



B SERIES AIR SUSPENSION TURBO BLOWER



Space Technology



Low noise



Oil-free



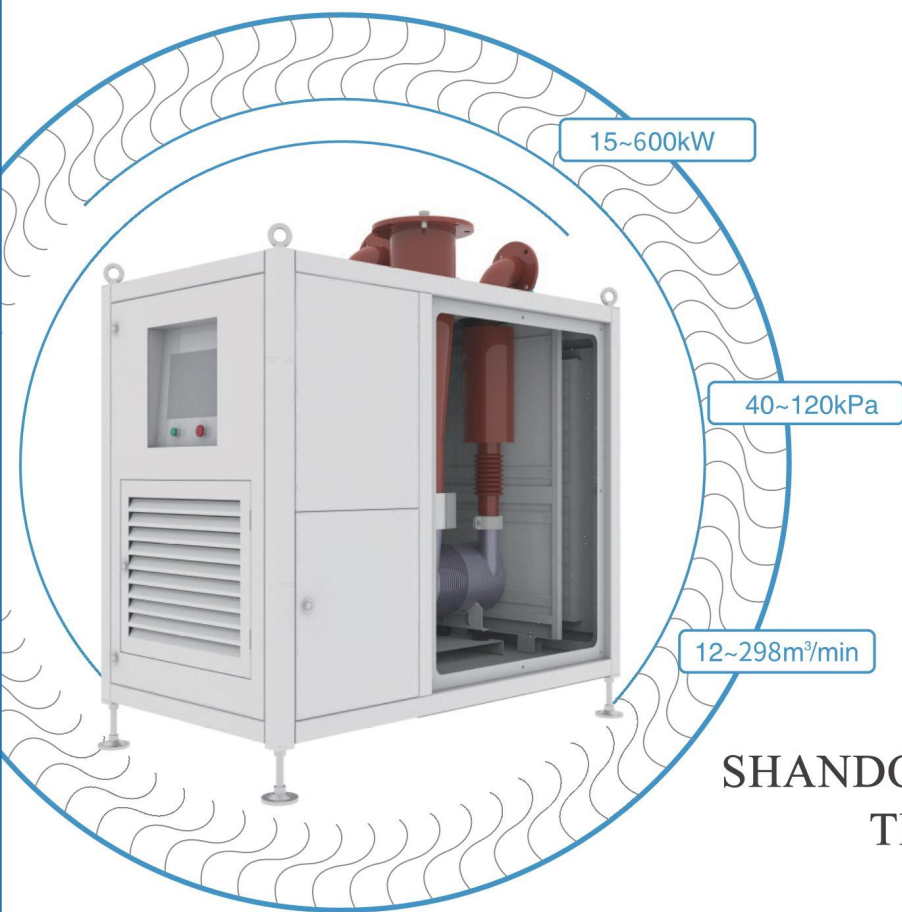
Energy conservation



Simple maintenance



Intelligent control



SHANDONG DACHENG MACHINERY
TECHNOLOGY CO.,LTD

Company Profile

Shandong Dacheng Machinery Technology Co., Ltd. is a professional large-scale manufacturer of all types of blowers, integrating development and production together. Our main products include air suspension turbo blower, roots blower, roots vacuum pump, rotary blower and multistage centrifugal blower. Our company was established in 2004, and we have many years of history in the blower industry. Located near Jinan, we enjoy convenient water, land and air transportation.

Dicheng B series air suspension turbo blower is a processing base developed and established in cooperation with Beijing Zhituobo Technology Co., Ltd. The core components (permanent magnet synchronous motor) and ultra-high speed controller are independently developed, which greatly reduces the cost. The air capacity is 9 m³/min to 648 m³/min and the pressure is 40 kPa to 120 kPa. The advantages of air suspension turbo blower are long service life, small volume, easy maintenance, high efficiency and energy saving, intelligent control, oil-free and low noise.

Our company employs more than 300 workers; through the efforts of our entire staff, we have become the leading manufacturer of blowers in China. DACHENG people have continuously tried to improve product quality, purchase large-scale precision production and testing equipment more than 20 sets, introducing CNC machining center, Large CNC milling machine, Dynamic balance detector and etc. Moreover, we have a CAD Design Center, giving our company good technical capabilities. Our annual production capability is 10 thousand sets of blower.

Currently, DACHENG blower is already exported to America, Australia, Korea and 20 other countries and regions. Our company has always focused on research, development and innovation, and has recently developed new multistage centrifugal blower and now is developing air suspension turbo blower. Till now, we attained ISO9001 quality management certification and CE safety certification.

