

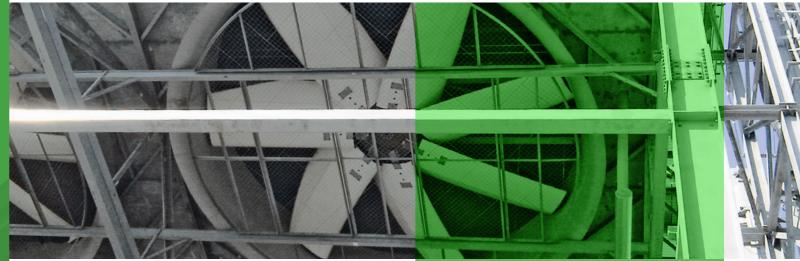
Providing solutions for any needs of improvement in your cooling systems







Cofimco Service was created to provide parts and engineering solutions to any needs related to plant cooling systems.



#### **LET US KNOW YOUR NEEDS**

We are experts in axial flow fans and air-cooled heat exchangers so allow Cofimco to help you by coming in and conducting a full air-cooled heat exchanger and axial fan inspection prior to a turnaround in order to help you better prioritize your needs.

### TYPICAL NEEDS OF COOLING INSTALLATIONS THAT WE CAN SATISFY

- Increase of fans cooling capacity
- Power savings with consequent reduction of CO<sub>2</sub> emissions
- Reduction of maintenance activities and related costs
- Dampening of system vibrations
- Supervision of fans and drive system Installation
- Lowering of noise emissions



#### **ADVANCED "KNOW HOW"**

Thanks to decennial experience in the fields, Cofimco Service can analyze and propose solutions for any need or problems related to any cooling system.

# **Solutions**





# INCREASE THE COOLING PERFORMANCE

Cofimco can improve the cooling performance of your installation increasing the airflow volume by installing a more efficient fans (keeping same power consumption). In particular the TANDEM Blade, with its patented design, represents the most efficient fan blade on market

After an initial survey, in order to determine the existing working conditions, we can provide a cooling increase estimation. The test will take few hours and in most cases, is not required to stop the fan.



### SAVE ENERGY AND OBTAIN RETURN OF INVESTMENT

The expertise of Cofimco engineering applying our innovative fan design, optimizes the cooling system efficiency, obtaining energy saving with consequent CO<sub>2</sub> emissions reduction.

We can also predict a possible return of investment, obtained with the power absorption reduction.



# REDUCE YOUR MAINTENANCE ACTIVITIES AND COSTS

Cofimco innovative products design reduces maintenance activities and the need to replace components.

Flexi design reduces loads and vibrations transmitted to supporting structure and drive system, increasing life-time of all components.



### **REDUCE** YOUR FAN VIBRATION LEVEL

High vibrations are the main cause of structure loosening, drive system wear and fatigue damages.

We are able to perform vibrations measurement on your installation and, after a detailed data analysis, to provide the best solution to reduce vibrations.



# FANS AND DRIVE COMPONENTS

COMPONENTS INSTALLATION ASSISTANCE Your fan needs a proper installation to ensure the correct performances and long terms durability. Cofimco provides installation, assistance, as well as supervision for fans and for all drive components (as pulleys, belts, bearings...).

If you need the right tools for installation, Cofimco provides CS Series: the toolkits dedicated to specific fans or components installation



### NOISE LEVEL REDUCTION

Cofimco can perform surveys and related studies to identify the main noise sources and to provide solutions for their reduction.

50F, 60F and CX fan Series are the Cofimco solutions with the lowest noise emission in the market.

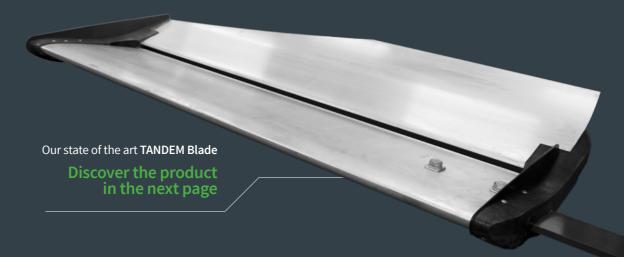


### AVOID CATASTROPHIC FAN BACKWARD

**ROTATION** 

The backward rotation of fans in standstill condition can lead to belt failure due to hard motor re-starts.

Cofimco designed an innovative anti-rotation devices that can be easily mounted on existing installations to prevent this problem.



# Revamping





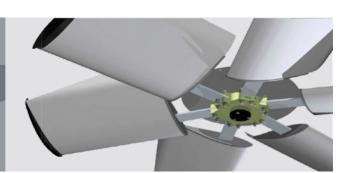
Cofimco innovative design is the best solution for customers needs.



