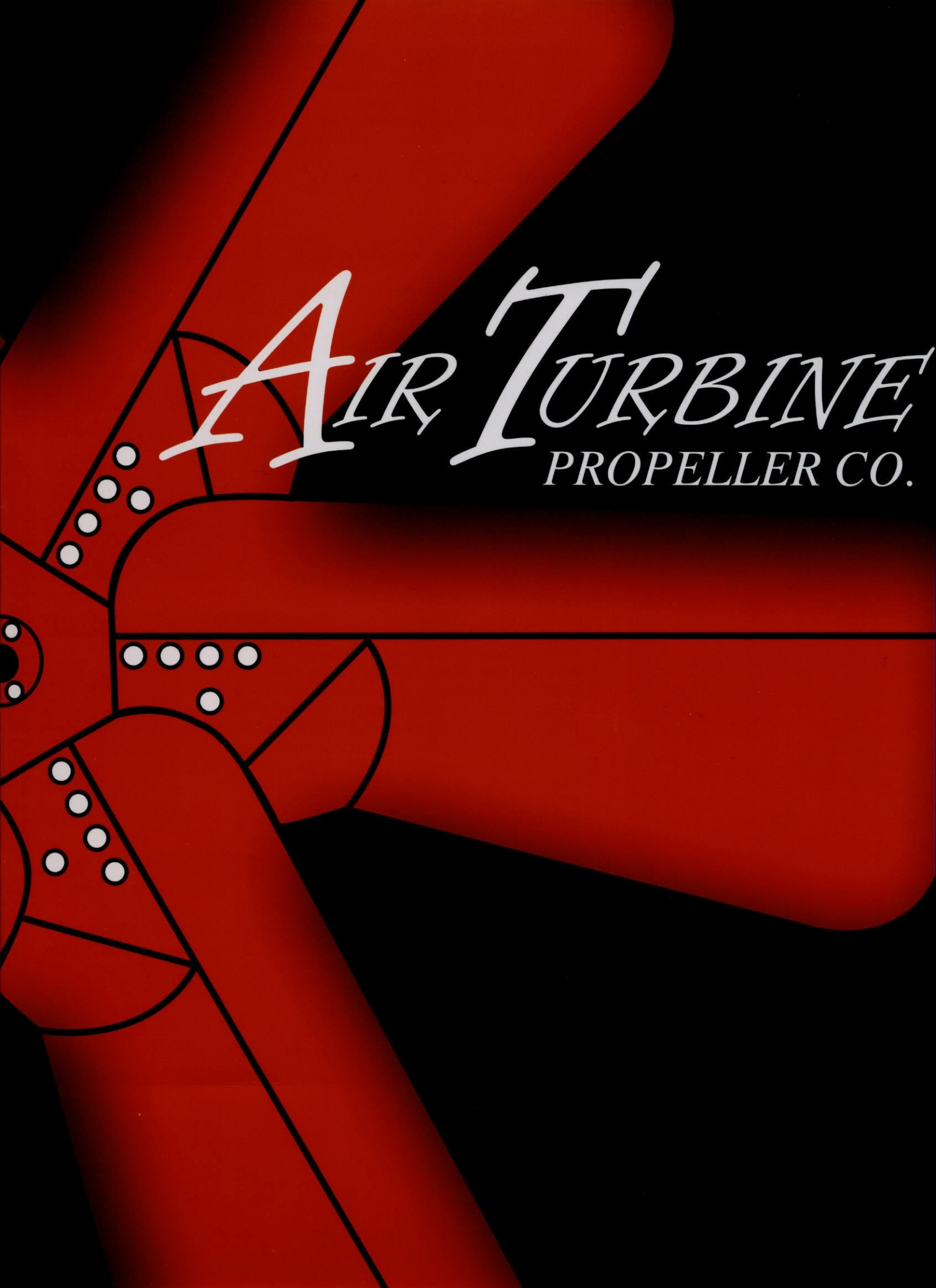

AIR TURBINE
PROPELLER CO.

