

Building & Industry

NOVENCO

SCHAKO Group

Carlsberg upgrades 1970s ventilation with high-efficiency NOVENCO® ZerAx® fans

The Carlsberg Group aimed to cut energy use to reduce CO₂ emissions and lower operating costs. Ventilation accounted for 23% of the total energy consumption at the Fredericia brewery. Each saved kWh also contributed 0.04 GBP in CO₂ credit sales. With these financial drivers, Carlsberg chose to replace its 1970s fans with new high-efficiency ZerAx fans from NOVENCO.

Promised savings achieved

Carlsberg's energy consultant Bjarne Pedersen reported that the energy savings were already being realised, even before system optimisation was completed.

Because ZerAx calculations were based on frequency control, the total savings exceeded the fan-only savings.



ZerAx fan installed at Carlsberg's Fredericia brewery, enhancing efficiency and reducing noise

"We expect the fans to lead to cost reductions of 30%. The rest will come from improved control of our ventilation system. A tong test ammeter confirms that we are close to the expected savings."

Bjarne Pedersen, Carlsberg



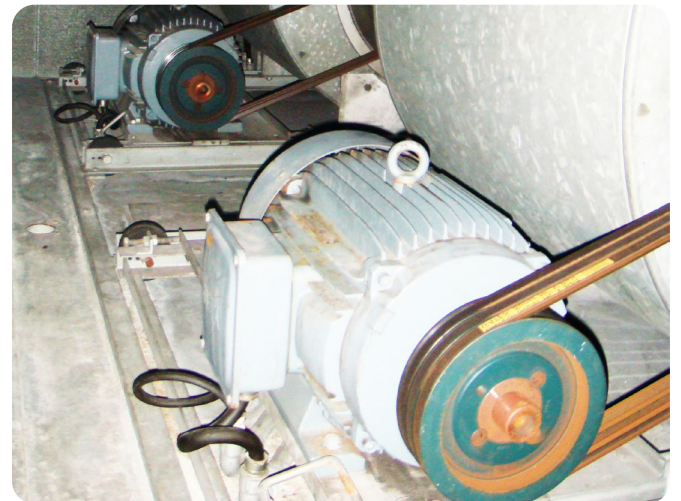
Carlsberg truck

ROI of 2 years

The return on investment for consultancy, system replacement and new fans was 2.2 years. The system upgrade was one of approximately 20 at the brewery within a full replacement programme that totalled several million GBP.

The replacement occurred in phases, where each installation had to achieve payback within two years. Savings for the first system alone were expected to be around 49,000 GBP per year.

The Carlsberg Group also valued improved working conditions. Although the bottling hall was noisy, the new fans clearly moved more air with far less noticeable sound.



Old fans from the 1970s



New installed ZerAx fan replacing two old units

"We expect the fans to lead to cost reductions of 30%. The rest will come from improved control of our ventilation system. A tong test ammeter confirms that we are close to the expected savings."

Bjarne Pedersen