Company Info

INFINAIR is committed to providing high-quality products and friendly services to our customers throughout the world. We strive to consistently meet or exceed our quality standards in the design, manufacturing and distribution of products to our customers. We are also determined to be different in caring our environment through innovative ideas.

Established: September, 2003
Area: 33,000m²
Company Address: 55 Qingneng Road, Jiading District, Shanghai, China PRC.

Company Vision:
To be the most trusted brand in ventilation industry.

Company Mission:
Provide reliable, convenient air movement controls, operations and services.

Awards and Achievements:
High-tech Enterprises
Renowned Shanghai trademark: INFINAIR
Shanghai Famous Brand Product: INFINAIR FAN
SGS ISO 9001, ISO 14001, OHSAS 18001 Management Certificates

Technological Strength:
INFINAIR’s Air Movement & Sound Laboratory is the first Air Movement and Control Association (AMCA) accredited laboratory in mainland China. It is also certified by Chinese National Accreditation Service for Conformity Assessment (CNAS). Most of the INFINAIR’s products are tested and certified by many international certification bodies such as AMCA, TUV, CE, CCC, CNEX, etc.

INFINAIR’s Intelligent Ventilation Technology
- **Intelligent Adaption:** We can quickly adapt to changes in the business environment.
- **Intelligent Adjustment:** The use of inverter or EC smart control technology can make the fans achieve best results under the control of the intelligent speed regulation system.
- **Intelligent Real-time Information:** Individual workstations are linked to the central control system through internet or local area network.
- **Intelligent Detection system:** Reliable sensors can detect early symptoms and notify the user. Ensuring stable operation.

INFINAIR’s Intelligent Fabrication
- **Intelligent Fabrication process:** Capable to carry out online performance, balance level and communication testing. Ensuring reliable quality.
- **Robotic welding technology:** Agile Manufacturing, responds quickly to customer desires.

INFINAIR’s After-sales Service
- **Joint Research & Develop**
The Joint R&D can provide customer the necessary support and guidance during the initial research progress.
- **Customization**
Our products are fully customizable. We are able to satisfy customer requirements on an individual basis.
- **Adequate After-sales Service**

Green Smart Technology
- **CFD Simulation & Analysis**
A computer-aided air movement simulation model which can calculate the efficiency of the fan based on the number of blades, blade angle, width, and sound level.
- **Finite Element Analysis Technology**
To analyze and provide accurate prediction of how material is likely to respond when subjected to structural and/or thermal loads.

INFINAIR’s Bionic Technology
- **INFINAIR’s Bionic Energy Conservation**
We develop energy saving products by observing behaviors from the animal kingdom. For example, birds can glide for thousands of kilometers without flapping.
- **INFINAIR’s Bionic Noise Reduction**
Why can Owls fly so silently? Even mice are not being able to detect their approach?
- **The research and development of INFINAIR’s products are heavily inspired by the animal evolution over the past millenniums. We have learnt how energy and sound are being able to conserve from their amazing changes .**
INFINAIR is committed to providing high-quality products and friendly services to our customers throughout the world. We strive to consistently meet or exceed our quality standards in the design, manufacturing and distribution of products to our customers. We are also determined to be different in caring our environment through innovative ideas.

Established: September, 2003
Area: 33,000m²
Company Address: 55 Qingneng Road, Jiading District, Shanghai, China PRC.

Company Vision:
To be the most trusted brand in ventilation industry.

Company Mission:
Provide reliable, convenient air movement controls, operations and services.

Awards and Achievements:
High-tech Enterprises
Renowned Shanghai trademark
Shanghai Famous Brand Product: INFINAIR FAN
SGS ISO 9001, ISO 14001, OHSAS 18001 Management Certificates

Technological Strength:
INFINAIR’s Air Movement & Sound Laboratory is the first Air Movement and Control Association (AMCA) accredited laboratory in mainland China. It is also certified by Chinese National Accreditation Service for Conformity Assessment (CNAS).
Most of the INFINAIR’s products are tested and certified by many international certification bodies such as AMCA, TUV, CE, CCC, CNEX, etc.

