

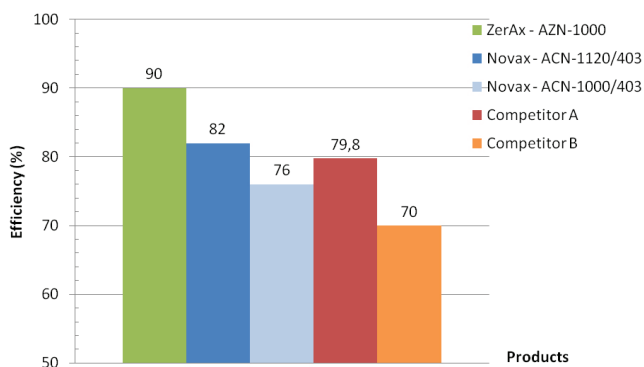


#### DESCRIPTION OF THE PRODUCT

ZerAx® is the first axial flow fan in the world to reach more than 91 % efficiency. The product is based on the latest technology and 60 years experience.

The new high efficiency fans are designed for both new and existing ventilation systems in buildings and ships as well as within the paper and pulp, wood and other industries that are looking for energy saving solutions.

Comparison of fan efficiencies (%)  
15 m<sup>3</sup>/s – 481 Pa static – 1470 rpm



So far efficiencies of axial flow fans in that market segment have been about 82 - 83 %.

#### HOW IS THE HIGH EFFICIENCY REACHED?

To improve the efficiency we took the entire fan engineering process outside the box.

A total re-design of the key aerodynamic aspects of the fan and robot-based manufacturing has improved efficiency in several key areas of the fan to deliver outstanding performance with reduction in power consumption. As an example, the clearance between the rotor blades and the fan casing is kept to a minimum to optimize performance.

The result is an axial flow fan that breaks new ground.

The high efficiency enables a reduction of the energy consumption of up to 40%.

On zerax.com any project can calculate the return on investment and in some cases the pay back time is down to a few months.

The fan life is more than 20 years.

## WHAT MAKES IT UNIQUE?

- Designed with computational fluid dynamics for improved aerodynamics
- Robot-based manufacturing for extreme precision
- New materials in blade and casing
- Result is very unique curves

## ENERGY SAVINGS

Based on 4000 running hours per year, the energy costs during 20 years' operation for 1000 ZerAx fans are 298 million Euro. The energy costs for our other flagship model Novax are 335 million Euro. Energy savings are 37 million Euro for 20 years' operation - in other words the new ZerAx fan is 11 % more efficient than our own Novax fan.

## CO<sub>2</sub> SAVINGS

1000 ZerAx fans will save 4000 tons of CO<sub>2</sub> per year corresponding to what 400 persons emit.

## SOUND LEVEL

An optimum fan design and new production processes have made it possible to significantly reduce the sound level for the ZerAx fan in comparison to other solutions on the market.

