

CARBON NEUTRALITY IN VRCHLABÍ

ŠKODA AUTO PLANT IN VRCHLABÍ ACHIEVES CARBON NEUTRALITY THANKS TO NUMEROUS INITIATIVES

12 KEY MEASURES IN PRODUCTION to reduce emission levels while increasing process efficiency



2020 saw the component production plant in Vrchlabí become ŠKODA AUTO's first site worldwide to have made its production operations completely carbon neutral. The plant achieved the most significant savings by transitioning to renewable energy and implementing numerous efficiency measures. These led to CO₂ emissions being reduced from 45,000 to 3,000 tonnes annually.

1.

Conveyors at turning and drilling sites optimised

Using the gravitational separation principle, the chip conveyor has been adapted to return residual emulsion to the machine without additional costs.



2.

Preventive hydraulic oil maintenance

The systematic monitoring and maintenance of hydraulic oil in machines reduces consumption while minimising waste.



3.

Electrostatic oil cleaning

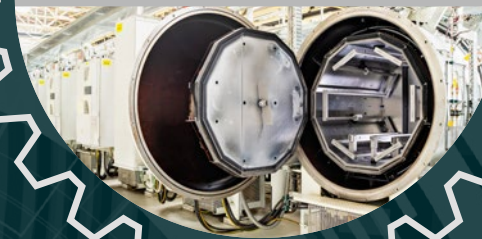
Electrostatic oil cleaning extends its service life, reduces its consumption and also limits waste.



4.

Carbon insulation in cement kilns replaced

New thermal insulation on hardening lines reduces energy consumption.



5.

9-bar compressed air production replaced

Outdated, high-cost 9-bar compressed air production has been replaced by two machines that use 6-bar compressed air.



6.

New equipment to limit energy loss

The controlled air exchange process in the production halls has been optimised to reduce energy consumption.



7.

Waste disposal system introduced

Waste sorting quality management under the WMIS standard (Waste Management Information System) has been launched.



8.

Used oil recycled

A system designed to filter station-generated abrasive sludge enables the filtered oil to be reused in production.



9.

Cutting oil reused

Cutting oil is pumped off the bottom of the tanks at the central filtering station to help reduce waste, and some of the oil can be reused.



10.

Evaporators installed

An evaporator is a system designed for industrial evaporation. The plant has installed evaporators to further reduce waste.



11.

Modern batteries fitted

Replacing the original batteries used in handling machines with lithium batteries has resulted in significant energy savings and a reduction of CO₂ emissions.



12.

Condensate collection system introduced

The use of condensation liquid generated by evaporation in component washing machines has reduced the consumption of water and detergents.

