## ENERGY SAVINGS AND RELIABLE OPERATION AT DANISH TV STATION



## A RELIABLE FAN NEEDED

The Danish tv station serves the public with around the clock news. NOVENCO Building \& Industry A/S was contacted by the tv station when a fan in one of their technical rooms broke down. The fan supplies fresh air to the news office where people work all hours of the day to provide news to the public.
Due to the fact that the editorial department broadcasts $24 / 7$, it was of the utmost importance that the new fan was fitted into an existing installation to minimize installation time and noise. The fan was installed during the night and caused a minimum of disturbance to the news team at work.

## THE EFFECTIVE SOLUTION

NOVENCO Building \& Industry exchanged the old fan with a state of the art axial flow fan type ZerAx ${ }^{\circledR}$ 1250/560, which is from a product line with efficiencies of more than $90 \%$ and very low noise levels.

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Special about this case were the customer's reuirements, which called for the design of a custom piece of duct work to fit the new and shorter fan directly into the existing installation.
The ZerAx ${ }^{\circledR}$ fan not only offers the tv station energy savings, it also spares the environment of 14 tons $\mathrm{CO}_{2}$ per year. The energy savings amount to almost 27,000 kWh/year.

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## EQUIPMENT DELIVERY

The ZerAx ${ }^{\circledR}$ fan has a total effect of 43 kW and an airflow capacity of $34.6 \mathrm{~m}^{3} / \mathrm{h}$.

## FAN DATA

| Impeller diameter: | 1250 mm |
| :--- | :--- |
| Hub diameter: | 560 mm |
| Number of blades: | 6 blades |
| Weight: | 584 kg |
| Air volume: | $34.6 \mathrm{~m} / \mathrm{s}$ |
| Total pressure: | 978 Pa |
| Efficiency: | $85 \%$ |
| Total effect: | 43 kW |
| 100\% efficiency: | $4,000 \mathrm{~h} /$ year |
| Energy at 100\%: | $172,000 \mathrm{kWh} /$ year |
| Energy savings: | 26.800 kWh |
| ROI: | $3.0 /$ year |

## FACTS

- 3 YEARS ROI
- NOISE REDUCTION OF 7dB (A)
- ENERGY SAVINGS OF 27.000 KWH/YEAR
- SAVES UP TO 14 TONS CO2 /YEAR