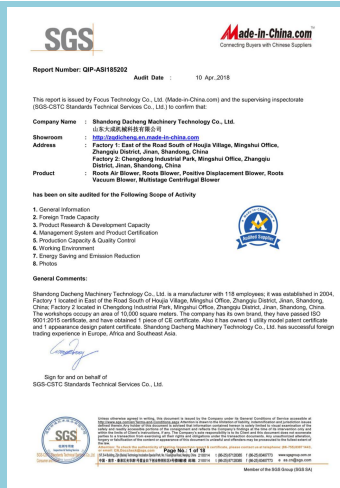
Dacheng Machinery will initiate the second phase of our development strategy. Our company regards “reasonable prices, efficient production time and good after-sales service” as our tenet. We hope to cooperate with more customers for mutual development and benefits. We welcome potential buyers to contact us.



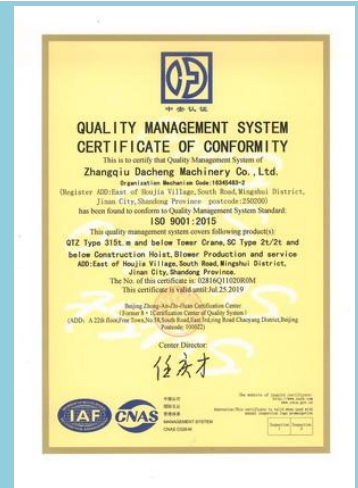
Qualifications



CE Certificate-1



SGS audited supplier verification



ISO9001 Certificate



Products adopt international standard approval certificate



Product execution standard registration certificate



Certificate of inspection of products quality



Certificate of measurement qualification



Jinan City Famous Brand



Jinan City identified enterprise technology center



Shandong Provincial Trustworthy company

Blower Specifications



Model meaning	B	Air suspension turbo blower
	75	Power (Kw)
	6	Pressure (x10Kpa)

Model		B15	B20	B30	B40	B50	B60	B75	B90	B110	B130	B150	B175	B200	B250	B300	B400	B500	B600	
Parameter		(m³/min)																		
Pressure (Kpa)	40	14	21	33	45	55	66	80	96	119	141	162	198	215	270	324	430	540	648	
	50	11	16	26	36	45	54	69	83	108	129	140	172	192	245	302	384	490	604	
	60	9	13	22	31	40	49	64	77	92	109	126	147	167	210	255	334	420	510	
	70		11	19	28	36	43	55	67	81	95	112	130	149	189	226	298	378	452	
	80			17	25	31	38	50	61	72	87	104	120	130	168	205	260	336	410	
	90				23	28	34	44	54	64	80	94	107	120	151	186	240	302	372	
	100					25	31	40	50	59	74	86	100	112	141	179	224	282	358	
	110						29	37	45	55	68	79	91	101	134	161	202	268	322	
	120							34	42	51	63	74	83	94	125	149	188	250	298	
Total power (Kw)		15	20	30	40	50	60	75	90	110	130	150	175	200	250	300	400	500	600	
Shaft power (Kw)		12	17	26	35	44	53	68	82	100	118	136	159	183	225	273	366	450	546	
Weight (Kg)		220	330	350	380	650	690	750	800	850	950	1000	1300	1400	1700	1780	2400	3000	3200	
Size	Length (mm)	1000	1200			1600			1700			1900		2000		2100		3500		
	Width (mm)	600	700			900			1000			1200		1400		1500		1800		
	Height (mm)	800	1100			1300			1400			1700		1900		2000		2100		
Outlet Dia. (DN)		100	150			200			250			300		350		400		600		
Filter qty.		2	3			6					8		12		14		18			
Noise (DB)		75	78								80									
Cable Type		3x10 +1x6	3x16 +1x10	3x25 +1x10	3x35 +1x16	3x50 +1x16	3x70 +1x25		3x95 +1x35		3x120 +1x35	3x150 +1x50	3x185 +1x50		3x240 +1x70		3x (240x2) +1x95			

Remarks:

1. Rated flow measurement conditions: 101.325kpa, 20 °C and 60% humidity.
2. Noise test conditions: the test site shall be a place without reflection conditions except the ground, and measured at a distance of 1m from the blower.
3. Pressure grade of outlet pipeline flange: PN10.
4. Flow error range: + - 5%.

