# IMPROVING HEALTH, COMFORT, AND PRODUCTIVITY WITH FANS & TURBINES

#### **COMMON PROBLEMS BUSINESSES FACE**





Loss of productivity from excessive heat: For every degree rise in temperature above 77°F, productivity drops by 2%. The average drop in productivity caused by buildings with poor ventilation has an annual cost of \$60 billion.



Comfort: The #1 complaint to facility managers is temperature: the top 10 complaints of corporate tenants include poor indoor air quality.



Health risks from Sick Building Syndrome: The direct cost to the U.S. economy due to increased allergies, asthma, and sick building syndrome symptoms was estimated to be \$7-\$23 billion per year; a large portion was estimated to be in the form of worker compensation claims, health insurance premiums, and direct healthcare costs that were mostly borne by the claimants' employers.



SouthwestSolutions.com | 800-803-1083 | info@southwestsolutions.com

# **HOW FANS & WIND TURBINES CAN HELP**

#### LARGE DIAMETER FAN

Ideal for large floor areas with high ceilings

Blankets floor area with a constantly-moving air cuirent to create an evaporative cooling effect

De strat ifies the airt ocreate even ambient temperatures

> Reduces condensation and humidity that promote mold and other allergenst ogrow

Variable frequency drive controls to adjust air output for year round use Can be reversed in winter to promote heating effect

Fansizes from 8 feet to 24 feet - in diameter with air movement diameters up to 230 feet

Inexpensive operation at 6 cents per hour for one fan at 0.75 KW (24 foot diameter fan uses less power than the average hair d'Yer)

Tubercle Technology<sup>m</sup> blades outperform conventional airfoils

#### **7 FOOT DIRECTIONAL FAN**

deal for areas with low cellings, high rackaisles and other spaces with obstacles that deter air flow

Adjustable air foils for one or two-directional use

Blows ar 40 feet wide by 100 feet in two directions or 40 feet by 200 feet in one direction

Can reduce cooling and ventilation eosts by up to 50%



Cools inhabitants controls insects, keeps floors dry, and improves employee comfort and productivity

Variable frequency drive controls to adjust air output for year-round use

One directional fan is equivalent to four large - single speed panel-aisle fans or eight 36° basket fans while using only half the power

Can be mounted from ceilings, building columns or on a standing pole



#### WIND-POWERED TURBINES

Ventilates and exhausts hot air, pollutants odors, audallergens

Designed to withstand high winds and adverse weather Reduces temperatures by up to 10°F

Only requires agentle breeze of 10mph to ventilate and condust air

## THE ADVANTAGE

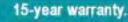
Fans and turbines work together as a ventilation system: Large diameter fans destratify the air, while turbines exhaust the hot, stale air from your facility and replace with cool, fresh air. The large diameter and directional fans then blow this cooler air throughout the building.



Tubercle fan blades provide greater efficiency than other blades while lowering vibrations and noise.



All fans and turbines operate quietly and unobstructively.



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Year-round use and benefits for all fans and turbines.



Most fan providers do not recommend large diameter fans to be run in reverse during the winter months to promote heating efficiencies - Large diameter fans can be run in reverse without sacrificing efficiency and with no impact on the warranty.



Virtually maintenance-free with recommended inspections every 20,000 hours (over 2 years running 24/7).



Fans have the ability to receive stop signals from your fire system, keeping you compliant with the National Fire Protection Agency Standard 13.

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#### **BENEFITS TO USING FANS & WIND TURBINES**





Increased Worker Comfort



Decreased workers' compensation claims and insurance premiums



Improved Indoor air quality









Reduce energy costs



### INDUSTRIES USING FANS AND WIND TURBINES



Manufacturing & Warehouse Facilities



Automotive Facilities

Military & Government Facilities

Athletic & Fitness Facilities

Arenas

Agriculture & Livestock Facilities

**Restaurants & Event Centers** 



Schools & Churches

**Airport Hangars** 



Retail & Shopping Malis





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