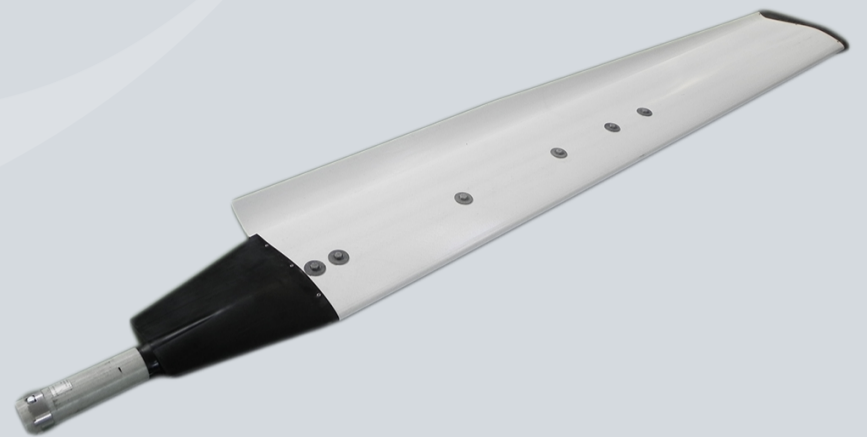




# 35F

AXIAL FANS



New **35F blade** with FRP pultruded shaft represent the most suitable product for **Wet application** with VFD device, combining the unique advantages of the flexible design together with the high resistance against corrosion effects.

Special root cap design determines a **total efficiency increase** reducing reverse airflow effects and allowing a better flow distribution along the blade.

**Available from 20 feet diameter to 36 feet** diameter with different G hub configurations to optimize blade length and natural frequency values. Combination of different materials and painting cycles offers the perfect solution to **resist under the most aggressive environmental conditions**, including offshore and seawater applications.

Cofimco's extensive research and laboratory test have resulted in the development of a new innovative shaft to connect the blade air foil to the hub, the new pultruded FRP shaft with carbon-fiber. The innovative shaft material gives the blade a suitable elasticity, between a flexible and rigid connection. As a result, **vibration** introduced by the fan to the supporting structure is **noticeably reduced**. The blade equipped with the innovative shaft is made with a traditional aerodynamic airfoil, fixed to the shaft by means of bolts.

Special root and tip caps are fixed to the airfoil by means of rivets.

The **35F Cofimco fan blade is the first and only worldwide blade with pultruded FRP shaft with carbon-fiber**, the following goals are achieved using the innovative material and dampening shaft design:

- > **The vibrations and loads** introduced by large fan blades in the supporting structure **are greatly reduced** thanks to the resulting blade elasticity, midway between flexible and rigid links.
- > The fan blades are able to withstand severe duty points and manage the high abrupt loads frequently introduced to the blades of large fans.
- > Drive system life is extended and supporting structure preserved. This new material and design represent a great improvement in the blade shaft strength and performance.

## Main applications:

- > Sea water cooling towers
- > Air cooled steam condensers