Core Technologies

01 Air Bearing

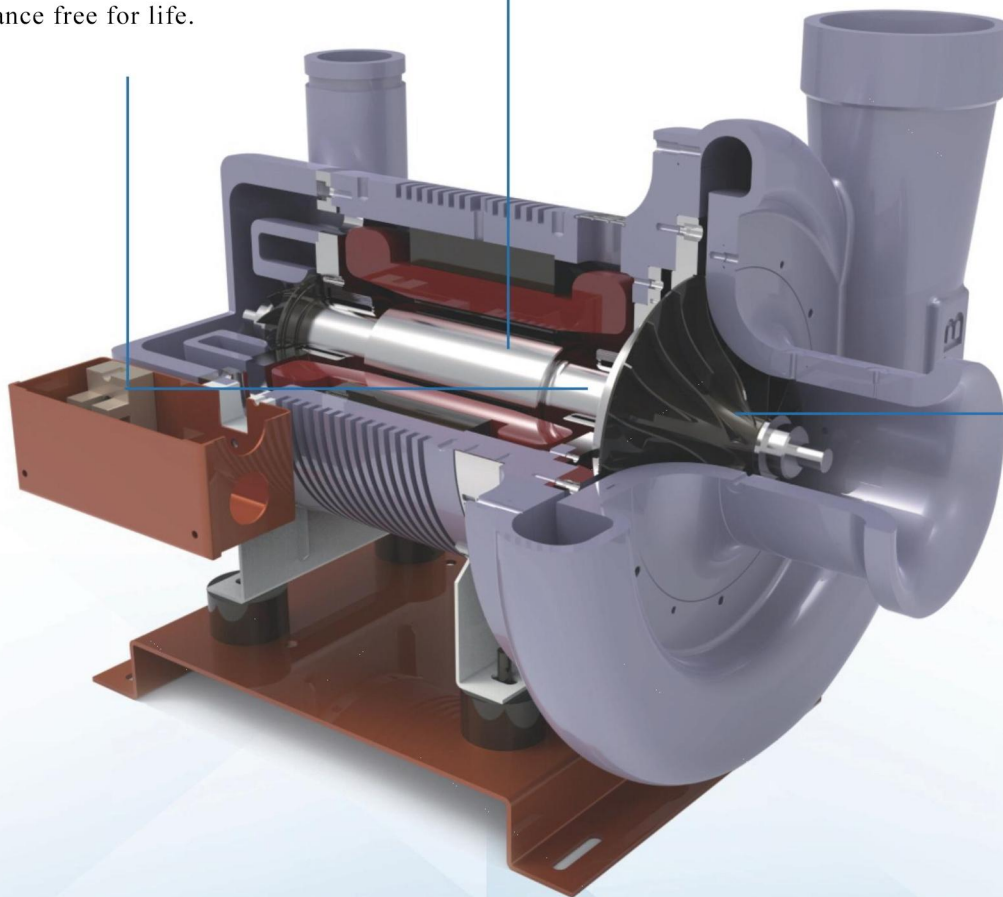


- Minimal friction, stable operation and no crawling;
- High running speed, maximum speed 1000000rpm;
- No heating;
- Applicable to the temperature range of - 180 ~ 600 °C;
- No oil, no pollution to the environment;
- Maintenance free for life.

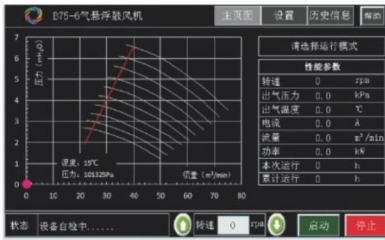
02 High-speed permanent Magnet Synchronous Motor



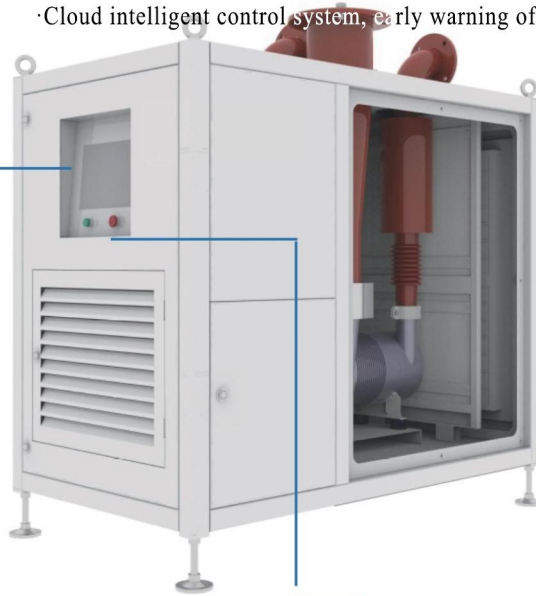
- The maximum speed can reach 400000 rpm;
- 40000 times of trouble free start and stop;
- The motor efficiency can reach more than 98%;
- Simple structure and small volume;
- The motor is directly connected with the impeller without power transmission loss.



