ACTEMIUM



NORVENT

CASE STUDY AUTOMOTIVE

SMART HEATING CONTROLS IMPROVE ENERGY EFFICIENCY FOR MAJOR AUTOMOTIVE FACILITY

Working with mechanical contractor **Norvent Pipeline Ltd, Actemium UK** delivered a bespoke Building Management System (BMS) solution for a leading automotive manufacturer.

Designed to improve energy efficiency and provide intelligent control of heating and ventilation systems, the solution enables greater operational visibility while helping reduce energy waste.

Engineered for performance

VINCI ENERGIES

PROJECT SUMMARY

Sector: Automotive

End User: Major automotive manufacturer

Location: West Midlands

Expertise: Building management systems (BMS)

KEY FACTS

8 HVAC ASSETS integrated into a single intelligent control platform

33 I/O POINTS providing real-time monitoring, control and system visibility

2 OPERATIONAL ZONES controlled across the False Trailer and Aperture areas

FIRST BMS PROJECT delivered by Actemium UK for this automotive manufacturer.

Project delivered in just **3 MONTHS**

TECHNOLOGY PARTNER

Schneider Electric

01

CLIENT & REQUIREMENTS

A leading automotive manufacturer required a complete design-and-build controls solution to support a new heating and ventilation installation within one of its production facilities.

With no existing controls strategy in place, the customer needed a bespoke Building Management System (BMS) capable of integrating with existing infrastructure, controlling heating and ventilation systems efficiently, and meeting UK Building Regulations and CIBSE guidance. The solution also needed to minimise unnecessary energy consumption while supporting the operational requirements of the facility.

Alongside compliance with UK Building Regulations and CIBSE guidance, the client wanted a solution that would improve energy efficiency and provide intelligent control of heating and ventilation equipment. Rather than operating continuously, systems needed to be scheduled around operational hours to minimise energy waste and reduce operating costs.

Actemium UK, through its Birmingham Business Unit, was selected to develop and deliver the Building Management System. Building on an established relationship with the customer through previous projects, the team demonstrated the technical expertise, controls capability and delivery experience required to provide a fully integrated solution, from design and installation through to commissioning and handover.

02

THE CHALLENGE

Several technical and operational challenges needed to be overcome.

As Actemium UK's first BMS project for this customer, establishing confidence and delivering a successful outcome was critical. The project also provided an opportunity to demonstrate Actemium UK's capabilities against an established incumbent supplier.

The team was required to:

- Develop a complete controls strategy from scratch
- Integrate heating and ventilation systems with existing infrastructure
- Coordinate closely with third-party suppliers, including electrical heater manufacturers
- Ensure thermal comfort requirements were met while reducing energy consumption
- Deliver seamless integration between mechanical systems and BMS controls
- Complete the project on time and within budget while building a trusted relationship with the customer

03

THE SOLUTION

Actemium UK adopted a structured design, manufacture and commissioning approach, utilising Schneider Electric technology to deliver a bespoke solution tailored to the customer's operational requirements.

Design & Engineering

Following project award, Actemium UK worked alongside Schneider Electric to develop the I/O Point Schedule, control strategy and detailed panel designs.

The engineering team produced:

- Control panel schematics
- Detailed design drawings
- Control philosophies
- Integration and commissioning plans

03 continued

All documentation was reviewed and approved before manufacture commenced.

Manufacture & installation
A bespoke control panel was manufactured and installed to provide centralised control of the heating and ventilation systems.

Site activities were carefully coordinated to ensure successful integration with mechanical equipment while minimising disruption to operations.

Commissioning & handover
Following installation, the complete system underwent commissioning to verify functionality, performance and control sequences.

The finished solution included a Schneider Electric Human Machine Interface (HMI) front end, enabling facilities teams to monitor and manage building services from a single platform.

04

RESULTS & BENEFITS

The completed system delivered enhanced visibility, control and energy efficiency, helping the customer optimise building performance while supporting its sustainability objectives.

Improved visibility
Real-time monitoring through the BMS front-end interface provided clear visibility of system performance and operating conditions.

Greater energy efficiency
Heating and ventilation equipment was configured to operate according to programmed schedules, reducing unnecessary running hours and energy consumption.

Centralised control
A single platform enabled facilities teams to manage and optimise building services more effectively.

Faster fault detection
Monitoring and alarm functionality helped identify faults and performance issues quickly, enabling a faster maintenance response.

Improved comfort & compliance
The system supported thermal comfort standards while maintaining effective ventilation and overall building performance.

05

SUPPORTING SUSTAINABILITY GOALS

Energy efficiency was a key driver throughout the project. By implementing intelligent controls and automated scheduling, the solution enabled the customer to reduce unnecessary electricity consumption whilst maintaining occupant comfort and operational performance. **The project contributed towards:**

- Reduced energy consumption
- Improved operational efficiency
- Support for Scope 2 emissions reduction targets
- Continuous monitoring and optimisation of building performance
- Long-term environmental and cost savings

LOOKING TO REDUCE YOUR ENERGY CONSUMPTION?

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