

AIRUS TURBO BLOWER FOR ALL INDUSTRIES

HIGH EFFICIENCY/ENERGY SAVING/OIL-FREE
/MAINTENANCE-FREE/LOW NOISE



- MAGNETIC BEARING BLOWER
- MAGNETIC BEARING VACUUM PUMP
- MAGNETIC BEARING AIR COMPRESSOR

- AIR FOIL BEARING BLOWER
- AIR FOIL BEARING VACUUM PUMP



Committed to become a full industry chain
suspension equipment manufacturer in China even Globally

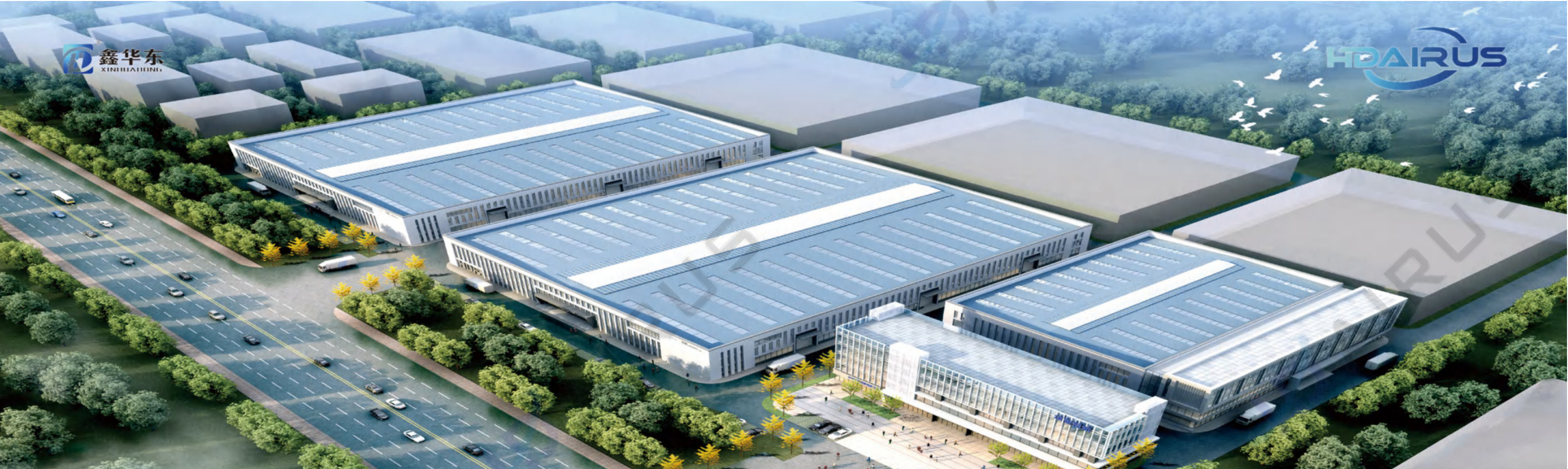
TURBO AIR BLOWER

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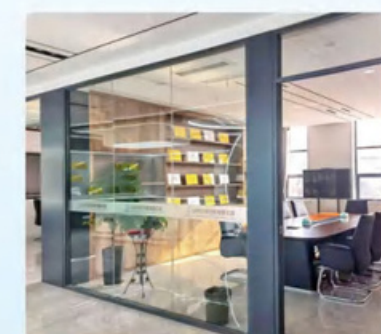
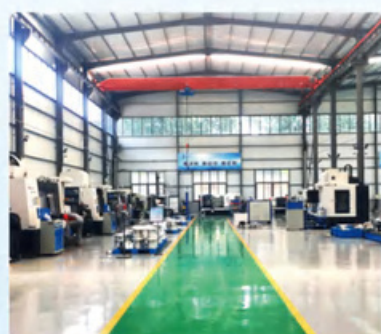
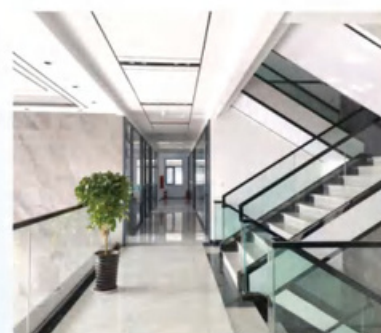
TURBO AIR BLOWER