Air Turbine Propeller is a leading manufacturer of propeller type fan blades for the Heating, Ventilation, Air Conditioning and Refrigeration industries throughout the world. Our reputation in the HVAC&R market is based on ***Customer Service, Quality, Reliability,*** and ***Fast Dependable Delivery*** of our products. Every propeller blade is custom manufactured, from a variety of materials and finishes, to fit the customers' specific application. Extensive in-house performance and acoustical testing ensure the integrity of each selection.

With an innovative management team, experienced labor force, modern manufacturing facility and highly regarded research and testing laboratory, Air Turbine Propeller consistently provides the ***highest quality*** fan blades at a reasonable price.

CUSTOM PRODUCTS

Look to Air Turbine for propellers ranging from 8 inches through 10 feet in diameter. Styles vary from 4 to 16 blades and materials include steel, aluminum and stainless steel. A comprehensive software package allows customers to select props based on performance, efficiency, noise and price. An experienced sales team will provide the support customers need to finalize their fan selection.

Materials:
- Carbon Steel
- Mill Galvanized Steel
- Stainless Steel (304 and 316L grades)
- Aluminum
- Semi-Stainless (Zinc plated hub with stainless steel blades and rivets)
- Semi-Aluminum (Zinc plated hub with aluminum blades and plated rivets)

Finishes:
- Gray enamel paint
- Epoxy paint
- Bright zinc plate
- Hot-dip galvanizing
- High temperature aluminum paint
- Custom finishes also available

QUALITY CONSTRUCTION

Rugged, reliable construction is the Air Turbine Propeller trademark. Tight tolerances maintained throughout the manufacturing process result in a superior product. Fan blades, tracked and balanced to specifications that meet and exceed industry standards, provide smooth and safe operation. Quality control at every step along the production path ensures accurate performance and longevity. A highly skilled work force provides the dependability required by a diverse customer base.

FAST SERVICE

In an effort to meet customer needs, Air Turbine Propeller offers short lead times of two to three weeks on most orders. In addition, there are no set-up charges and no minimum order requirements. Customized packaging, from heavy-duty wooden crates to single fan cardboard boxes, protects each fan blade to ensure the integrity of the construction.

Emergency "Quick Ship" Program
For certain emergency situations, Air Turbine Propeller will ship small quantity orders in three days for a small premium.

PRODUCT LINE

Type X Propeller Blade

The workhorse of the industrial ventilating industry, this propeller is of heavy gauge construction and is designed to operate within a wide horsepower range with substantial air delivery, for both direct and belt drive applications.

The **TYPE MS** propeller, a smaller, lighter duty version of the Type X blade with a diameter range of 16-24," is also available.

Specifications:
- Diameters from 24-120"
- Max HP - 25
- SP Range - 0-2.0" wg

Applications:
- Roof Top ventilators
- Cooling towers
- Refrigeration units
- Portable blowers

Type S Propeller Blade

This standard, low cost, general purpose ventilating blade is designed for light duty. Its wide blade design produces a large volume of air at low static pressures.

Specifications:
- Diameters from 8-72"
- Max HP - 7.5+
- SP Range - 0-1.0" wg

Applications:
- Air conditioning and refrigeration units
- Roof top ventilators
- Portable blower fans
- Panel fans
- Cabinet fans
- Poultry exhaust fans

Type A Propeller Blade

This is the fastest growing fan design for the general ventilation industry today. The Type A blade is an ultra quiet, medium duty blade tha produces large volumes of air at low speeds fo lower noise output.

Specifications:
- Diameters from 24-60"
- Max HP - 10+
- SP Range - 0-1.5" wg

Applications:
- General ventilation fans
- Agricultural fans
- Poultry fans
- Air turn-over units

Type Y Propeller Blade

Noted for its quality and stable air flow characteristics, this propeller is designed to operate against medium static pressures and produce the same air flow at lower speeds. This blade is ideal for industrial applications where greater efficiency and lower noise characteristics are required.

The **TYPE ES** propeller, a smaller, lighter duty version of the Type Y blade with a diameter range of 16-24" is also available.

