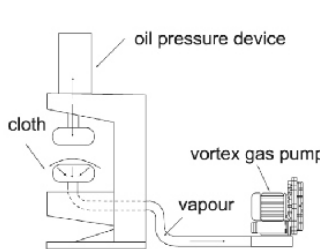
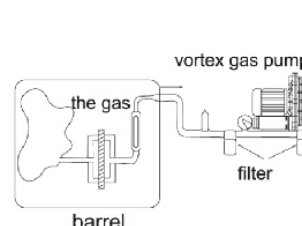


NO.	Spare part	Material	NO.	Spare part	Material
01	Pump cover	Zinc alloy	11	Silencer tube	Zinc alloy
02	Impeller	Zinc alloy	12	Joint (flange)	Iron
03	Pump body	Zinc alloy	13	Rotor	Iron
04	Bearing	Bearing Steel	14	Motor	Zinc alloy
05	Bearing cover	Iron	15	Terminal box	Zinc alloy
06	Foot Base	Iron	16	Motor Case	Zinc alloy
07	Oil seal	Rubber	17	Motor back cover	Zinc alloy
08	Gasket shim	Non-asbestos	18	Motor fan	Plastic
09	Silencer Iron Mesh	Iron	19	Motor fan cover	Iron
10	Silencer Sponge	Sponge	20	Supporting tube	Iron

6. Blower's Functional Applications

<p>The gas and heavy oil gush out firing</p>  <p>vortex gas pump high-pressure air fuel</p> <p>high wind pressure (2.000mmAq) and enough wind amount, can ligh tenning your reliance to the air com press horizontal.</p>	<p>Wash the bottle machine and dries up</p>  <p>dries up the water droplet after drops of water empty bottles vortex gas pump</p> <p>empty bottle of beverage are water-washed, suitable for the food industry .</p>	<p>Can collect all the bits automatically after cut the Paper</p>  <p>colth piece blow and send off cut kniferoll and transfer vortex gas pump</p> <p>plastic, cloth , paper, etc., out.</p>	<p>It is dry to use the air knife</p>  <p>vortex gas pump the circuit base plate of dust drop of water printed circuit board</p> <p>electron industry can make use of forced draught blower to blowdown the small dust and water droplet.</p>
<p>Air cushion</p>  <p>knife paper vortex gas pump paper air ball</p> <p>increasing the buoyancy, easy to move.</p>	<p>The domestic animal excrement ferments' fierceness gas</p>  <p>vortex gas pump 1.5~1.8m saw-dust or rice husk discharging holes</p> <p>entering domestic animal's excrement trough flirtatiously with the high-pressure air, it is exposed to the area to increase domestic animal excrement and air. Also suitable for the sewage disposal of the public hazards .</p>	<p>Subpoena transport</p>  <p>examine cashier medicine office vortex gas pump</p> <p>it regards air as motive force to be fast also really to transport file.</p>	<p>The electrolytic liquid mix round</p>  <p>vortex gas pump electrolytic trough</p> <p>makes use of air to stir the electrolytic trough , make the electrolyte circulate, and repel adhering to the bubble and make electroplate rapidly, the result is even . (export holes with the best of 4mm)</p>
<p>The oxygen supply in breed aquatics</p>  <p>vortex gas pump oxyge</p> <p>water in the pool .</p>	<p>Puncher machine</p>  <p>vortex gas pump molding product</p> <p>convenient to is it press product of taking shape after to take out.</p>	<p>Powder body transport</p>  <p>powder body vortex gas pump control valve compress air spray head</p> <p>powder body grains of body ,etc. air of raw materials transport.</p>	<p>Combustion-supporting discharge with the waste gas of the incinerator</p>  <p>air vortex gas pump wind knife</p> <p>atmdspherical help blaze and exhaust</p>
<p>The exhaust gas blows smoking</p>  <p>vortex gas pump wind knife</p> <p>discharging rapidly by the scattered exhaust gas that appears, so as not to cause pollution.</p>	<p>Wash the car and dry up</p>  <p>vortex gas pump wind knife</p> <p>blow the moisture content to dry after having car machine washing .</p>	<p>Print and force dryness</p>  <p>vortex gas pump heater wind knife warm wind</p> <p>enabling the printing color to dry fast.</p>	<p>Dry up after cleaning</p>  <p>vortex gas pump wind knife</p> <p>moisture content or oil gas after cleaning break away from articles rapidly.</p>

7. Suction's Functional Applications

<p>The sucking of the printing machine of network edition</p>	<p>Eject the exhaust gas and dust produced while welding drawing</p>	<p>The weave cotton machine suck silk</p>	<p>Photo-engraving</p>
 <p>vortex gas pump print</p> <p>printed matter utilize the pressure of sucking to be regular, in order to make it easy for print.</p>	 <p>vortex gas pump filter of waste gas filtering case welding rod blast pipe</p> <p>acuum way is arranged to the elsewhere, ensure operators to be healthy.</p>	 <p>yarn dehydrate the hole vortex gas pump</p> <p>absorb the moisture content and regular end of a thread, improve the quality and efficiency of the products.</p>	 <p>crooked film by the board darkroom vortex gas pump</p> <p>make use of vacuum suction to keep films, make it smooth, is suitable for photo-engraving industry.</p>
<p>The powder body transports</p>	<p>Print suck</p>	<p>Industry hoover</p>	<p>Vacuum dehydrate</p>
 <p>vortex gas pump tube filter screen valve air two times</p> <p>granular object, for instance plastic raw materials, etc., can make use of the atmospheric pressure (blows) or the vacuum suction to accomplish the task of sending.</p>	 <p>vortex gas pump cylinder suck cylinder</p> <p>vacuum suck printing paper is it transfer by molding.</p>	 <p>vortex gas pump filter screen collect dust case</p> <p>in the factory for bits platform of remaining etc., it is the all right it have Fig. it have the clean the ways.</p>	 <p>pump gyro wheel knife mud do strain cloth vortex gas pump air and water segregate the air</p> <p>the paper pulp dehydrates, pollution dehydrates, the cloth dehydrates etc.</p>
<p>Make books machine</p>	<p>Incomplete cloth deal with</p>	<p>Ox milk paper carton filling machine</p>	<p>Bean curd machinery</p>
 <p>cut knife support bar book vortex gas pump</p> <p>cut off books when keep sucking.</p>	 <p>cloth vortex gas pump filter incomplete cloth cut off suck draught</p> <p>cloth cutting treatment</p>	 <p>vortex gas pump</p> <p>ox milk vacuum that box is fill attract and utilize.</p>	 <p>vortex gas pump</p> <p>tracting the soybean wheel to give, clean and use to cleaning the trough.</p>
<p>Keeping processing</p>	<p>Defence works scene</p>	<p>Iron cloth machine</p>	<p>The gas resolves</p>
 <p>processing processing the platform vortex gas pump</p> <p>block of processing thing, plastic, etc. using regularly for some un-magnetism object's fixing.</p>	 <p>vortex gas pump breathing in tunnel</p> <p>for remove the part of the tunnel and narrow and small part's dust and poisonous gas.</p>	 <p>oil pressure device cloth vortex gas pump vapour</p> <p>send to discharge the vapour when ironing cloth.</p>	 <p>vortex gas pump the gas barrel filter</p> <p>using the attraction of the gas resolves device.</p>