Supply & Retrofit for AHUs/Ventilation Applications

Proud Leaders of Sustainability by Introducing Axial Fan Technology to the Indian Industry in 2016

Our Vision

"To contribute in energy savings with innovation technology" which are **Efficient, Effective** & **Economical**

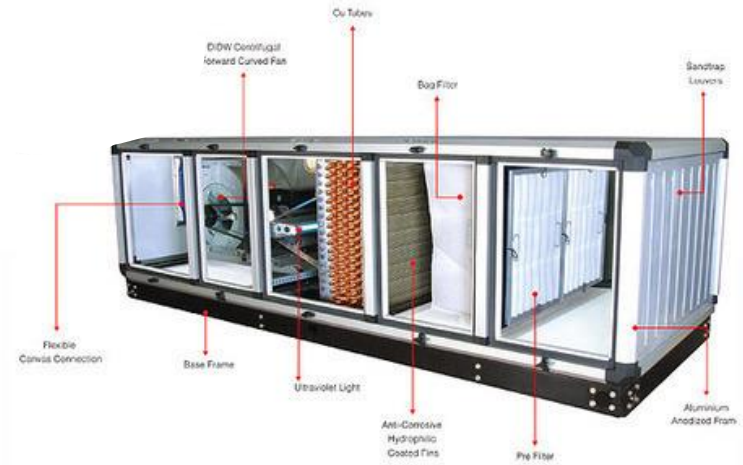
Our Mission

"To remove inefficiencies of HVAC Systems leading to **Xero Energy wast**age"

Our Story

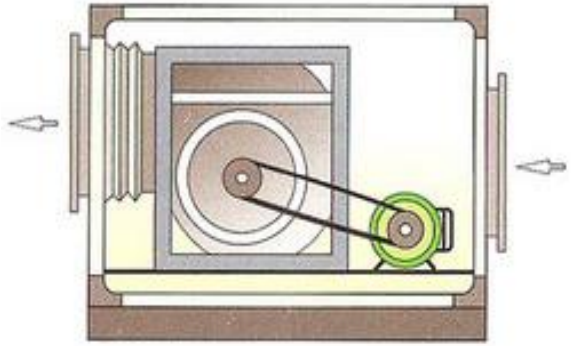
Team of expert engineers implementing High efficient ventilation solutions for its customers across India since 2016.

CURRENT SYSTEMS

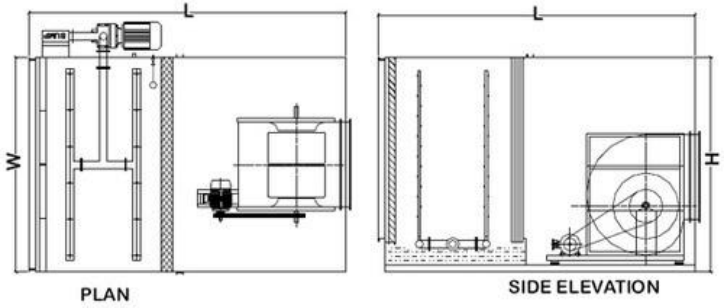


Chilled Water Air handling Units

Air Cooling Air Handling Units



Fresh Air Handling Units



H Plant or Spray Type Air Cooling Unit

Areas of improvement in Fan System

Aero Dynamic Efficiency of Impeller

Discussion can be done

Motor Efficiency

Discussion can be done

VFD Efficiency

Drives in the market are 97% efficient with almost no gap to improve

Transmission Efficiency

Belt drive – Discussion of inefficiency; Direct drive – No discussion of inefficiency