05 Cloud Intelligent Control System



- Equipped with touch screen, which can adjust and view the equipment operation status on site;
- It has anti surge and shock protection function to ensure the safe operation of the product;
- Provide a variety of operation modes, which can intelligently adjust the pressure and flow according to the changes of external factors;
- Support a variety of communication protocols to realize real-time remote detection and control of equipment operation status in the whole process;
- Full life cycle data storage;
- Cloud intelligent control system, early warning of equipment failure.



04 High-speed Vector Controlled Inverter

- Equipped with special high-speed vector control frequency converter for permanent magnet synchronous motor, the high-speed rotation of the motor can be quickly adjusted through frequency change;
- Small pneumatic current;
- The efficiency of frequency converter is greater than 97%;
- Accurate speed control.

03 Aviation Three-dimensional Flow Centrifugal Impeller



- Three dimensional flow backward bending pneumatic design, high efficiency and wide working range;
- Five axis linkage, high-speed and high-precision milling;
- High strength aviation aluminum material is selected, and the surface is hard anodized, with high strength, good corrosion resistance and service life of more than 20 years;
- According to the actual needs of users, special high-efficiency impeller can be designed to pursue the best energy-saving effect.



Product Features

Long life: No friction, service life greater than 20 years.

Small size: Integrated design, the volume is only $1/3 \sim 1/5$ of the traditional blower, simple installation, no foundation and direct placement.

Easy maintenance:

Only clean the filter cotton regularly according to the system prompt.

Energy saving:

Integrating high-speed permanent magnet synchronous motor, high-efficiency centrifugal impeller and air bearing, and adjusting the operation state of the blower according to the load, it can save 30% ~ 50% energy compared with the traditional blower.

Cloud intelligent control:

The user's mobile terminal and PC terminal are managed at the same time, and all data can be returned remotely for consent management and analysis.

Oil free: Adopt advanced air bearing, no friction, no need to add lubricating oil.

Low noise: Low noise centrifugal impeller design, no mechanical vibration, noise less than 80 dB.



Markets



Pneumatic conveying



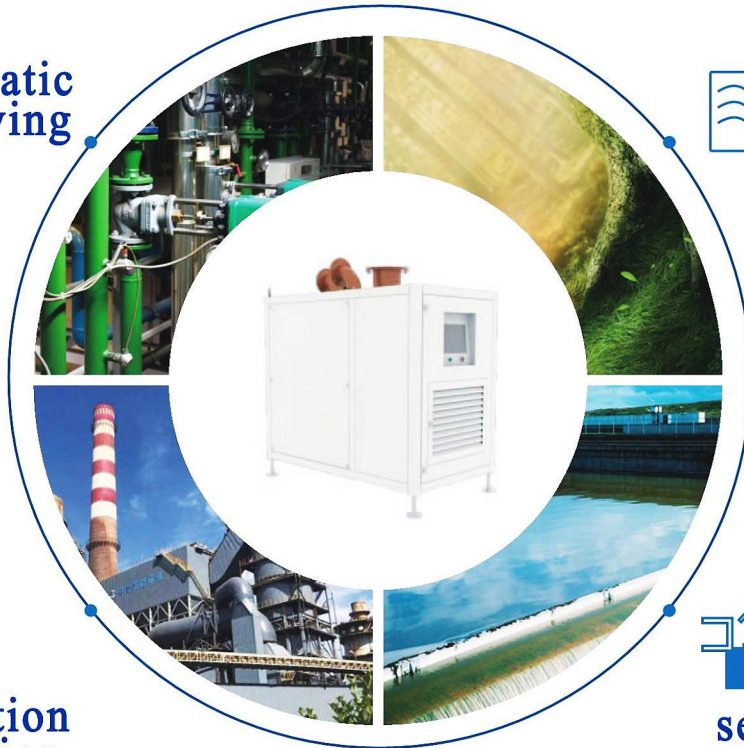
Dry and fermentation



Desulfurization and denitration

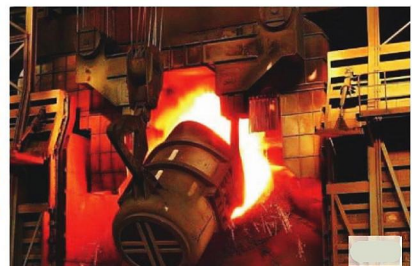


sewage treatment



Industrial Applications

Air suspension blowers are used in environmental protection industry, sewage treatment, cement industry, steel smelting, printing and dyeing, textile, papermaking, petroleum, chemical industry, electric power, biomedicine, food, brewing, chemical fertilizer, dust removal and back blowing, oxygen production, aquaculture and other industries.



