

China

Aipu

T/T, L/C

Centrifugal Fan

# Permanent Magnetic Levitation Blower Synchronous Motor Wastewater Treatment

## **Basic Information**

- Place of Origin:
- Brand Name:
- GF175 Model Number: 1
- Minimum Order Quantity:
- Price: Negotiable Export Standard Packaging
- Packaging Details:
- Payment Terms:



### **Product Specification**

- Typology:
- Flow Range:
- Boost:
- Bear:
- Efficiency:
- Highlight:
- 82-208m<sup>3</sup>/min 40-120kPa Autonomous Domestic Magnetic Bearings 77% permanent magnetic levitation blower, magnetic levitation blower synchronous,

permanent magnetic levitation bearings

Our Product Introduction

## Magnetic Levitation High Efficiency Permanent Magnet Synchronous Motor Wastewater Treatment

### **Product Description**

1. Wastewater treatment

The magnetic levitation high-speed centrifugal blower can be widely used in all kinds of sewage treatment equipment, such as. Sewage aeration system

Bio-reactor blower Sludge drying equipment

The non-contact magnetic levitation technology, high-efficiency motor drive and optimised flow field design can effectively meet the needs of wastewater treatment equipment for high-efficiency, low-noise, reliable blowers.

2. Industrial Ventilation

This product can also be used in various industrial ventilation systems, such as.

Ventilation and dust removal in steel, chemical and other factories

Ventilation in mines, tunnels and other environments.

Ventilation systems in warehouses, workshops, etc.

Its excellent performance indicators, such as high efficiency, low noise, reliability, etc., can provide quality solutions for industrial ventilation systems.

3. HVAC system applications

Maglev high-speed centrifugal blowers are also widely used in building HVAC systems, such as

Central air-conditioning systems in large shopping malls and office buildings.

Fresh air systems in hospitals, airports and other public places.

Ventilation systems for underground works such as subways and tunnels

Its excellent energy efficiency and reliability can bring significant energy saving and safety for HVAC system.

### **Performance Features**

#### Energy saving and high efficiency

High-speed permanent magnet motor and high-efficiency ternary flow impeller are directly coupled. More than 30% energy-saving than traditional Roots fan. More than 20% energy-saving than multi-stage centrifugal blower.

More than 10% energy-saving than single-stage high-speed centrifugal blower.

#### Low noise

Adopting self-balancing technology, the vibration amount of magnetic levitation bearing is one order of magnitude smaller than that of traditional bearing and no friction. At the same time to take the active damping design, stable operation, body vibration is very small, fan noise at 80dB (A) or so.

#### Maintenance-free

Integrated design, skid mounted structure, easy installation, one key start and stop. Daily operation, free of mechanical maintenance, only need to replace the filter.

#### Intelligent control

Adopting PLC+GPRS/3G/4G, it can monitor the running status of the fan in real time, and realise the intelligent regulation of wind volume, wind pressure, rotational speed, etc. as well as manual mode control. In case of failure, it can also be remotely repaired and debugged.

### **Magnetic Levitation Blower Series Selection**

Product Series	GF 50	GF 75	GF 100	GF125	GF 150	GF175	GF 200	GF 250	GF 300	GF350	GF 400
Motor power(KW)	50	75	100	125	150	175	200	250	300	350	400
Boost (kPa)	Inlet flow rate (m <sup>3</sup> /min) 1atm 20°C										
40	55	86	110	156	168	208	219	270	323	425	443
50	50	74	100	132	149	185	198	247	297	375	396
60	43	64	85	113	127	158	169	210	253	320	356
70	37	55	74	99	111	140	148	184	222	280	312
80	33	49	65	86	97	120	129	160	193	240	271
90	28	44	57	75	84	105	112	139	167	210	235
100			52	68	77	96	102	127	153	190	215
110					71	88	95	118	142	175	199
120	1		i —	1	66	82	88	110	132	165	185
130			i —				1		124	152	165
150											148
sizes(mm)	1700×1500×1 480		1850×1700×1780			2150×1750×1700			2370×2260×2080		
Weight (kg)	800	1000	1200	1350	1500	1800	2000	2500	2800	3200	3500

When the use conditions of the blower and the above table does not match, the need for performance conversion, our

company can be non-standard design according to user requirements to meet the specific needs of users of various working conditions.

## core technology

#### Core Technology with independent intellectual property right-Magnetic Bearing design and control technology

With independent intellectual property rights of 5 degrees of freedom magnetic levitation bearing technology, can ensure that when the equipment is energised, the rotor system can be levitated by electromagnetic force. The controller ensures more than 10,000 times of signal acquisition per second and gives real-time correction signals synchronously to ensure the stable levitation of the high-speed rotor.

With redundant power supply system and protection bearings to achieve multiple protection, will not cause any damage due to sudden power failure or fault shutdown.