COMPANY PROFILE

SHANDONG HUADONG BLOWER CO.,LTD WAS ESTABLISHED IN 2010 AND HAS BEEN ENGAGED IN BLOWER BUSINESS SINCE 2007. IT IS LOCATED IN ZHANGQIU DISTRICT, JINAN CITY, SHANDONG PROVINCE, WITH A REGISTERED CAPITAL OF 100 MILLION CHINESE YUAN, OWNING 2 PLANTS WHICH EACH COVERING AN AREA OF 100,000 M2 AND EQUIPPED WITH MORE THAN 100 CNC MACHINES. CURRENTLY WE HAVE MORE THAN 300 EMPLOYEES, INCLUDING 60 R&D PERSONNEL WITH DOCTORS AND MASTERS AS CORE TECHNICANS.

THE COMPANY' S PRODUCTS ARE CHARACTERIZED BY HIGH EFFICIENCY, ENERGY SAVING AND GREEN ENVIRONMENTAL PROTECTION, MAINLY INCL. HMGB MAGNETIC SUSPENSION HIGH-SPEED MOTOR, MAGNETIC BEARING AND BEARING CONTROL SYSTEM, HMGB MAGNETIC BEARING CENTRIFUGAL BLOWER & TURBINE VACUUM PUMP, HMC MAGNETIC BEARING CENTRIFUGAL COMPRESSOR, AIR FOIL BEARING, HKB AIR FOIL TURBO BLOWER, MVR STEAM COMPRESSOR, HDL, HDGR, HDR 2LOBE ROOTS BLOWER, HDSR, HDLH, HG 3 LOBE ROOTS BLOWER





Magnetic Bearing Series



High Efficiency Centrifugal Impeller

- Using three-dimensional flow theory design and parameter optimization, the impeller efficiency is maximized and working area is wide.
- The impeller is made of high-strength forged aluminum or titanium alloy with strong deformation resistance.
- Each model of impeller we design has undergone long-term bench experiments to ensure its efficient and reliable aerodynamic performance. The impeller variable efficiency can reach 85%, and it has passed 115% overspeed test. It adopts VFD mode, cancels guide vane adjustment, and has a smaller starting current but wider adjustable range of the blower



High-power & High-speed PMSM

- Adopt high-speed and high-power PMSM.
- Small size, Light in weight but high power density motor.
- Motor can rotate at max 60,000 rpm.
- Can achieve stepless speed control.
- Motor rotor and impeller are coupled directly to reduce intermediate energy consumption, low operating failure rate and high transmission efficiency.



Magnetic Bearing

- No wear/No lubrication required, high-speed operation possible.
- Can monitor rotor and bearing status.
- No lubrication required, reducing case size and weight.
- Semi-permanent lifespan, no maintenance required.
- Adopts 5-DOF active magnetic bearing technology, using electromagnetic force to achieve rotor suspension.



Displacement Sensors

- The eddy current position sensor independently developed and produced by the company can achieve high-frequency and high-precision accurate detection.
- It has excellent performance of anti-interference, high temperature resistance, impact resistance, and can adapt to various harsh environments.



Magnetic Bearing Centrifugal Blower



Magnetic bearing high-speed centrifugal blower is a new design of high-efficiency, energy-saving and environmental friendly that integrates magnetic bearing technology and high-speed motor technology into traditional blowers. It has advantages of simple structure, high efficiency, intelligence, integration, simple operation and maintenance, and low operating costs. Widely serving for sewage treatment (municipal, industrial and others), material conveying, food and medicine, textile and dyeing, leather and paper making, glass manufacturing, steel metallurgy, flue gas desulfurization etc., with significant energy saving effects.

