fan solutions
for residential, commercial and industrial applications
Eighty Years and Growing.
Lau's history began in 1931 when Edgar B. Lau began the Lau Blower Company in Dayton, Ohio, building high efficiency, forward-curved blower wheels. In 1941, Lau was granted a patent for a blower conversion unit which converted gravity heated homes to forced air. This early innovation launched Lau on its path towards efficiently moving air to improve comfort. As homes made the switch, Lau stood at the forefront of developing forced air solutions to improve comfort.

Innovation: The Engine of Growth.
It was innovation that brought Lau to life and it is innovation that keeps our company moving forward. One of the reasons for our success is a core belief that business can only grow through innovation. With over 50 patents related to heating and ventilation comfort, Lau continues to innovate solutions to meet the world’s changing energy and noise requirements while delivering the highest quality product as economically as possible. Lau innovated the first full production welded blower wheels with welded blades, the Preslok™ blower wheel center disc with unique design, the world’s first external rotor motorized blower package, and much more.

Our Expertise. Your Solution.
With decades of experience comes air moving knowledge, the foundation of what Lau brings to each application. Lau offers both standard and customer focused solutions, tailoring each product to a specific application to maximize performance.
1931 Founded by Edgar B. Lau as Lau Blower Company. Produced large volume, high-quality blower wheels.

1941 Lau patents the blower conversion unit to convert homes from gravity to forced air heating.

1947 Lau patents the window-mounted fan with an integral venturi for compact room ventilation.

1950 Lau patents the world’s first spun blower wheel, eliminating the need to weld blades on residential furnace blowers.

1954 Lau patents the first external rotor motorized blower called the “Electro-Wheel Blower,” the most efficient direct drive blower available.

1955 Lau becomes one of the first advertisers on Tonight with Steve Allen.

1955 Lau patents the Preslok™ blower wheel, the precursor to the modern A Wheel.

1960 Lau patents the Dynacone, a mixed-flow fan suitable for residential applications.

1964 Lau develops the industry’s first tight housing allowing for larger blower wheels in smaller spaces.

1968 Lau designs a fixed-flow blower for clean rooms where static pressures change but require constant flow.

1968 Lau Blower Company purchases all assets of the Propellair Division of Robbins and Myers, Inc., Springfield, Ohio. This purchase complemented Lau’s then current product line of air-moving equipment.

1971 Lau patents a hub design for blowers which does not require a set-screw.

1971 Lau launches a line of modern appliance-styled humidifiers, the Lau Vapor-Air Humidifiers.

1973 Lau announces a line of portable electronic air cleaners called Sea-Air appliances.

1980 Lau patents the Weldlok center disc design, the precursor to the modern H Wheel.

1990 Lau is purchased by Tomkins PLC, an international company focused on manufacturing, headquartered in London, England, further ensuring Lau’s success.

1996 Lau purchases the assets of Brookside Group, a residential and commercial air moving manufacturer.

2001 Lau releases Whirlwind, a computer-assisted fan selection software.

2005 Lau opens its Monterrey, Mexico blower production facility.

2008 Lau expands propeller production into Olive Branch, Missouri.

2009 Lau develops the Corus direct drive plenum fan with reduced tonal annoyance and limited vibration for full range VFD control.

2010 Lau expands its manufacturing capacity to eight locations serving thousands of customers worldwide.
World Class Engineering

For over 80 years, Lau’s engineering department has had no rivals in business. Our team of experienced design engineers and technicians utilize state-of-the-art engineering tools and laboratory facilities to provide solutions for the most demanding customer applications. Areas of technical expertise include:

- Airflow Performance
- Acoustics
- Structural Dynamics

Lau’s engineering laboratory provides a full range of product and application testing. Airflow performance testing is conducted in one of two large airflow chambers. Dual reverberant rooms are available to measure sound power levels in accordance with AMCA Standard 300. The Lau Engineering laboratory is accredited by AMCA for test standards 210 and 300.

Other laboratory capabilities include balance and vibration measurements, dynamic strain-gauge testing, life cycle testing, and ASTM B-117 Salt Fog.

The laboratory contains a 12,000 ft² prototype and sample shop supporting product development and customer sample requests.