System Efficiency

Component of all the above

System Effect

How smoothly the air flows through the fan without bends

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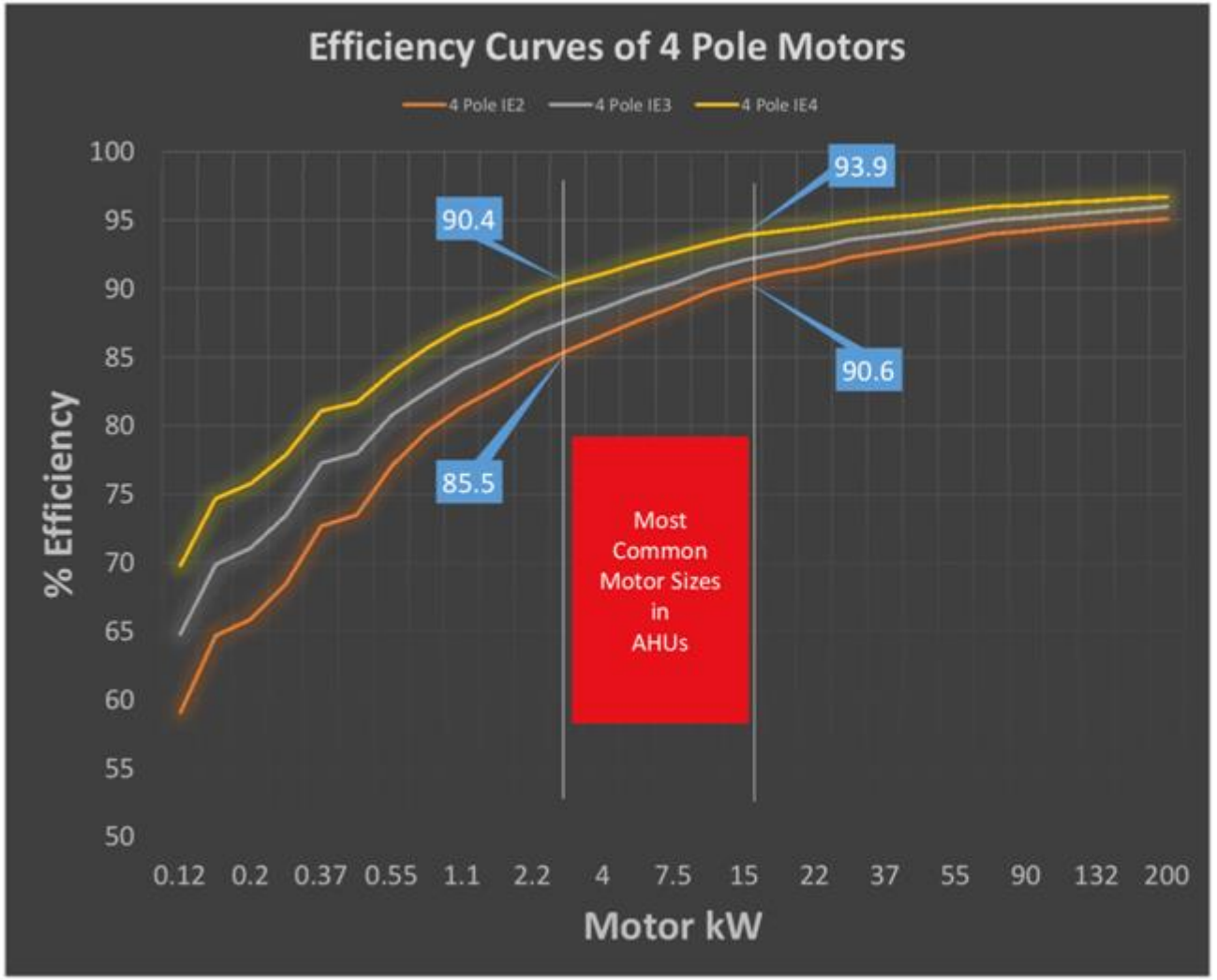
Energy Efficient Solutions

3 – 5% Efficiency gain in AHU with PM motors



- IE4 motors typically have efficiencies of above 90%
- Permanent magnet motors deliver IE4 or better performance.
- AHUs now available with PM motors that typically have 3 to 5% better efficiencies than IE2 motors

Commonly Seen Fan Types in Ventilation Systems

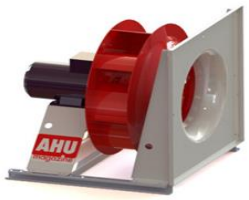
Centrifugal Fan

Impeller Type:
- Forward & Backward curved

Motor Types:
- Induction/PM

Speed Control:
- VFD

Typical System Efficiency:
Up to 63%



Plug Fan

Impeller Type:
- Backward curved

Motor Types:
- Induction/PM

Speed Control:
- VFD

Typical System Efficiency:
Up to 66%

Plug Fan (EC Fan)