Specifications:
- Diameters from 24-120"
- Max HP - 30
- SP Range - 0-2.5" wg

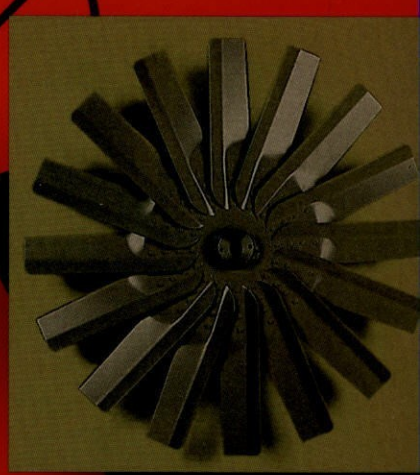
Applications:
- Cooling towers
- Tube and vane axial fans
- Refrigeration units
- Heavy duty ventilating fans

Type F Propeller Blade

Made of heavy gauge materials, this rugged twelve blade propeller is designed for heavy duty, high pressure applications where other propellers are limited by their construction. A large hub to tip ratio enables this blade to operate at higher speeds and static pressure ranges that other blades can't handle.

Specifications:
- Diameter 24-120"
- Max HP 100
- SP Range - 0-5" wg

Applications:
- Radiator cooling on compressors and diesel engines
- Large refrigeration units
- Vane and tube axial fans
- Cooling towers



Type G Propeller Blade

This heavy duty, sixteen blade propeller with a large hub to tip ratio is designed for even mor rugged, high speed, high pressure application than the Type F blade.

Specifications:
- Diameter 24-120"
- Max HP 150
- SP Range - 0-5" wg

Applications:
- Radiator cooling o compressors and diesel engines
- Large refrigeration units
- Vane and tube axia fans
- Cooling towers

A BRIEF HISTORY OF AIR TURBINE PROPELLER

In 1950, William F. Feazell founded Alloy Propeller in Baltimore, Maryland. He developed a technique of fabricating large, steel fan propellers for use in the industrial market. Most of the heavy industrial propellers at that time were cast aluminum. Roof Ventilators, Mancooler Fans and Evaporative Condensers quickly began to incorporate his blades. As the Cooling Tower industry emerged, his propellers were the fabricated blades of choice. In 1952, he moved his operation to Zelienople, PA where he improved and expanded his product lines. In 1965, he sold the name and various product lines, and immediately started Air Turbine Propeller Company. The company incorporated in 1970 and an ESOP program allowed employees to become owners in 1979.

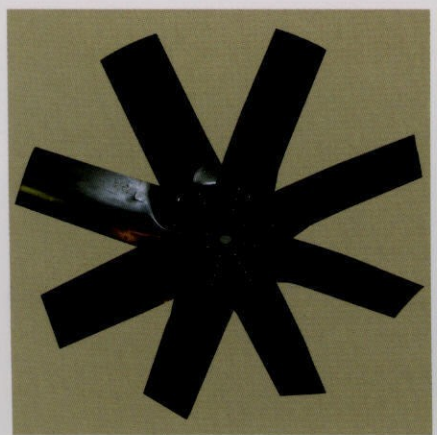
As an employee owned company, Air Turbine benefits from an experienced work force, dedicated to providing superior quality and workmanship with a personal commitment to customer satisfaction. With a solid history of growth, plus the utilization of modern technology and research to create a reliable, efficient product, the employee owners look forward to remaining at the forefront of the ever-evolving HVAC&R market.