From basic air-moving components to motorized air-moving packages, Lau engineering is uniquely positioned to tackle the most demanding customer application challenges.
Innovation Next Door

Marketing and R&D Headquarters
Dayton, OH

Wholesale Distribution Warehouses
Rochester, IN • Mira Loma, CA • Dallas, TX

Manufacturing Locations
Lexington, KY
Commercial Centrifugal

Rochester, IN
Residential & Commercial Centrifugal

Galesburg, KS
Residential Centrifugal

Olive Branch, MS
Residential Axial

Geneva, AL
Residential & Commercial Centrifugal

Carrollton, TX
Residential & Commercial Axial

Juarez, Mexico
Residential & Commercial Axial, Commercial Centrifugal

Monterrey, Mexico
Residential & Commercial Axial, Residential & Commercial Centrifugal

Note: Gray area is only 250 miles from any shipping point.
More than just fan selection software, **element** is a comprehensive tool to design an air-moving solution for your application. **element** incorporates an easy-to-use interface with everything the design engineer needs to identify, compare, and select fan technologies in a simple, single software package.

In addition to the great features shown on the next page, **element** allows users to quickly and easily print submittals, catalog pages, and drawings all to a printer or PDF with one-touch access.
element Advanced Fan Selection Software

1. Make selections based on fan technology and operating points or simply by energy efficiency at a specified operating point.


3. Easily view and print drawings and multi-speed fan curves.

4. Evaluate fan energy efficiency using several common metrics.
Lau’s Axial Fans

Lau offers the most versatile range of propellers on the market, manufactured at numerous locations throughout North America.

The proper selection and application of propellers in unitary systems is a complex engineering subject because of the large variety of propeller designs and systems in which they are used. The proper selection and application of the propeller requires evaluation of all the variables to arrive at the most efficient, economical propeller for your application.

Lau’s HVAC axial fans are designed for numerous pressure applications including condenser units and heat pumps, cooling towers, engine cooling, and agricultural ventilation.
Lau’s Centrifugal Fans

Lau offers the broadest range of centrifugal products available anywhere in the world. A variety of innovation from a single source.

The most common types of centrifugal fans are forward-curved (FC) and backward-curved (BC) airfoil. FC are by far the most common type of centrifugal fan. A housing is necessary to develop rated pressures. FC fans are used in high flow, low pressure applications including residential furnaces and packaged air handling equipment. When used in its designed range, FC fans operate quietly and efficiently. FC fans offer the most compact air moving solution.

BC airfoil wheels perform well with or without a housing and are used in medium flow, high pressure applications such as air handling units. The BC airfoil wheel is the most efficient centrifugal fan design.

C Series Dovlok Wheels
A light weight, light duty wheel specifically designed for residential furnace and air handler applications (FC blades). Available in both direct drive (9˝ - 12˝) and belt drive (9˝ - 15˝).

C Series Wheels & Housings
An excellent solution for residential furnace and light commercial air handler units. Available in both direct drive (9˝ - 12˝) and belt drive (9˝ - 15˝).

A Series Preslok Wheels
A stronger, robust product with blades that lock into place, designed for small to mid-size commercial, residential and industrial applications (FC blades). Available in both direct drive (9˝ - 12˝) and belt drive (9˝ - 20˝).

A Series Wheels & Housings, Blowers
Commonly used in commercial air handlers and filtration equipment. Available in both direct drive (9˝ - 12˝) and belt drive (9˝ - 20˝).

A Series Framed Blowers
Designed for commercial and industrial applications requiring Class I and Class II performance.

H Series Weldlok Wheels
A heavy-duty belt drive wheel specifically designed for commercial and industrial applications requiring a high volume of air for Class I and Class II performance (FC blades).

H Series Framed Blowers
Designed for commercial and industrial applications through Class II. Also available in a wheel and housing configuration.

Corus
An environmentally superior alternative to conventional fans that can be used in any design or any application (BC airfoil blades).
Residential Axial Fans

Outdoor Condensing Units & Heat Pumps

**CF Series**
- 18” – 26” diameter
- Available in multiple blade widths and thicknesses
- 2, 3 and 4-blade configurations
- CW and CCW rotations
- Blades available in galvanized steel, galvalume or aluminum
- 1,200 RPM maximum speed

**S Series**
- 18” – 28” diameter
- Available in multiple blade widths and thicknesses
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations
- Blades available in galvanized steel, galvalume or aluminum
- 1,200 RPM maximum speed

**M Series**
- 10” – 18” diameter
- Available in multiple blade thicknesses
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations
- Blades available in galvalume or aluminum
- 1,200 RPM maximum speed