INFINAIR’s Intelligent Ventilation Technology
- Intelligent Adaption:
  We can quickly adapt to changes in the business environment.
- Intelligent Adjustment:
  The use of inverter or EC smart control technology can make the fans achieve best results under the control of the intelligent speed regulation system.
- Intelligent Real-time Information:
  Individual workstations are linked to the central control system through internet or local area network
- Intelligent Detection System:
  Reliable sensors can detect early symptoms and notify the user. Ensuring stable operation.

INFINAIR’s Bionic Technology
- INFINAIR’s Bionic Energy Conservation
  We develop energy saving products by observing behaviors from the animal kingdom. For example, birds can glide for thousands of kilometers without flapping.
- INFINAIR’s Bionic Noise Reduction
  Why can owls fly so silently? Even mice are not being able to detect their approach?
- The research and development of INFINAIR’s products are heavily inspired by the animal evolution over the past millenniums. We have learnt how energy and sound are being able to conserve from their amazing changes.

INFINAIR’s Intelligent Fabrication
- Intelligent fabrication process
  Capable to carry out online performance, balance level and communication testing.
  Ensuring reliable quality
- Robotic welding technology
- Agile Manufacturing, responds quickly to customer desires

Green Smart Technology
- CFD Simulation & Analysis
  A computer-aided air movement simulation model which can calculate the efficiency of the fan based on the number of blades, blade angle, width, and sound level.
- Finite Element Analysis Technology
  To analyze and provide accurate prediction of how material is likely to respond when subjected to structural and/or thermal loads.

INFINAIR’s After-sales Service
- Joint Research & Develop
  The Joint R&D can provide customer the necessary support and guidance during the initial research progress
- Customization
  Our products are fully customizable. We are able to satisfy customer requirements on an individual basis
- Adequate After-sales Service

INFINAIR’s Intelligent Fabrication
- Intelligent fabrication process
- Capable to carry out online performance, balance level and communication testing.
  Ensuring reliable quality
- Robotic welding technology
- Agile Manufacturing, responds quickly to customer desires

Certiﬁcations and Tests
- Most of the products are certificated by: CCC, AMCA, TUV, CE, ATEX, UL, RoHS and ErP2015.
- Performance and Reliability Tests:
  Airflow, Air Pressure, Power, Sound Level, Temperature Durability, Salt Spray and Water Proof Test, etc.
Positive Inducing Fan Series

- Designed according to the principles of aerodynamics, positive inducing fans induce and disturb surrounding air through the high velocity discharge produced and then guide the air in specified directions. The central discharge velocity gradually comes down with the increasing distance away from the outlet nozzle, but the discharge area expands so that more air can be induced. By diluting indoor harmful gases and circulating air at the same time, positive inducing fans can gather these gases and bring them along the predefined flow passage quickly to the exhaust fan, thus making the air well ventilated in the underground car parks.

- Positive inducing fans can effectively dilute harmful gases and smoke in car parks, keeping air well ventilated and improving the environment.

Applications

Guiding the surrounding air to predefined areas and in specific directions through the high velocity discharge produced, positive inducing fans help dilute the waste gases and improve air quality.

Applications:
- Underground car parks
- Underground entertainment venues
- Large areas with certain parts polluted
- Intelligent inducing ventilation that features regional linkage

Discharge velocity decrement

<table>
<thead>
<tr>
<th>Distance (m)</th>
<th>Discharge Velocity (m/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>3</td>
<td>2.25</td>
</tr>
<tr>
<td>4</td>
<td>1.13</td>
</tr>
<tr>
<td>5</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Underground car parks

Underground entertainment venues

Large areas with certain parts polluted

Intelligent inducing ventilation that features regional linkage
Positive Inducing Fan Series

- Designed according to the principles of aerodynamics, positive inducing fans induce and disturb surrounding air through the high velocity discharge produced and then guide the air in specified directions. The central discharge velocity gradually comes down with the increasing distance away from the outlet nozzle, but the discharge area expands so that more air can be induced. By diluting indoor harmful gases and circulating air at the same time, positive inducing fans can gather these gases and bring them along the predefined flow passage quickly to the exhaust fan, thus making the air well ventilated in the underground car parks.

- Positive inducing fans can effectively dilute harmful gases and smoke in car parks, keeping air well ventilated and improving the environment.