Parameter Table

Magnetic Bearing Turbo Blower										
Model	HMGB55	HMGB75	HMGB90	HMGB110	HMGB132	HMGB150	HMGB200	HMGB250	HMGB300	HMGB400
Flow range (m ³ /min)										
Pressure										
40kpa	11.5-66	11.5-85	28-110	28-135	28-150	40-186	52-216	69-204	82-210	87-420
60kpa	13.5-47	13.5-66	31-77	31-95	31-105	44-130	57-170	78-213	89-247	116-340
80kpa	15-36.5	15-45.5	35-60	35-75	35-80	47-103	62-135	86-170	97-203	145-260
100kpa	16.5-31	16.5-42.5	39-50	39-61	39-64.5	51-81	67-107	94-140	105-165	164-220
120kpa	/	30-37	40-44	40-47	40-47	54-70	75-80	100-121	113-140	148-183

Remark: HMGB55, 55 means 55kw



Magnetic Bearing Centrifugal Compressor



Magnetic bearing centrifugal compressor is a new design of high-efficiency, energy-saving and environmental friendly that integrates magnetic bearing technology and high-speed motor technology into traditional compressors. Oil Free, Friction Free, Simple Structure, High Efficiency, Intelligence, Intergration. With significant advantages of simple operation and maintenance, low operating cost, it can be widely used in pharmaceutical, textile, glass, power plant, mining, food, fermentation, papermaking etc. industries. Energy saving effect is significant.

Parameter Table

Magnetic Bearing Centrifugal Compressor										
Model	HMC 2.0-110	HMC 3.0-110	HMC 2.0-132	HMC 2.0-160	HMC 3.0-160	HMC 2.0-180	HMC 3.0-180	HMC 2.0-200	HMC 2.0-200	HMC 3.0-250
Rated Flow Rate (m ³ /min)	43.2	33.2	42	60.3	46.3	60.8	47.9	65.2	52.8	56.2
Rated Pressure (bar)	2.0	3.0	2.0	2.0	3.0	2.0	3.0	2.0	3.0	5.0
Pressure Range (bar)	1.0-2.0	1.5-3.0	1.0-2.5	1.0-2.0	1.5-3.0	1.0-2.5	1.5-3.5	1.0-2.5	1.5-3.5	2.0-5.0
Rated Power (Kw)	110	110	132	160	160	180	180	200	200	250



Magnetic Bearing Turbine Vacuum Pump



Shandong Huadong Magnetic bearing turbine vacuum pump is a non-contact, frictionless, high-efficiency and energy-saving intelligent environmental protection equipment. Serving for papermaking, metallurgy, petroleum, chemical, electricity, food, semiconductor, medicine etc fields. The average power saving rate >40%.

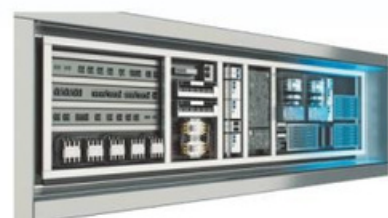
Magnetic bearing turbine vacuum pump consists of core components such as five-degree of freedom magnetic bearings, high-speed PMSM, high-efficiency centrifugal impellers, high-precision rotors and dedicated control system.

Parameter Table

Magnetic Bearing Turbine Vacuum Pump										
Model	HMVB30	HMVB45	HMVB55	HMVB75	HMVB110	HMVB150	HMVB200	HMVB315	HMVB400	HMVB500
Vacuum Pressure (kPa)	10~70	10~70	10~70	10~70	10~70	10~70	10~70	10~70	10~70	10~70
Flow Rate (m ³ /min)	36~53	49~74	62~92	84~129	125~190	167~256	222~337	350~535	446~681	525~800
Motor Power (kW)	30	45	55	75	110	150	200	315	400	500



Air Foil Products series



Automatic intelligent control system

- Adopt motor and inverter speed control system, and PLC automatically adjusts air flow and pressure to achieve the best economic operation within the working range.
- The Control system performs self-inspection on speed, pressure, air flow, temp. etc., and has anti-surge and alarm automatic shutdown functions. The panel control operation is intelligent and simple.



