

Building & Industry

NOVENCO 

SCHAKO Group

JK Tyres pioneers energy reduction technology in India with NOVENCO® ZerAx®

The choice

JK Tyres operates nine major factories across India and is one of the country's leading tyre manufacturers. Known for pioneering radial tyre production, the company offers a wide range of tyres for diverse vehicle segments.

With rising energy costs and increasing environmental responsibility, JK Tyres sought advanced and efficient solutions to reduce energy consumption at its Chennai manufacturing plant.

After extensive research into all available technologies — including EC fans — JK Tyres selected the market's most efficient HVAC upgrade: the EC+ concept from NOVENCO Building & Industry.

The EC+ concept combines high-efficiency ZerAx fans, high-efficiency motors and intelligent Danfoss VFDs. Together, they deliver total system efficiencies of up to 85%, the highest achievable for AHUs on the market.

The proven technology convinced JK Tyres to replace an old centrifugal fan with a high-efficiency ZerAx axial flow fan, high-efficiency motor and Danfoss VFD.



JK Tyres, India

Pioneering project



Before retrofit



After retrofit

This installation is the first EC+ concept retrofit in India, making JK Tyres a pioneer in the region. The company initially expected 30% energy savings but surpassed this target with savings above 50%. The project demonstrates the significant potential of replacing centrifugal fans with ZerAx axial flow fans based on the EC+ concept.

High-tech installation

As the first manufacturer in India to adopt the EC+ concept, JK Tyres retrofitted an existing AHU in the Chennai plant with a ZerAx AZN 900/350-6 axial flow fan. The installation includes the high-efficiency fan, motor and intelligent Danfoss VFD.

The new ZerAx fan now provides essential fresh air to a critical production zone where treads are applied to tyres — the hottest area in the plant, often reaching 46 °C during peak summer jk tyreand operating almost continuously. Despite the harsh environment, the system delivers substantial energy savings and reliable performance.

Environmental effects

Beyond energy savings, the NOVENCO EC+ solution enables JK Tyres to significantly reduce carbon emissions. The retrofit aligns with the company's ongoing sustainability and corporate social responsibility initiatives at the Chennai site.

Facts:

- 50% energy savings
- 20+ years lifetime
- Very low fan section sound levels
- Easy to retrofit
- Significant reduction in carbon footprint