Patented **TANDEM Blade** utilizes the FLEXI Blade technology and takes advantage from the combination of two separate profiles held together with the scope to delay the separation of the airflow around the airfoil to reach extremely high efficiency levels TANDEM Blade represents the best solution for Energy Saving projects (reducing the absorbed power, but maintaining the same cooling capacity) and when it is necessary to increase the cooling capacity maintaining the same power consumption and motor size. Available from 8ft (2.4m) to 22ft (6.7m) with manual and autovariable pitch configuration.



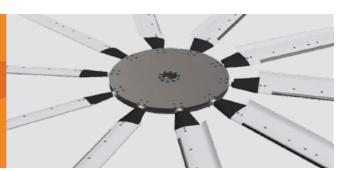




Since several years **FLEXI Blade** represents the most innovative and revolutionary design in fan industry. The flexible connection between airfoil and hub reduces the vibrations induced to the driving system and supporting structure, avoids resonance conditions (including VFD applications) and reduces stresses on the Blades. Fans are

available with manual and auto-variable pitch configuration, using different airfoils in aluminium and FRP and with a diameter range from 5ft (1.5m) up to 20ft (6.1m). Thanks to its technical advantages FLEXI Blade configuration allows a longer life time of the complete driving system and a strong reduction in maintenance costs.

## 35FBlade



**35F** is the only blade on the market designed with carbon-fiber reinforced FRP shaft, combing the high efficiency of the pultruded airfoil with the vibration dampening effect of the fibreglass connection. Combination of different materials and painting cycles offers the perfect solution under the most aggressive

environmental conditions, including offshore and seawater applications. Cofimco 35F Blade is available from 20ft (6.1m) to 36ft (10,7m) and represents the best solution for Cooling Towers and Air Cooled Condenser applications in terms of performances and preservation of the mechanical group.

### 50F/60F



**50F and 60F** are the largest FRP monolithic blades available on the market, with a very wide range of diameters starting from 14ft (4.3m) up to 38ft (11.5m). The special blade profiles are designed for super low noise application on Air Fin Coolers, Air Cooled

Condenser and Cooling Tower projects, allowing up to 10 dB(A) noise reduction respect to standard products and with the main advantages to maintain, for such a low noise level, high values of efficiency typical of the standard pultruded blades.

# XR/CS Series

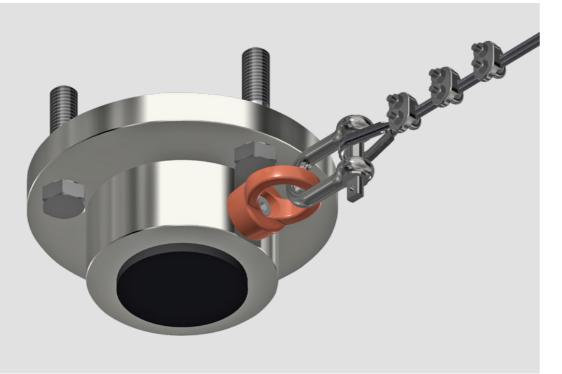




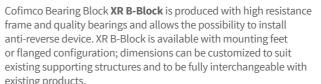
XR Series include all accessories and devices to optimize the performances and durability of your installation.

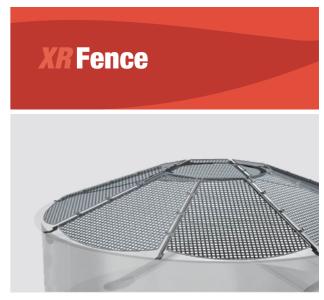


Cofimco **XR Lock** is an anti-rotation device installed below the driven pulley with the function to eliminate motor hard-starts caused by the reverse rotation of the fans during wind-milling. Design of this device can be customized according to customer requirements; the product is fully in compliance with standard Atex 2014-34-EU, zone II2G/D c IIC Tx.









Cofimco **XR Fence** is a smart and "easy to install" product, suitable to be fixed on existing Air-Coolers and Heat-Exchange units. XR Fence is design to offer easy access during maintenance activities and needs only few minutes to be removed/installed It is available from 3ft (1m) up to 20ft (6,1m) size.





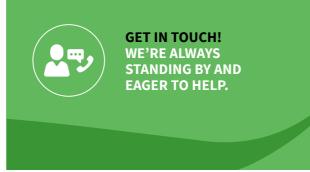




**CS Series** is the sets of Cofimco toolkits specific for installation of each fan model



Our dedicated and competent technical sales team is at disposal to support you in the first analysis of your needs.



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Cofimco is a world leading company manufacturing high technology axial fans for cooling applications.

Operating since 1975 Cofimco is today a global player with three different sales and manufacturing facilities in Europe, Asia and America.

Cofimco axial fans ranges from 4ft up to 40 ft diameter and are capable to satisfy the most demanding requirements of cooling systems dedicated to Oil & gas, power, HVAC and processing industries.

Our highly engineered aluminum and FRP fans incorporate exclusive and patented technical innovations, capable to guarantee top aerodynamic performances and long lasting operating life.

The long standing and successfully relationship with all the major cooling system manufacturers and end users, makes Cofimco your ideal partner for all your fans performances enhancing projects.