Energy Saving Comparison

Energy saving comparison of Air suspension turbo blower - Guangling Jinyu Cement Co., Ltd

In recent years, in order to reduce production costs, Jinyu group has taken the transformation of blower as a key work. Since 2018, the group has taken Guangling Jinyu Cement Co., Ltd. as the pilot of transformation, and successively purchased 5 air suspension turbo blowers from our company to replace the kiln head primary air blower, kiln tail coal feeding blower, homogenization silo blower and sewage plant aeration blower in the cement plant. The pilot has become a model of air suspension turbine blower in the energy-saving transformation of blower in cement industry.

Compared with the actual measured data, the modified air suspension turbo blower saves 34.48% energy than the original roots blower.

Taking the primary air blower at the kiln head as an example, the measured energy-saving data are compared:

Comparison items	Roots blower	Air suspension turbo blower
Number of operating units (set)	2 ((1 use and 1 standby))	1
Actual power (KW)	58	38
Annual electricity charge (CNY)	406464	266304
Annual electricity saving (CNY)	140160	
Energy saving rate (%)	34.48%	

The electricity charge is RMB 0.008 per kWh.

Before



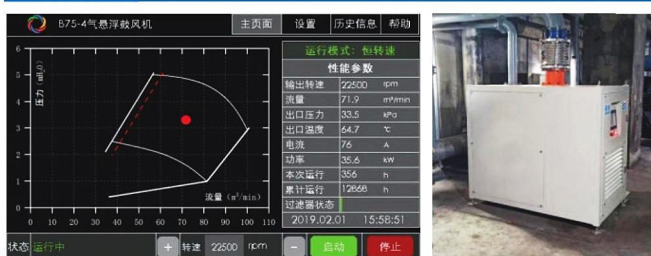
历史数据查询

开始时间(S): 2018/9/12 4:35:57 结束时间(E): 2018/9/13 5:35:57 采样类型(T): 原始值 采样周期(C): 3600000 毫秒

一次风机 更换前功率 9月12日

设备	类型	质量	时间	数值
anbiao.YT1~16-PS	单精度浮点数	优	2018-09-12 15:09:15.006	55.04
	单精度浮点数	优	2018-09-12 15:09:56.540	55.12
	单精度浮点数	优	2018-09-12 15:10:38.660	55.2
	单精度浮点数	优	2018-09-12 15:11:15.211	55.04
	单精度浮点数	优	2018-09-12 15:11:41.590	55.2
	单精度浮点数	优	2018-09-12 15:12:02.042	55.2
	单精度浮点数	优	2018-09-12 15:12:39.451	54.88
	单精度浮点数	优	2018-09-12 15:13:41.383	54.88
	单精度浮点数	优	2018-09-12 15:14:23.019	54.88
	单精度浮点数	优	2018-09-12 15:14:50.413	54.88
	单精度浮点数	优	2018-09-12 15:15:24.031	54.96
	单精度浮点数	优	2018-09-12 15:15:57.646	54.96
	单精度浮点数	优	2018-09-12 15:16:41.314	54.8
	单精度浮点数	优	2018-09-12 15:17:07.678	54.88
	单精度浮点数	优	2018-09-12 15:17:56.366	54.96
	单精度浮点数	优	2018-09-12 15:18:50.187	55.04
	单精度浮点数	优	2018-09-12 15:19:29.795	55.12
	单精度浮点数	优	2018-09-12 15:21:22.412	55.12
	单精度浮点数	优	2018-09-12 15:22:29.367	55.12

After



历史数据查询

开始时间(S): 2018/10/10 20:32:33 结束时间(E): 2018/10/13 21:32:33 采样类型(T): 原始值 采样周期(C): 3600000 毫秒