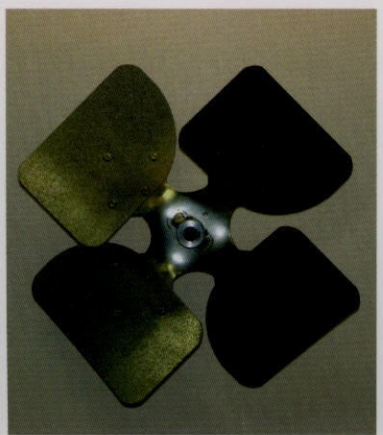
MANAGEMENT TEAM APPROACH

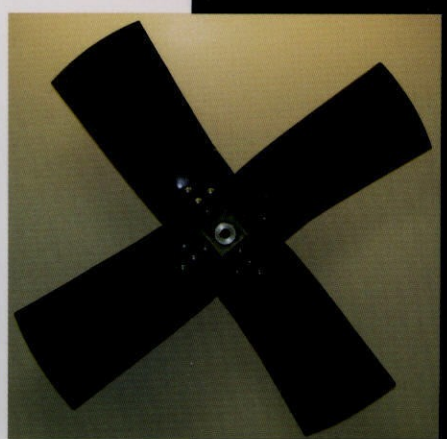
The strength of Air Turbine Propeller's management team is derived from a combination of top notch administrative skills, a thorough knowledge of the technical aspects of the industry and strong sales support. The individual expertise of each team member and a common commitment to excellence results in a comprehensive approach to company decision-making.

The hands-on philosophy of the management team is effective in finding ways to better serve customers, maintain product quality and ensure consistent company growth. The team is also dedicated to integrating computer technology into all aspects of manufacturing, accounting and sales, so that vital information is easily accessible to all company personnel.

NEW PRODUCTS







TESTING AND RESEARCH

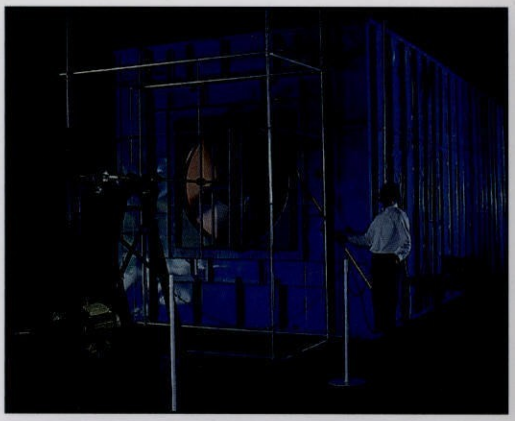
Air Turbine Propeller operates a state of the art laboratory and research center, acknowledged by HVAC&R engineers as one of the finest test facilities in the air handling industry. Lab personnel conduct rigorous testing of all Air Turbine products, perform specialized research in vibration and sound analysis and offer engineering assistance and testing services to Air Turbine Propeller's customers. Portable equipment is available for both in-house and on-site customer verification testing.

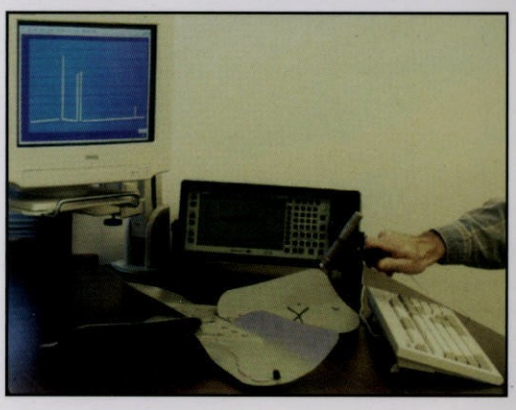
The laboratory inlet-outlet test chamber is constructed in accordance with ASHRAE standard 51-75 and AMCA standard 210-85 and is capable of testing propellers that are up to 60 inches in diameter. Modern data acquisition equipment and computer analysis provide instantaneous test results. FFT analyzers are used to perform resonance frequency testing and modal analysis. CAD and 3-D modeling are available to help in the design of current and future products.

Laboratory personnel have been instrumental in improving the current product line and developing new propeller styles, while affording customers the opportunity to benefit from the latest technology in sound and performance testing.

Acoustical Testing Program

Air Turbine is at the cutting edge of the industry in conducting sound intensity measurements. Acoustical testing is performed in accordance with ANSI S12.12. This method enables one to perform acoustical analysis in the presence of background noise. Tests may be conducted in the field or in the laboratory. Noise properties may be calculated for any operating point by combining actual test data with our in-house acoustical software. Results can be displayed in power, pressure, sones and octave band if required. Our selection software makes this information easily accessible to the general public.





For Air Turbine Propeller Company's warranty information and selection software, please contact us at the address above or see our website at www.airturbine.com

P.O. Box 218
22329 Perry Hwy.
Zelienople, PA 16063
724.452.9540
724.452.0961 FAX

www.airturbine.com
sales@airturbine.com