Applications

Guiding the surrounding air to predefined areas and in specific directions through the high velocity discharge produced, positive inducing fans help dilute the waste gases and improve air quality.

Applications:
- Underground car parks
- Underground entertainment venues
- Large areas with certain parts polluted
- Intelligent inducing ventilation that features regional linkage

Discharge velocity decrement

0=18m/s  1=9m/s  2=4.5m/s  3=2.25m/s  4=1.13m/s  5=0.6m/s

Underground car parks

Underground entertainment venues

Large areas with certain parts polluted

Intelligent inducing ventilation that features regional linkage
Positive Inducing Fans Series V

Product Features

- Small-size and light-weight: Easy installation with no additional ducts required; Highly targeted and cost-effective.
- Energy-efficient: inducing air through the high velocity discharge produced.
- Flexible metallic nozzle with easily adjustable discharge angles.
- Intelligent positive inducing function available: sub-regions interlinked to ensure energy efficiency and reliability.
- Housing made of quality galvanized steel sheet; housing finished with electrostatic epoxy coatings also available.

Technical Parameters

<table>
<thead>
<tr>
<th>Model</th>
<th>Speed (rpm)</th>
<th>Thrust (N)</th>
<th>Airflow (m³/h)</th>
<th>Motor Power (kW)</th>
<th>Sound Pressure Level (dB(A))</th>
<th>Outlet Velocity (m/s)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIV-B-3</td>
<td>1450</td>
<td>6~11</td>
<td>180~1380</td>
<td>8.12</td>
<td>43</td>
<td>17~24</td>
<td>25</td>
</tr>
</tbody>
</table>

Outline Dimensions

<table>
<thead>
<tr>
<th>Unit: mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>PIV-B-3</td>
</tr>
</tbody>
</table>
**Product Features**

- Small-size and light-weight; Easy installation with no additional ducts required; Highly targeted and cost-effective.

- Energy-efficient; inducing air through the high velocity discharge produced.

- Flexible metallic nozzle with easily adjustable discharge angles.

- Intelligent positive inducing function available: sub-regions interlinked to ensure energy efficiency and reliability.

- Housing made of quality galvanized steel sheet; housing finished with electrostatic epoxy coatings also available.

**Technical Parameters**

<table>
<thead>
<tr>
<th>Model</th>
<th>Speed (rpm)</th>
<th>Thrust (N)</th>
<th>Airflow (m³/h)</th>
<th>Motor Power (kW)</th>
<th>Sound Pressure Level (dB(A))</th>
<th>Outlet Velocity (m/s)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIV-B-3</td>
<td>1450</td>
<td>6~11</td>
<td>180~1380</td>
<td>5.12</td>
<td>43</td>
<td>17~24</td>
<td>35</td>
</tr>
</tbody>
</table>

**Outline Dimensions**

<table>
<thead>
<tr>
<th>Unit: mm</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>d</th>
<th>t1</th>
<th>t2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIV-B-3</td>
<td>600</td>
<td>400</td>
<td>250</td>
<td>550</td>
<td>590</td>
<td>630</td>
<td>335</td>
<td>250</td>
<td>9</td>
<td>80</td>
<td>120</td>
</tr>
</tbody>
</table>
Fan Installation

Positive inducing fans Series V can be ceiling-hung and ceiling-mounted. When ceiling-mounted, fans can be horizontally hung, vertically hung or wall-mounted. They should not be mounted too high (preferably 2.3~3 meters high above the ground) and there shall not be any obstructions within 500mm from inlets and outlets. When ceiling-hung, there shall be spring isolators. When ceiling-mounted, Neoprene isolators shall be added to screws. The spacing between fans shall be smaller than the discharge range so that airstreams from different outlets do not collide.