High efficiency centrifugal impeller

- The three-dimensional flow theory design and parameter optimization are adopted to maximize the impeller efficiency and widen working area.
- Impeller is made of high-strength forged aluminum or titanium alloy, which has strong deformation resistance. Not only light, but also consumes very little power.
- Impeller is precision machined by 5-axis CNC machining center. With characteristics of high strength, high aerodynamic efficiency and low wear. It is all treated with anti-corrosion.
- Each model impeller we designed has undergone longterm bench experiments to ensure that its aerodynamic performance is efficient and reliable. The impeller variable efficiency can reach 85%, and it has passed 115% overspeed test.
- VFD is adopted so that canceling guide vane adjustment, starting current is smaller, and blower adjustable range is wider.



Ultra-high speed PMSM

- Shandong Huadong Blower Co., Ltd, using high efficient PMSM technology and efficiency is up to 95%, meanwhile precision speed control can be carried out. With minimal design, fast speed and air cooling to realize motor in high efficiency. Air cooling configuration has higher reliability than water cooling, easier operation and maintenance, and ensures the safe & continuous operation of equipment.



Air foil bearing

- Air foil bearings use air buoyancy & surrounding air instead of lubricating oil, so it can operate at higher temperature and high speed. The advantages of air foil bearing are flexible and low-cost operation, no mechanical friction, no lubricating oil, no vibration, low noise and long life.
- When the blower start-up, bearing and shaft contacts, which is a frictional contact. When levitation speed is reached, the bearing and shaft are no contact, no friction, and rotor is at suspension status.



Air Foil High Speed Aerator



Air foil high speed aerator adopts an integrated compact design. The impeller, high speed motor, inverter, air bearing and its control system are integrated into a control panel with a CPU microprocessor, which improves the convenience of installation and operation. It greatly saves energy and daily maintenance costs for customers and provides a clean working environment. Therefore, it has the characteristics of advanced technology, reliable performance, simple structure, small size, energy saving, and easy maintenance.

Parameter Table

Air Foil High Speed Aerator						
Model Flow (m3/min) Pressure kpa	HKG7.5	HKG15	HKG22	HKG30	HKG37	HKG45
15	22	39	57.5	78	95.5	121
20	20	37	52	74	89	115
25	16	30	43	60	74	95.5
30	14	26.4	38.3	51.3	63	76
35	12	23	33	45	58.5	69
40		19	29	38.5	48	58.5

Remark: HKG7.5, 7.5 means 7.5kw



Air Foil Turbo Blower



HKB Series Air foil turbo blower is a highly efficient, energy-saving and environmentally friendly product that realizes intelligent control without contact or friction. It is composed of core components such as air foil bearings, high-efficiency centrifugal impellers, high-power permanent magnet synchronous motors, high-precision rotors and dedicated inverters. Simple structure, intelligent and efficient, oil free and maintenance free, high degree of integration. Mainly serving for municipal and industrial sewage treatment, cement, food, medicine, electronics, chemicals, printing and dyeing etc. industries.