风机更换后 10月10日

设备	类型	质量	时间	数值
anbiao.YT1~17-PS	单精度浮点数	优	2018-10-10 21:12:13.696	35.68
	单精度浮点数	优	2018-10-10 21:12:39.046	35.76
	单精度浮点数	优	2018-10-10 21:13:07.438	35.72
	单精度浮点数	优	2018-10-10 21:13:38.873	35.56
	单精度浮点数	优	2018-10-10 21:14:35.657	35.68
	单精度浮点数	优	2018-10-10 21:15:08.167	35.6
	单精度浮点数	优	2018-10-10 21:15:42.019	35.72
	单精度浮点数	优	2018-10-10 21:16:26.651	35.6
	单精度浮点数	优	2018-10-10 21:16:59.099	35.72
	单精度浮点数	优	2018-10-10 21:17:27.491	35.48
	单精度浮点数	优	2018-10-10 21:17:58.925	35.56
	单精度浮点数	优	2018-10-10 21:18:25.289	35.64
	单精度浮点数	优	2018-10-10 21:18:47.597	35.64
	单精度浮点数	优	2018-10-10 21:19:13.961	35.72
	单精度浮点数	优	2018-10-10 21:19:45.395	35.8

Energy Saving Comparison

Energy saving comparison of Air suspension turbo blower - Jiaozuo Huakang Sugar Alcohol Technology Co., Ltd

Jiaozuo Huakang Sugar Alcohol Technology Co., Ltd. purchased a B100-6 air suspension turbo blower from our company in May 2018 in order to achieve many transformation purposes such as energy conservation and emission reduction, noise reduction and production cost reduction.

Compared with the measured data, the energy-saving rate of the modified air suspension turbo blower is 50.13% higher than that of the original roots blower.

The measured energy-saving data are compared:

Comparison items	Roots blower	Air suspension turbo blower
Number of operating units (set)	3 ((2 use and 1 standby))	1
Actual power (KW)	149	74.3
Annual electricity charge (CNY)	913668	455607
Annual electricity saving (CNY)	458061	
Energy saving rate (%)	50.13%	

The electricity charge is RMB 0.007 per kWh.

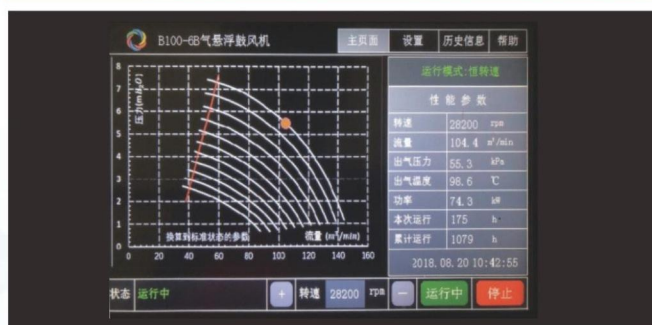
Before



焦作市华康糖醇科技有限公司原使用罗茨鼓风机3台（2用1备），原设备具体参数如下：

设备名称	额定风量	额定功率	额定风压
1# 罗茨鼓风机	75m ³ / min	110kW	58.8kPa
2# 罗茨鼓风机	75m ³ / min	110kW	58.8kPa
3# 罗茨鼓风机	75m ³ / min	110kW	58.8kPa

After



Engineering Cases

(sewage treatment industry)



Engineering Cases

(pneumatic conveying)



FAQ

1. What's the information should I provide when inquiry?

A: Air capacity

B: Pressure

C: Application

D: Use environment(Temperature, atmospheric pressure)

E: Do you need motor?

Or other specials you give us will be more appreciated.

2. What is your warranty?

Our warranty is 12 months after received the roots blower. During the warranty period, replace the damaged parts for free of charge. Out warranty period, to provide timely, high-quality technical services and price concessions spare parts to ensure continuous safe and high-quality equipment operation.

3. How long is the service life of roots blower?

In normal use environment

A- Service life of blower is more than 10 years.

B- Service life of Impeller is more than 60,000 hours.

C- Service life of bearing is more than 50,000 hours.

D- Service life of gear is more than 60,000 hours.

Contact Us

Shandong Dacheng Machinery Technology Co., LTD

Address: Zhangqiu Mingshui, Jinan City, Shandong province, China 250200.

Website: <http://www.chinadicheng.com>

Tel: +86 0531-83216898

Fax: +86 0531-83216898

Cellphone: +86 013188890202

WhatsApp: +86 013188890202

Skype: [live:zqdicheng](https://www.skype.com/live?contact=zqdicheng)

Email: zqdicheng@chinadicheng.com