Mounting Types

- Ceiling-hung
- Horizontally hung
- Vertically hung
- Ceiling-mounted
- Wall mounted

Intelligent Control Principles of Positive Inducing Fans Series V

When the control switch is in the automatic mode, the system is controlled as below:

Inside each intelligent positive inducing fan, there is a sensitive waste gas concentration detector. Upon detection of a carbon monoxide (CO) concentration of over 30PPM, the intelligent positive inducing fan in this specific region will start automatically and run for 5 minutes. If the concentration level remains, the centralized controllers in the interlinked sub-regions will start all the intelligent positive inducing fans. Also, supply fans and exhaust fans will be started to exhaust indoor waste gases and send in fresh air. When the CO concentration level falls below 30PPM, the fans will continue to run for another 10 minutes before they turn off automatically.
Fan Installation

Positive inducing fans Series V can be ceiling-hung and ceiling-mounted. When ceiling-mounted, fans can be horizontally hung, vertically hung or wall-mounted. They should not be mounted too high (preferably 2.3~3 meters high above the ground) and there shall not be any obstructions within 500mm from inlets and outlets. When ceiling-hung, there shall be spring isolators. When ceiling-mounted, Neoprene isolators shall be added to screws. The spacing between fans shall be smaller than the discharge range so that airstreams from different outlets do not collide.

Mounting Types

- Ceiling-hung
- Horizontally hung
- Vertically hung
- Ceiling-mounted
- Wall mounted

Intelligent Control Principles of Positive Inducing Fans Series V

When the control switch is in the automatic mode, the system is controlled as below:

Inside each intelligent positive inducing fan, there is a sensitive waste gas concentration detector. Upon detection of a carbon monoxide (CO) concentration of over 30PPM, the intelligent positive inducing fan in this specific region will start automatically and run for 5 minutes. If the concentration level remains, the centralized controllers in the interlinked sub-regions will start all the intelligent positive inducing fans. Also, supply fans and exhaust fans will be started to exhaust indoor waste gases and send in fresh air. When the CO concentration level falls below 30PPM, the fans will continue to run for another 10 minutes before they turn off automatically.
PIV Technical Specification

- **Fan Type**
The fan shall be a positive inducing one with a centrifugal galvanized steel wheel. The wheel should be subject to static and dynamic balancing tests up to AMCA 204-G2.5 quality grade.

- **Fan Housing**
The fan housing shall be made in galvanized steel sheet (or steel sheet finished with electrostatic epoxy coatings) for effective corrosion prevention. There has a removable access door for inspection and maintenance. There shall be baffle plates at the outlet, ensuring regular airstreams from each nozzle.

- **Motor**
The motor shall be direct driven and well match the fan load. It shall be IP44 rated with Class F insulation.

- **Nozzle**
Seamlessly formed by spinning with aluminum alloys, the flexible nozzle shall be directly embedded on the fan housing.

- **Nameplate**
A permanently fixed aluminum nameplate shall clearly display the fan number, product model and serial number (a unique ID for each fan) so that the parts used can be traceable by customers.

- **Qualified Suppliers**
Qualified suppliers shall be assigned a credit rating of “AAA”. INFINAIR or similar products supplied are designed based on PIV models of INFINAIR.
PIV Technical Specification

- **Fan Type**
  The fan shall be a positive inducing one with a centrifugal galvanized steel wheel. The wheel should be subject to static and dynamic balancing tests up to AMCA 204-G2.5 quality grade.

- **Fan Housing**
  The fan housing shall be made in galvanized steel sheet (or steel sheet finished with electrostatic epoxy coatings) for effective corrosion prevention. There has a removable access door for inspection and maintenance. There shall be baffle plates at the outlet, ensuring regular airstreams from each nozzle.

- **Motor**
  The motor shall be direct driven and well match the fan load. It shall be IP44 rated with Class F insulation.

- **Nozzle**
  Seamlessly formed by spinning with aluminum alloys, the flexible nozzle shall be directly embedded on the fan housing.

- **Nameplate**
  A permanently fixed aluminum nameplate shall clearly display the fan number, product model and serial number (a unique ID for each fan) so that the parts used can be traceable by customers.

- **Qualified Suppliers**
  Qualified suppliers shall be assigned a credit rating of “AAA”. INFINAIR or similar products supplied are designed based on PIV models of INFINAIR.
INFINAIR CORPORATION
Add: NO. 55 Qingneg Road, Waigang Town, Jiading District, Shanghai, P.R. China
Pc: 201806
Tel: 86 21 39185688
After-sale service Tel: 400 821 3316
Http://www.infinair.com

INFINAIR

PIV
Positive Inducing Fan Series V