

GREEN POWER ENGINEERING CORPORATION

Turbomachinery Specialist



Turbo Blower Product Introduction

FORE CORES.



Efficiency equipment



High specification analysis software



Professional team



Best quality





1. Company Profile

Green Power Engineering Corporation (GPE) has been engaged in the R&D, Testing, and Maintenance of turbine-related rotating machinery for more than 20 years.

Our products include Turbo Blower, Turbines, Centrifugal Compressors and other related components.

Company Scale

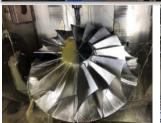
- 1. Capital Amount: 6.8 Million EUR.
- 2. Factory Scale:
- (1) Kaohsiung Factory No. 1: Design & Testing Center + Aerospace Five-Axis Processing Equipment.
- (2) Kaohsiung Factory No. 2: 20 high and low speed dynamic balancing machines (0.5kg-40 tons).
- (3) Taoyuan Factory: Analysis Center.
- (4) Taipei Office: Sales and Engineering Center.
- 3. Equipment: Analysis Software + Five-Axis Processing Equipment + Three-Dimensional Inspection + Wind Tunnel Testing Lab + Other Inspection Equipment.
- 4. Advantages: Own Design + Analysis + Manufacturing + Testing + Factory Buildings and Equipment.



Company Achievement









➤ Industry: Power Plant, Petrochemical Plant, Electronics Plant, Steel Plant...

➤ Application: Power Generation, Gas Compression, Vacuum, Dust Collection, Air Transportation, Air Knife...



2. Introduction of GPE Turbo Blower

GPE uses "Forge Materials" and "Five-Axis Machining" to develop "Aerospace-Grade Turbine" for generating air flow. The product has the advantage of "long Service Life".

High Total Efficiency , Energy Saving

- CE Certificate.
- Compact and Stackable.
- Easy Installation, Maintenance and Repair.
- No need of Foundation.
- Oil-free, Low Temperature Rise
- Long Service Life (more than 10 years).
- Adjustable Frequency by the Inventor for Flexible Operational Conditions.

Low Noise, Vibration, Starting Current

- Low Noise (70-75dB(A))
- Low Vibration (below 1.2 mm/sec)
- Low Starting Electric Current.

(Stable and Reliable
Ē.,	Intelligent Control



Model	Power	Voltage	Rotating Speed	Absolute Pressure	Air Flow	Total Efficiency
	kW	V	RPM	bar(a)	SCMM	%
K005-110	3.7	3Ф220 3Ф380	21000	1.1 (Output)	14	73
K005-120	3.7	3Ф220 3Ф380	24000	1.2 (Output)	7.4	80
K005-130	3.7	3Ф220 3Ф380	24000	1.3 (Output)	5.2	76
K100-160	90	3Ф380	15000	1.6 (Output)	65	70-75
K100-180	90	3Ф380	15000	1.8 (Output)	50	70-75
K005-10H	3.7	3Ф220 3Ф380	21000	0.9 (Input)	10	57-61







Aerospace-Grade Turbines





3. Structure Design and Application of GPE Turbo Blower

POSITIVE PRESSURE

Aeration, Oxygen Increasing, Gas Delivery, Powder Conveying, Air Knife.



L592 X W455 X H560 MM · 57.5KG



ADVANCED

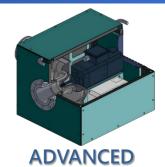
L820 X W700 X H570 MM · 127KG

NEGATIVE PRESSURE

Dust Collection, Oil Mist Recovery, Air Filtration and Sterilization.



L592 X W455 X H560 MM · 57.5KG



820 X W700 X H570 MM , 127KG

Application Settings

- **➤ Semiconductor & Electronics Industry**
- ➤ Printed Circuit Board Industry
- ➤ Electroplated Metal Industry
- **▶**Petrochemical Industry
- > Food Manufacturing Industry
- > Breeding plants Industry



5HP Turbo Blower Structure

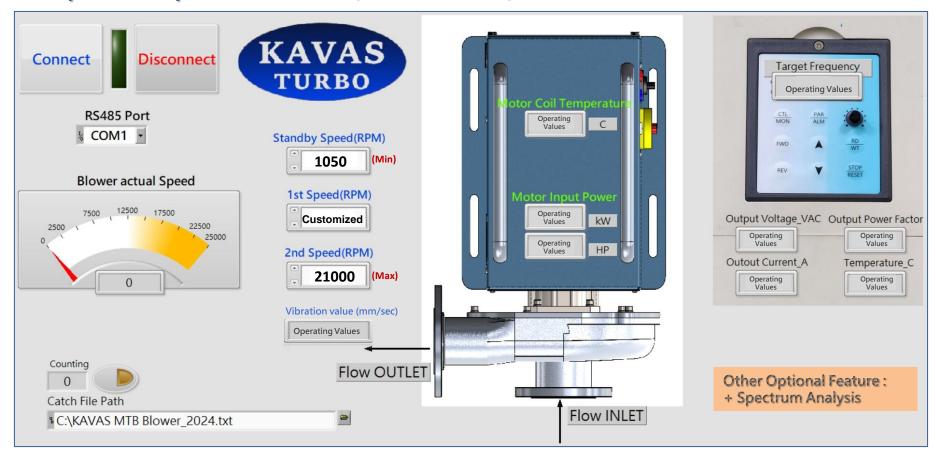
- √ Human-Machine Interface
- ✓ Semiconductor Industry Certification





3-1. Structure Design and Application of GPE Turbo Blower

Computer Setup Control Screen (Basic Function)





4. Reference of GPE Turbo Blower

Annual Savings of Approximately NT\$100,000 - NT\$200,000

(under 7200 hours of operating condition per year)

The Semiconductor and PCB industries require high power consumption.

In response to global energy policies and challenges of rising electricity prices, it is important to reduce the energy using and carbon emission while improving the production capacity.



"1 Kavas Turbo Blower"
Replace

"3 Traditional Ring Blowers"





Kavas Turbo Blower Ring Blower

1 set



3 set

Benefits

- Low Vibration. → Around 0.7-1.2 mm/s.
- Low Noise. \rightarrow Around 70-75dB(A).
- No Need for Sound-Proof Shield.
- The Working Environment will be Clean, Quiet, Safe.
- Small Size and Stackable (Three machines in 1m²).
- High Efficiency (20-50% higher than ring blower).
- No Need for Foundation and Cooling System.
- Low Output Temperature (10-20°C higher than the inlet temperature).
- Provide Preliminary Benefit Analysis.
- Provide Perfect After-sales Service.
- Z Realizing Energy Saving and Carbon Reduction.





GPE dedicates in green technology to make the world better.

CONTACT INFORMATION

Green Power Engineering Corporation

TEL: +886-7-6955216

FAX: +886-7-6955217

Website: www.gpe.com.tw

E-Mail: gpe.power@msa.hinet.net

No.6, Luke 3rd Road, Luzhu Dist, Kaohsiung City, 82151, Taiwan.