



Volkswagen Autoeuropa

Redesign of the AVAC system using geothermal energy and structural reinforcement of the assembly building.

AVAC

In 2023, Engexpor took on the project to redesign the heating, ventilation, and air conditioning (HVAC) system in the press and bodywork (welding) production areas. This highly relevant project for the modernization and sustainability of the Volkswagen Autoeuropa factory includes the centralization of hot and cold water production in a thermal power plant, altering the existing paradigm of the current point-to-point installation.

This change in concept also allows for the elimination of natural gas use, the utilization of hot water from the press and welding production process during the winter, and the integration of renewable energy sources through the construction of the largest geothermal system in Portugal for heating or cooling the system's water. This project also includes the replacement of air handling units with more powerful and efficient machines to improve the climate control in the production halls.

In 2024, Engexpor was immensely proud and felt a sense of responsibility when its work was recognized through the awarding of a second similar project, this time in the final assembly production area, reaffirming its commitment to energy efficiency and the reduction of fluorinated gas emissions.

Engexpor is responsible for the design, project management, technical evaluation of proposals, and supervision of the complete overhaul of the HVAC system in Volkswagen Autoeuropa's production halls, including the installation of 25 MW of thermal power with 11 chillers, more than 50 AHUs, and 338 geothermal boreholes, aiming to increase energy efficiency and decarbonize the system.

 Volkswagen Autoeuropa Lda.

 Palmela / Portugal

GCA 273.000 m²

 Under development

Structural reinforcement

Since 2024, Engexpor has been responsible for the project management of the reinforcement of the factory's primary structure, intervening in the critical areas of final assembly where the overhead conveyors are located. Engexpor ensures the organization of tenders for construction projects and the supervision of works, guaranteeing the coordination of work carried out during summer and winter shutdowns, to ensure the structural safety of the building and the operational continuity of the production line.

