



LAU QUALITY STATEMENT

We will provide products and services which will meet or exceed customer expectations by assuring a work environment where all Lau employees contribute to continuous improvement.

A WORD ABOUT LAU INDUSTRIES AND LAU-CONAIRE DIVISION

For over 70 years, Lau has been a dedicated service and manufacturing supplier to the major original equipment manufacturers; both large and small. That's a long time and quite a testament to Lau's commitment and stability in a very challenging market. We were here to serve our customers; not only yesterday, but we are here now, into and throughout the 21st Century!

Lau's Conaire Division is the only manufacturer in the market dedicated to the replacement business. Conaire has supplied "Universal Replacement" propellers, blower assemblies, wheels plus related components and humidifiers for over 50 years.

Lau Conaire's focus has always been on the HVAC/R Wholesalers, Appliance and Electric Motor Distributors, as well as the Service Technician. Our "Universal Replacement" products are designed and engineered to keep SKU numbers to a minimum, to replace and endure the most rugged handling, and withstand the increased workload expected of quality replacement products through years of service.

Find out more about Lau and Lau-Conaire "Universal Replacement" propellers, blowers, wheels and related components and humidifiers from your local Lau-Conaire wholesaler or sales representative. If you need help locating a source for Lau products, please call or e-mail us via our Web site at www.lau-ind.com/conaire.htm.

Thank you for your continued support by demanding top quality at competitive prices ... by demanding Lau!

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LAU CONAIRE ("LAU") LIMITED WARRANTY

1. Lau extends to original equipment manufacturers, buyers for resale, commercial users or owners, or commercial installers only the following warranty against defects in material or workmanship on air moving components for one (1) year from the date of any such customer's purchase.
 - a) If, during the warranty period, any Lau product is defective, Lau will repair or replace (at its option) the defective unit, without charge, provided that the defective unit is returned to Lau; transportation charges prepaid by the customer, and if replacement is elected, the customer must pay for any charges for the shipping and installation of the replacement unit.
 - b) To obtain warranty service, please provide the following information to the authorized Lau distributor as outlined in item e below: name of the customer and present owner, mailing address of the present owner, where the present owner can be reached during business hours, the make and model number of the defective unit, proof of date of purchase, the date of resale or installation and a description of the defect.
 - c) This warranty does not cover any defects or damage caused by:
 1. The particular use or application of the Lau product by any customer or user of the product.
 2. Improper installation.
 3. Damage (not resulting from defect or malfunction) while in the possession of the customer or user, or in transit to Lau.
 4. Unreasonable use (including failure to provide reasonable and necessary maintenance).
 - d) REPAIR OR REPLACEMENT UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CUSTOMER. LAU WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON ANY LAU PRODUCT. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ON ANY LAU PRODUCT. LAU'S LIABILITY IN ALL EVENTS IS LIMITED TO, AND SHALL NOT EXCEED, THE PURCHASE PRICE PAID.
 - e) Inquiries regarding this warranty should be directed to the distributor from whom the Lau product was acquired or write Lau direct: Lau Conaire, 4509 Springfield Street, Dayton, Ohio 45431.
2. NO WARRANTIES TO CONSUMERS - Lau Conaire makes no warranties to those defined as consumers in the Magnuson-Moss Warranty-Federal Trade Commission Improvement Act.
3. PRODUCT SUITABILITY - Many states and localities have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While Lau attempts to assure that its Products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, please review the product application, and national and local codes and regulations, and be sure that the product, installation, and use will comply with them.



GENERAL INFORMATION

The simplest form of axial fans consists of a propeller, usually with three to five aluminum blades mounted in a venturi. This type of fan finds wide use in applications requiring high air volumes at low static pressures. The performance characteristics of propellers may vary in many ways. Some general guidelines are:

- Increased blade pitch increases CFM and HP.
- Decreased blade pitch decreases CFM and HP.
- Increasing the number of blades increases static pressure characteristics.

ADVANTAGES OF PROPELLERS:

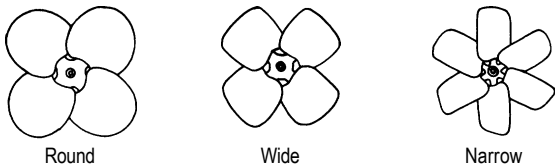
- Straight through air flow pattern
- Low cost
- Light weight
- High volume

TYPICAL APPLICATIONS

- Roof Top Unit Heaters
- Condensing Units
- Walk-In Refrigeration Units
- Pedestal Fans, Mancoolers, Ventilating Fans

BLADE SHAPE

There are only three basic important shapes that are of interest in the propeller selection – round, wide pressure blade and narrow pressure blade.



The round shaped blades are used for free air delivery and low pressure applications, and are quieter.

The wide pressure blade is used in most applications operating at substantial static pressures. It has excellent pressure characteristics and reasonable noise levels.

The narrow pressure blade is generally used in applications where higher static pressure exists, such as multi-row coils or places where minimum axial depth is necessary.

PROPS FOR THE REPLACEMENT BUSINESS

Both free air and condenser designs

- 2-, 3-, 4-, 5-, and 6-Blade Props and Slinger Ring Props
- Up to 60- in diameter, up to 40° pitches
- Hubs and Bushings: 1/4- to 1 7/16- bore

PROPELLER VIBRATION

Propellers are, by nature, rather flexible and subject to vibration. Commercially available propellers will have a number of natural frequencies occurring as different parts of the propeller vibrate, or as they vibrate in different modes. Lau exercises great care in designing propellers so natural frequencies do not occur at frequencies normally found in systems.

PITCH SELECTION

- Pitch is measured at the spider lobe.
- Consult the chart for pitch selection to avoid motor overload.
- Make certain that the propeller horsepower does not exceed the motor horsepower.
- On “Free Air” type propellers, use the brake horsepower published under the RPM in the performance chart.
- On “Condenser” type applications, where static pressure is unknown, use the brake horsepower published at .3- static pressure for the appropriate RPM.

PROPELLER ROTATION

- The direction of rotation of a propeller is determined to be clockwise (CW) or counter-clockwise (CCW) when viewed from the air discharge side.
- The discharge side is the concave (“cupped”) side of the blade.
- “Sandbox Method” – Imagine standing in a sandbox and dropping the propeller face up or face down on the sand. Regardless of which side is up, the direction of rotation is the same as the direction required to turn the propeller into the sand.

HORSEPOWER CONVERSION CHART

Use to convert decimal horsepower to commonly available fractional horsepower motors. (for watt conversion, use the formula 745.7 watts = 1 HP)

DECIMAL HORSEPOWER																	
0.010	0.014	0.017	0.020	0.025	0.033	0.040	0.050	0.067	0.083	0.100	0.125	0.167	0.250	0.333	0.500	0.750	1.000
FRACTIONAL HORSEPOWER																	
1/100	1/70	1/60	1/50	1/40	1/30	1/25	1/20	1/15	1/12	1/10	1/8	1/6	1/4	1/3	1/2	3/4	1



Most Lau products are suitable for normal parcel shipping services such as RPS or UPS. However, some products are too large and must be shipped via common carrier.

Next day or 2nd day parcel service: Most products are suitable for such expedited services at special handling costs. However, due to the bulkiness of the majority of products featured in this catalog, you can avoid unpleasant surprises by checking with our Customer Service to verify cost before you request expedited service.