Impeller Type:
- Backward curved

Motor Types:
- PM

Speed Control:
- Built-in speed controller

Typical System Efficiency:
Up to 68%

Aeronaut Axial Fan

Impeller Type:
- Vane axial fans

Motor Types:
- Induction/PM

Speed Control:
- VFD

Typical System Efficiency:
Up to 88%

What makes our Fans Efficient **Up to 94%**

Unique Impeller Design

Efficiency – pressure

Maintains efficiency at part loads

Motor & drives

Efficiency at part loads

Can use AC/EC/DC Motor

Downstream Guide Vanes

Efficiency – pressure

Reduces Turbulence Losses

Minimum Tip clearance

Efficiency – noise reduction

Reduces Turbulence Losses

Hub

Efficiency – pressure

Aerodynamic Design

Inlet Cone

Efficiency – noise reduction

Air introduced into the fan smoothly

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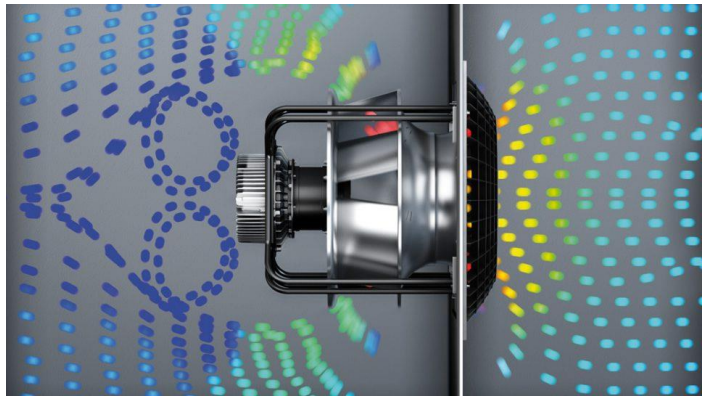
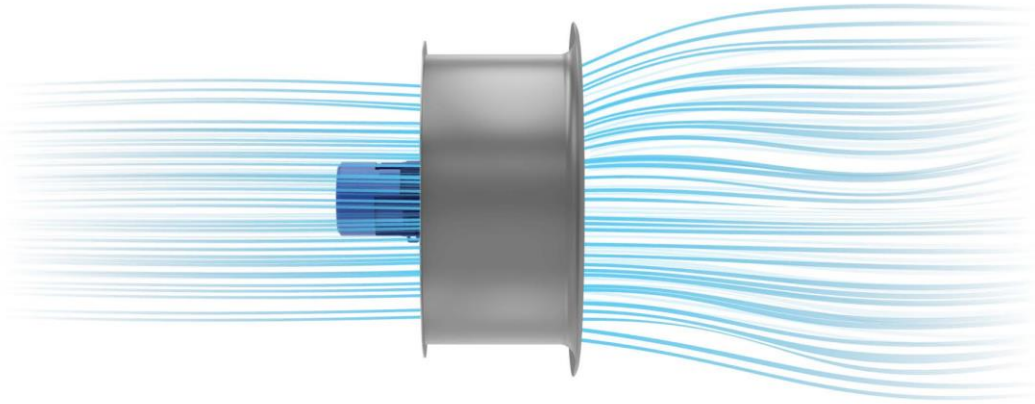
Energy Efficient Air Movement with **AERONAUT Fans**

Plug/EC Fan



Aeronaut Axial Fan



Save 30% - 50% Straight – Hassle Free

- Guaranteed Savings with same AIR FLOW
- No change in your system design
- 6-8 Hrs of Quick Retrofit
- No maintenance
- No belt replacement - Centrifugal
- No Costly Fan replacements due to bearing or winding issues – EC
- Compact Fans - More space for service and cleaning

