

**FAMILIA DE VENTILADORES INDUSTRIALES:
Fabricante COFIMCO**

1. PRESENTACIÓN DE COFIMCO

Competitive factors

The worldwide success of Cofimco is due to the innovative aerodynamic blade design combined with a unique way of manufacturing the fans resulting in the most cost-effective product on the market ! The fans are made of few components, with a high degree of commonality between the different families. This allows optimizing of the manufacturing process, and reducing the inventory; the result is a significant cost reduction and a shorter lead-time. In addition, our technology allows customizing the fan to the cooling unit, instead of modifying the unit to fit available fan sizes. Consequently, we offer the customer the most versatile product at a lower cost.

Computerized fan selection

Selecting the optimum fan from a large variety of available configurations is a simple process. Cofimco provides an easy-to-use fan selection program. It automatically identifies the best fan based on the customer's optimization criteria: power, sound, or price.

Cofimco location

The main Cofimco S.p.A. facility is located in Pombia, Novara, 27 miles N-W from Milan, Italy's main industrial center. This facility is very close to the Malpensa International Airport, making it convenient for visitors and airfreight.



In 1992, a new manufacturing and sales center, Cofimco USA, was established in Chesapeake, Virginia, USA, 20 miles south of Norfolk International Airport.

Para más información, puede enviarnos sus consultas o peticiones de oferta por correo electrónico (ipic@ipic-gsp.com) o por fax (965-206412).

2. LÍNEAS DE PRODUCCIÓN DE COFIMCO

- 2.1. SERIE "Z"
- 2.2. SERIE "M"
- 2.3. SERIE "U"
- 2.4. SERIE "G"
- 2.5. SERIE "AV"
- 2.6. EJES
- 2.7. UNIDADES COMPLETAS

2.1. VENTILADORES COFIMCO SERIE "Z"

Series Z vary-step® adjustable pitch fans are available in diameters up to 84 in (2.134 m) in two different blade profiles. Both clockwise and counterclockwise configurations are available in both standard and reverse mounting types. The extruded aluminum blades are connected to the hub disk with a patented vary-step® adapter, which fixes the blade pitch.



7 bladed "Z" series fan



"Z" series hub

Adapters are available in ten different pitches. If necessary, the blade pitch can be quickly changed just by replacing the adapters. The Z series vary-step® hubs are available in three different sizes, and consist of a high quality steel disk with a center hub boss. The connection to the driving shaft can be provided either through a cylindrical bore or a tapered bushing.

Main applications:

- small cooling towers;
- air coolers;
- air conditioning;
- ventilation.

2.2. VENTILADORES COFIMCO SERIE “M”

Series M adjustable pitch fans are available in diameters up to 20 ft (6.1 m) in thirteen different blade profiles. Both clockwise and counterclockwise configurations are available, in both standard and reverse mounting types. The blades (either aluminum extruded or FRP pultruded) are connected to the hub through a high quality steel shank. The patented M hub consists of two precision machined steel forgings, clamped together to sandwich the blade shank. One of the two pieces incorporates the hub boss. The M hub is available in seven different sizes, depending on the fan diameter and number of blades. The connection to the driving shaft can be provided either through a cylindrical bore or a tapered bushing.



6 bladed "M" series fan



"M" series hub

Main applications:

- air coolers;
- wet cooling towers;
- air cooled steam condensers;
- radiators;
- air conditioning;
- ventilation.

2.3. VENTILADORES COFIMCO SERIE “U”

Series U adjustable pitch fans are available in diameters up to 18 ft (5.486 m) in thirteen different blade profiles. Both clockwise and counterclockwise configurations are available in both standard and reverse mounting types. The blades (either extruded aluminum or pultruded FRP) are connected to the hub through a high quality steel shank. The U hub consists of precision machined steel forging, which incorporates the shanks housing and the hub boss. A pair of U bolts clamps each blade shank securely to the hub. The



connection to the driving shaft can be provided either through a cylindrical bore or a tapered bushing.



"U" series hub

Main applications:

- air coolers;
- wet cooling towers;
- air cooled steam condensers;
- radiators;
- air conditioning;
- ventilation.

2.4. VENTILADORES COFIMCO SERIE "G"

Series G adjustable pitch fans are available in diameters up to 40 ft (12.192 m) in six different blade profiles. Both clockwise and counterclockwise configurations are available in both standard and reverse mounting types. The blades (either extruded aluminum or pultruded FRP) are connected to the hub through a high quality steel shank. The G hub consists of two steel disks, connected to the top and bottom sides of the hub boss. Upon request, a connection flange can be provided to facilitate the installation of the largest fans. The blades are connected to the hub through extruded aluminum pillow blocks sandwiched between the hub disks. A special feature of the G Series is that it allows a +/- 2" adjustment of the fan diameter, either to minimize the tip clearance to increase the performance or to increase the clearance to compensate for out-of-roundness of the fan cylinder ring. The G hub is available in five different sizes, which are selected on the basis of the fan diameter and the number of blades. The connection to the driving shaft can be provided either through a cylindrical bore or a tapered bushing.

6 bladed "G" series fan



Main applications:

- air coolers;
- wet cooling towers;
- air cooled steam condensers.



"G" series hub

2.5. VENTILADORES COFIMCO SERIE "AV"

Series AV (Automatic Variable pitch) fans are available in diameters up to 23 ft (7.010 m) in thirteen different blade profiles. Larger diameters can be provided upon request.

Both clockwise and counterclockwise configurations are available in both standard and reverse mounting types. Each blade (either extruded aluminum or pultruded FRP) is connected to the bearing block through a high quality steel flange. Our third generation pneumatic actuator provides a linear and hysteresis-free response to the input (signal) pressure. Specifically designed for minimum maintenance, it assures the most competitive life cycle cost.

In case of air failure the blade pitch is forced to either the maximum or minimum value according to the customer's requirement. Alternatively, the blades can also be kept at the last pitch value by the addition of an air lock valve. The user can easily make adjustments to the blade pitch and maximum travel.

Actuator response test





5 bladed "AV" fan

2.8. EJES COFIMCO



Cofimco also manufactures drive shafts and bearing blocks. These units can be supplied based on either Cofimco design or according to the drawing/specification provided by the customer.



Drive shaft and bearingblock

2.9. UNIDADES COMPLETAS COFIMCO



Complete unit with FRP fan and inlet bell

Complete unit with aluminium fan.



Cofimco complete fan units are available in the diameter range from 20" (0.508 m) to 96" (2.438 m). The most common motor configurations B3, B5, V1, V3, V5 are supplied. A rigid steel case and motor support assure vibration-free operation.

An optional FRP elliptical inlet bell is supplied whenever efficiency and sound characteristics require an extra-margin.