**HS Series**
- 18” – 30” diameter
- Available in multiple blade forms, widths and thicknesses
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations available in most diameters
- Blades available in aluminum
- 1,200 RPM maximum speed
Residential Centrifugal Fans

Indoor Furnaces & Air Handlers

C Series Dovlok Direct Drive Wheels and Blowers
- Dovlok center disc construction for positive alignment
- 9” – 12” wheel diameters
- 4” – 12” wheel widths
- Galvanized steel construction
- Available with a spot-welded housing or seamed housing
- Bolt-on housing supports accommodate four discharge positions
- Available as a motorized package for plug-and-play utilization

A Series Preslok Direct Drive Wheels and Blowers
- Preslok center disc construction for positive blade retention, providing higher RPM capability
- 9” – 12” wheel diameters
- 4” – 12” wheel widths
- Galvanized steel construction
- Housings available in galvanized steel or painted gray steel
- Bolt-on housing supports accommodate four discharge positions
- Available as a motorized package
Commercial Axial Fans

Air-Cooled Condensing Units & Commercial Grade Applications

**S Series**
- 18” – 28” diameter
- Available in multiple blade widths and thicknesses
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations
- Blades available in galvanized steel, galvalume or aluminum
- 1,200 RPM maximum speed

**HS Series**
- 18” – 30” diameter
- Available in multiple blade forms, widths and thicknesses
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations available in most diameters
- Blades available in aluminum
- 1,200 RPM maximum speed

**E Series**
- 14” – 50” diameter
- Available in multiple blade widths
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations
- Blades available in galvanized steel, galvalume or aluminum
- 1,800 RPM maximum speed up to 24”
- 1,200 RPM maximum speed up to 30”
- 900 RPM maximum speed up to 50”
Commercial Centrifugal Fans
Packaged Air Conditioners & Air Handlers

A Series Preslok Direct Drive Wheels & Blowers
- Preslok center disc construction for positive blade retention, provides higher pressure capability
- 9” – 12” wheel diameters
- 4” – 12” wheel widths
- Also available as a wheel and housing combination

A Series Preslok Belt Drive Wheels & Blowers
- Preslok center disc construction for positive blade retention, provides higher RPM capability
- 9” – 20” wheel diameters
- 4” – 18” wheel widths
- Blowers come standard with pillow block ball bearings and AMCA Class I or Class II options
- Available with cartridge bearing or frame-style complete blower assemblies

H Series Belt Drive Wheels & Framed Blowers
- 20” – 36” wheel diameters
- 15” – 36” wheel widths
- Pillow block ball bearings
- AMCA Class I and Class II performance available
- Wheels and housings available in painted steel

Corus Direct Drive Plenum Fan
- Complete motorized solution
- Aluminum, welded airfoil wheels available in 9-blade, 12-blade and the exclusive Qualitone (minimizes tonal annoyance) configurations
- 10” – 40” wheel diameters
- Available in multiple wheel widths to meet a wide variety of operating conditions
- Galvanized steel base with optional isolators
- No resonant conditions in the operating range
- Proprietary balance system for industry’s tightest vibration performance
- Available with shaft grounding kit, piezometer, inlet dampers, guarding, and special coatings
Industrial/General Purpose Axial Fans

Cooling & Ventilation

Y Series
- 10” – 20” diameter
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations
- Blades available in steel, galvalume or aluminum
- 1,200 RPM maximum speed

R Series
- 10” – 24” diameter
- 2, 3, and 4-blade configurations
- CW and CCW rotations
- Blades available in steel or aluminum
- 1,800 RPM maximum speed up to 20”
- 900 RPM maximum speed up to 24”

E Series
- 14” – 50” diameter
- Available in multiple blade widths
- 2, 3, 4 and 5-blade configurations
- CW and CCW rotations
- Blades available in galvanized steel, galvalume or aluminum
- 1,800 RPM maximum speed up to 24”
- 1,200 RPM maximum speed up to 30”
- 900 RPM maximum speed up to 50”

D Series
- 36” – 60” diameter
- Available in multiple blade widths
- 2, 3, 4, 5 and 6-blade configurations
- CW and CCW rotations
- Blades available in galvanized steel or stainless steel
- 850 RPM maximum speed up to 40”
- 708 RPM maximum speed up to 48”
- 600 RPM maximum speed up to 60”
Innovation + Expertise = what we deliver.