HKG SERIES AIR SUSPENSION BLOWER

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



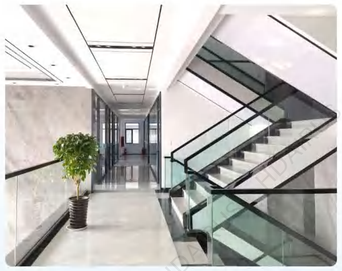
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SHANDONG HUADONG BLOWER CO.,LTD



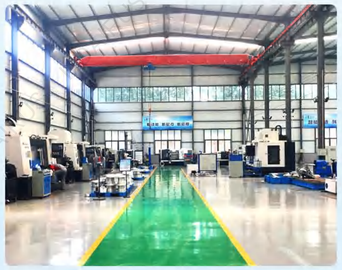
COMPANY PROFILE









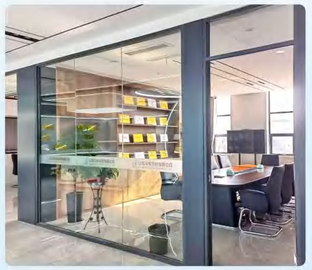




Shandong Huadong Blower Co., Ltd., founded in 2010, is located in Mingshui Economic & Technological Development Zone, Zhangqiu District, Jinan City, Shandong Province. We are a National-level Specialized, Refined, Unique & Innovative "Little Giant" Enterprise and National High-tech Enterprise. Covering a total land area of 100,000 m^2 with 70,000 m^2 of standard production workshops, the company is equipped with more than 200 sets of CNC machining equipment and employs over 500 staff. Our R&D team consists of over 60 doctors and masters, and we hold more than 100 national patents and various intellectual property rights.







Product Features

Power saving 40%

Permanent Magnet Synchronous High-Speed Motor + High-Efficiency Ternary Flow Impeller
Energy savings of up to 40% compared to traditional blowers (e.g., vortex, Roots blowers)

Low noise without lubrication

Low vibration and noise level < 80 dB(A)
Oil-free design during air compression, delivering clean and oil-free air

Intelligent remote control

Remote Data Monitoring
Remote commissioning and adjustment of equipment operating conditions

Stable and reliable

Centrifugal impeller provides continuous and stable airflow, with no pressure decay during long-term operation
Frequent start-stop capable, suitable for a wide range of operating conditions
Professional services and worry-free after-sales support

Convenient maintenance

Special structural design allows complete machine disassembly and assembly in just 30 minutes, easy installation
No mechanical maintenance required during normal operation



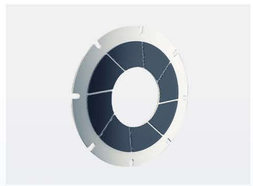
Core technology











High-speed permanent magnet synchronous motor

Utilizes a high-efficiency Permanent Magnet Synchronous Motor (PMSM) with an efficiency of >96%.
Microcomputer-controlled, achieving speeds of over 20,000 RPM.
Insulation class H (maximum temperature resistance up to 170°C).

Integrated Direct Drive

Features a design where the impeller and motor share a single shaft, eliminating intermediate components such as pulleys, reducing transmission losses to zero and achieving 100% transmission efficiency.

Ternary Flow Impeller

Precision-manufactured from aerospace-grade aluminum with strong corrosion resistance.
Produced using 5-axis machining centers with tolerances maintained below 5/1000 mm.
Lightweight design reduces power consumption and losses.

Air Foil Bearings

Utilizes air buoyancy instead of lubricating oil for operation.
Offers flexible startup and low-cost operation.
No mechanical friction, eliminating the need for lubricating oil.
Vibration-free, low noise, and extended service life.

Comprehensive Advantages

Based on user requirements, the system has achieved the goal of comprehensive management by enabling remote monitoring, configuration management, fault alarms, and logging analysis for the integrated air suspension blowers.

Intelligent control panel

The pressure, flow rate, and rotational speed of the blower can be easily configured via the control system, ensuring simple operation.
Real-time monitoring of equipment operation is available through the touchscreen interface.
Remote control is supported via mobile app (optional).
Equipped with anti-surge protection to enhance safety, and offers multiple operating modes.
Automatic fault alarm function facilitates troubleshooting and root cause analysis.

High efficiency frequency converter

High stability and reliability.
Energy conservation and consumption reduction are achieved through frequency modulation.
Built-in DC reactor suppresses power harmonics.
Depending on the specifications of different blowers, the operating frequency of the frequency converter typically ranges from 400 to 1000 Hz.

Internet of Things Platform

Real-time monitoring of system operation data and trajectory with multi-level protection and early warning functions.
IoT database management establishes a backend service platform for modular energy efficiency management of equipment.

