

Building & Industry

NOVENCO

SCHAKO Group

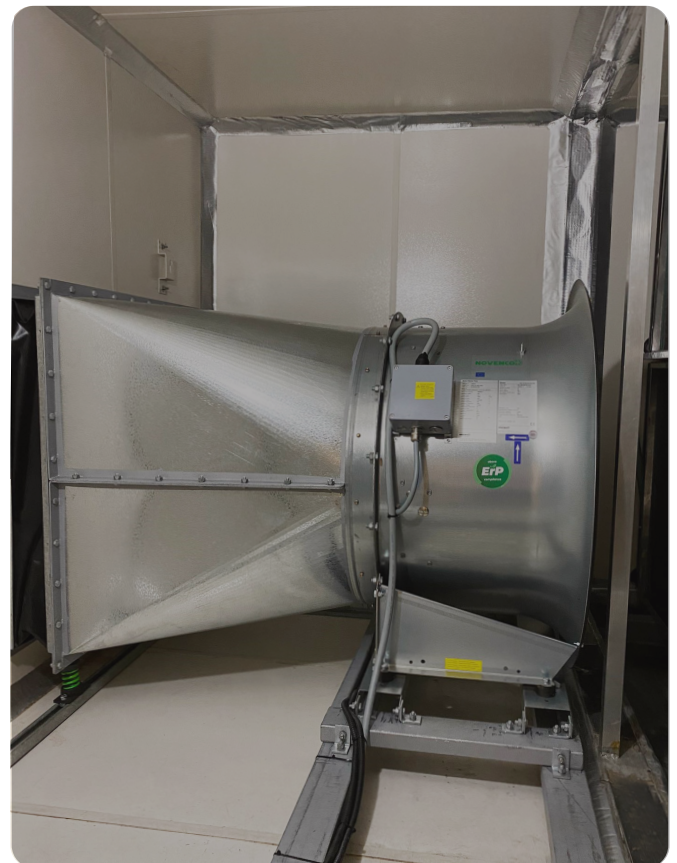
From proof of concept to multi-site rollout

The project

"Reduce energy consumption. Do not compromise uptime."

That was the challenge from a leading European food and beverage manufacturer looking to reduce the energy consumption of its ventilation systems. The company operates energy-intensive production facilities where ventilation runs 24/7, making it a significant contributor to overall energy use. At the same time, temperature control, airflow consistency and hygiene standards are critical requirements.

The project began with a single air handling unit (AHU) at one production site. The objective was simple: validate whether upgrading to NOVENCO® ZerAx® fans could deliver measurable energy savings under real operating conditions.



ZerAx® fan installed to validate energy savings under real operating conditions

The challenge

The existing ventilation system had been operating for many years. While reducing energy consumption was a priority, maintaining uptime was non-negotiable.

The client had heard efficiency claims before. Like many industrial operators, had seen promised savings fail to materialize once technologies were installed and operating under real conditions.

As a result, the client approached the project with a scepticism and required a low-risk approach that could verify savings before committing to a larger investment. Any solution would need to prove itself in practice, not just on paper.

A single NOVENCO ZerAx® fan was installed in one of the site's most energy-intensive AHUs and monitored closely over an extended period.

Performance was evaluated using real operating data, including airflow, static pressure, power input and energy consumption. This allowed the client to validate the fan's performance within its own production environment before making further investment decisions.



Before retrofit: the original fan installation in operation

Facts:

- 62% energy savings
- Payback period of less than one year
- Increased system reliability
- Longer service intervals



Measurement in progress on an air handling unit.

Real conditions. Real data. Real performance validation.

The results

The results were clear. The proof-of-concept installation delivered a measured 62% reduction in energy consumption on the selected AHU. More importantly, the savings were achieved without compromising operational performance.

The results were based on verified operational data collected from the client's production environment. The successful trial led to a full-site rollout, where the same level of energy reduction was validated across the facility.

The project achieved a payback period of less than one year and subsequently expanded into a wider implementation programme across additional sites within the group.

What started as a cautious proof of concept became a long-term partnership built on measured results, operational reliability and documented energy savings.