Installation

Before Retrofit

Nicotra Backward Curved Belt Driven Centrifugal Fan
Airflow: 23,735 CFM
Power Input kw: 14.5 kw

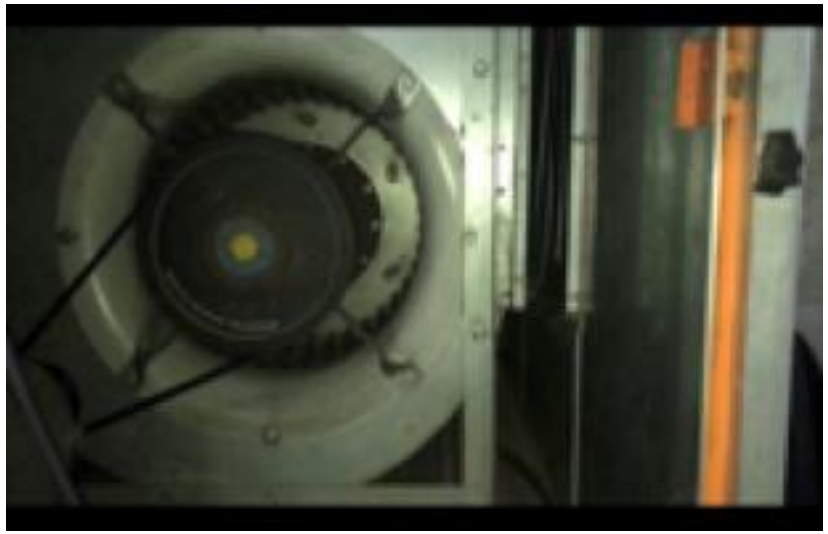
After Retrofit

High Efficient Axial Fan
Airflow: 23,777 CFM
Power Input kw: 4.5 kw

✓69%

Installation

Before Retrofit



Kruger Forward Curved Belt Driven Centrifugal Fan
Airflow: 12,685 CFM
Motor Rated kw: 5.5 kw
Power Input kw: 3.92 kw

After Retrofit

High Efficient Axial Fan
Airflow: 12,796 CFM
Motor Rated kw: 4 kw
Power Input kw: 1.94 kw

✓51%

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OUR SIMPLE PROCESS

1 

Meet

- Appointment with our engineers
- Performance measurement with calibrated instruments

2 

Proposal

- Innovative solutions suitable to any type of installation
- Using worlds most efficient and adaptable technologies

3 

POC

- Actual installation on site to prove our calculated savings for the same output

4 

Evaluate

- Promised commitments with POC on site without liability on client
- Testing facilities after installation with 24x7 on call service support

5 

Full Project proposal

- Full project analysis and proposal after proving our commitments by doing POC.

6 

Validate

- Hassel free pre proven project scaling for entire facility
- 48 Hours guaranteed on site service support across India

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South Asia's largest HVAC Exhibition

ACREX India 2018
22 - 24 FEBRUARY 2018
BIEC, BENGALURU
www.acrex.in

600+
EXHIBITORS

50000+
VISITORS

Team Xero Energy interaction with Customers

1st Runner up in Technology Day

Receiving the 1st Runner up award by TATA Motors

Xero Energy team is under discussion with TATA Motor's leadership

TATA MOTORS
Connecting Aspirations

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OUR CUSTOMERS

XERO ENERGY
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RECENT PROJECTS

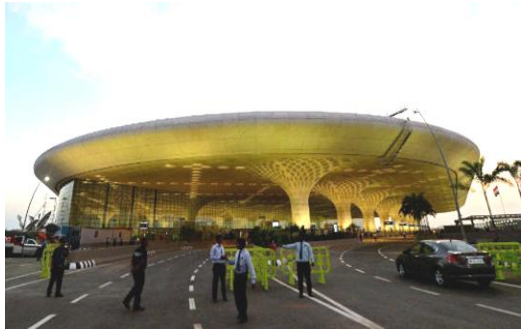
ICICI Bank- Hyderabad

Taj Palace - Delhi

JK Tyers - Chennai

Hero – Haridwar

JPPL - Mumbai



GVK Airport - Mumbai

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LETS GET STARTED

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