Permanent Magnet High-Speed Motor

PMSM (Permanent Magnet Synchronous Motor) delivers high-speed rotation and superior efficiency.
Precise speed control is achieved through the frequency converter.

economic performance



economic performance

Replacing a 55 kW Roots Blower with a 37 kW High-Speed Low Pressure Airfoil Turbo Blower can save approximately RMB 110,000 in electricity costs per year.

Note:

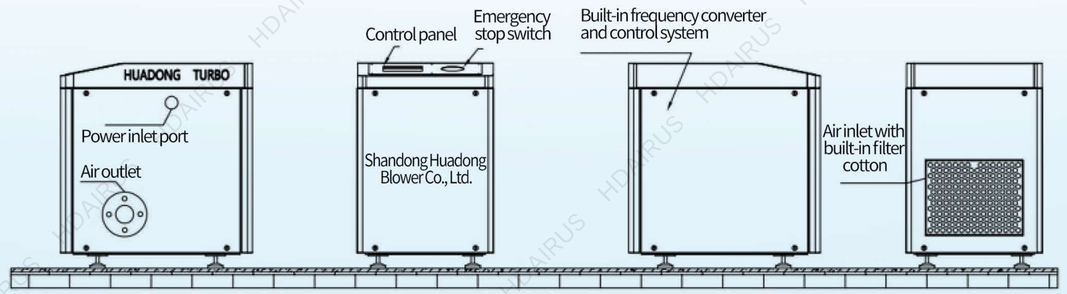
Electricity cost savings calculation:

(55 − 37) kW × 24 hours × RMB 0.7/kWh × 365 days ≈ RMB 110,000

Product series & specifications

Pressure \ Model	HKG7.5		HKG15		HKG22		HKG30		HKG37	
	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)
Motor Power	7.5 kW		15 kW		22 kW		30kW		37 kW	
15 kPa	9	18	20.5	35	32	42	/	/	/	/
20 kPa	8	17	15	31	25	40	25	54	40	60
25kPa	9	14	13	27	15	36	25	47	30	55
Pressure \ Model	HKG7.5 (high pressure)		HKG15 (high pressure)		HKG22 (high pressure)		HKG30 (high pressure)		HKG37 (high pressure)	
	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)	Min Air flow (m3/min)	Max Air flow (m3/min)
Motor Power	7.5 kW		15 kW		22 kW		30kW		37 kW	
25 kPa	6	14	13	24	18	36	25	54	30	55
30 kPa	6.5	12	14	21	17	33	20	42	20	52
35 kPa	7	10.5	15	18	20	30	18	38	20	48
40 kPa	7.5	8.2	16	15	22	27.5	20	32	20	42

Installation diagram



collaboration Cases

















Professional Water Treatment Solutions



Aquaculture

Effectively increases dissolved oxygen levels in water, prevents fish and shrimp from surfacing due to oxygen deficiency, purifies water bodies, improves feed utilization efficiency, and supports increased aquaculture yields.

Wastewater Treatment



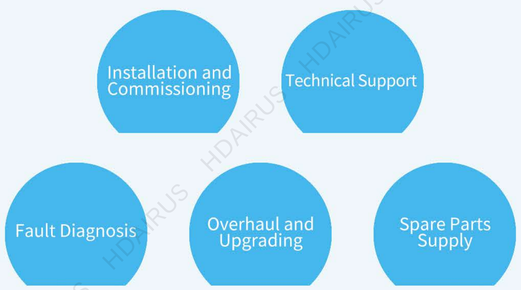
Accelerates the decomposition of organic matter and material cycling, purifies water quality, stabilizes key water parameters, and is suitable for various wastewater treatment scenarios.



River & Watercourse Restoration

Enhances water fluidity, boosts self-purification capacity, and improves water quality. Suitable for ecological rehabilitation of natural water bodies such as rivers and lakes.

After-sales Service



■ Service Assurance

We provide 24/7 uninterrupted service response. Our robust, well-organized logistics system ensures fast delivery of spare parts to customers, alongside a full suite of after-sales support.

■ 7×24-Hour Professional Support

1-hour rapid after-sales response; on-site installation guidance within 48 hours
Huadong Blower deeply appreciates all clients, providing lifetime service and free lifelong technical support.







Enterprise culture

Corporate Mission：

To continuously create value for customers, develop the enterprise, bring happiness to employees, and contribute to the nation through industry.

Corporate vision:

To become a global leader in aerodynamic technology.

Corporate Values:

·People-oriented, valuing contributors
·Innovation, entrepreneurship, and internationalization

Corporate Spirit:

Never give up — we are the best team!

Huadong Blower is heart-to-heart with its employees



Qualifications and honors

Our company has accumulated more than 100 honorary titles, and has more than 100 intellectual property rights related to leading products, including more than 50 invention patents. They have passed ISO9001 International Quality Management System Certification, ISO24001 Environmental Management System Certification, ISO45001 Occupational Health and Safety Management System Certification, Two Integration Management System Certification, Intellectual Property Management System Certification, EUCE Certification and EAC Certification.