Parameter Table

Air Foil Turbo Blower

Model Flow Range (m³/min) Pressure	HKB15	HKB20	HKB30	HKB50	HKB75	HKB100	HKB125	HKB150	HKB200	HKB250	HKB300	HKB400
40kpa	3.4-11.6	5.8-15.6	7-25	12-41	20-63	24-83	28-78	34-124	44-158	46-130	65-235	85-320
50kpa	3.8-10.6	6.6-14.6	8-23	13.5-38	22-58	28-76	30-88	37-114	50-147	50-146	70-225	95-300
60kpa	4.2-9.8	7.4-13.4	8.5-21.3	15-35	24-53.5	30-70	33-82	40-106	54-136	54-164	75-208	100-275
70kpa	4.4-8.8	8.6-12.2	9-19.5	16-32	26-49	33-64	36-76	44-97	58-126	62-153	85-190	110-252
80kpa	4.8-8	9.4-11	10-18	17-29	28-44	35-58	38-70	48-88	64-114	66-142	90-173	120-230
90kpa	/	/	/	12-24	23-39	28-51	/	38-76	50-103	49-111	58-150	92-198
100kpa	/	/	/	13-22	24-36	30-47	/	42-70	52-96	51-106	62-140	96-184

Remark: HKB15, 15 means 15HP



Air Foil Vacuum Pump



HKVB series air foil vacuum pump is an efficient, energy-saving and environmentally friendly products. This product integrates ternary flow impeller, high-speed permanent magnet synchronous motor, inverter, PLC, cartridge filter and other components into a skid-mounted cabinet. With Simple structure, intelligent and high-efficiency, oil free and maintenance free, and high degree of integration. It can be widely used in papermaking, textile, food and medicine, printing and dyeing, material conveying etc. industries, with remarkable energy-saving effect.

Parameter Table

Model Flow Vacuum Pressure (-kPa)	HKVB15	HKVB22	HKVB30	HKVB37
-20	43.5m³/min	63.8m³/min	85.6m³/min	106.3m³/min
-30	30.3m³/min	44.7m³/min	58.7m³/min	72.8m³/min
-35	27.8m³/min	37.2m³/min	52.6m³/min	63.3m³/min
-40	-	-	-	58.1m³/min
-50	-	-	-	49.5m³/min



Quality Assurance



**TO WARDS HIGH TECH MANUFACTURING
PROMOTING HIGH END CNC DEVELOPMENT**

Shandong Huadong Blower/Airus Blower has advanced testing, experimental equipments, practicing the production and manufacturing concept of “design and development, test and verification, operation optimization, market and continuous innovation”, and realizing all-round inspection and testing of key design results such as magnetic bearings, high-power high-speed PMSM, and high-efficiency centrifugal impellers. Thus, the developed magnetic bearing blower has a strong guarantee in terms of stability and reliability.

Shandong Huadong BLower/Airus blower always insists that working better than clients expected, and creates timely, professional, pleasant, thoughtful service concept. Everything to exceed customer needs.

For the mission, responsible for the results!



Qualifications and Honors

The company has been awarded more than 100 honorary titles and owns more than 100 intellectual property rights related to its leading products., including more than 30 invention patents. Meanwhile, it has also passed ISO9001 international quality management system certification, ISO24001 environmental management system certification, ISO45001 occupational health and safety management system certification, industrialization and informationization integration management system certification, intellectual property management system certification, EU CE certification, ATEX and EAC etc.



Cooperation Cases





After-sale Service

Installation & commissioning

Technical Support

Troubleshooting

Overhaul & upgrading

Spare parts supply

■ SERVICE GUARANTEE

24-Hour uninterrupted service response and a powerful and orderly logistics system ensure that spare parts can be quickly provided to customers in a timely manner and provide comprehensive after-sales service.

■ 7*24 PROFESSIONAL SERVICE

After sale service: 1 hour quick response, 48 hour on site guidance and installation service (china markets. negotiable for oversea markets).

Shandong huadong blower/Airus blower gratitude customers, enjoy lifelong free technical support.



key Partners

Common choice of tens of thousands of customers, customer service is endless.



Applicable Industries

Widely serving for paper, petroleum, metallurgy, chemical, power plant, food, semiconductor, medicine etc.



Paper



Petroleum



Metallurgy



Chemical



Power



Food



Semiconductor



Medicine