

# CASE STUDY Amesbury - Salisbury

## School Expansion Requires Upgraded Ventilation

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### Situation

As part of a necessary expansion in an educational setting, there was a requirement for a bi-directional mechanical ventilation unit to handle air volumes of up to 2.5 m³/s for both supply and extract air.

### Solution

We provided a DUOVENT® Modular unit featuring a double-decked Rotary Thermal Wheel Exchanger. This bespoke air handling unit was designed for efficient ventilation and included a refrigerant coil for comfort cooling. Additionally, packaged controls were integrated to streamline the unit's operation and management.

### Benefits

The DUOVENT® Modular unit offered a tailored solution that met the project's specific requirements for air volume and functionality. Its modular design facilitated easier installation within the plant room, optimizing space utilization. The inclusion of a Rotary Thermal Wheel Exchanger ensured efficient heat and humidity transfer, contributing to improved indoor air quality. Furthermore, the unit's packaged controls simplified operation and maintenance, enhancing overall system reliability.



S&P were very helpful through the design stage where we had next to no space to locate ventilation plant. Their team worked with us to provide bespoke units to meet the design criteria to a high quality. Their aftersales team who came and commissioned the unit were second to none. They ran through the large AHU that we installed and went through all the functions working with other trades to ensure all ran as intended.

**Russell Cameron**

Operations Director

VME Mechanical & Electrical

### Technical

S&P's DUOVENT, A range of customisable air handling units with air volumes up to 14 m³/s.

All models 50mm Double-Skinned Acoustic Panels to Reduce Noise with frameless construction, providing the highest classification for both casing strength and air leakage.

**Cabinet:** Built with 50 mm thick galvanized sheet metal panels, finished with RAL9002 external coating, and lined with acoustic and thermal non-flammable mineral wool insulation.

**Compliance:** Meets CSN EN 1886 standards with structural strength factor of D1, thermal bridge factor of TB2, and overall cabinet tightness rated as L1.

**Fan:** Centrifugal backward-curve blades fans with composite material impellers, statically and dynamically balanced.

**Heat Exchanger:** Double-decked Rotary Thermal Wheel Exchanger for efficient heat and humidity transfer. Cooling: Integrated refrigerant coil for comfort cooling.

**Controls:** Packaged controls for streamlined operation and management



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**Customisable Features:**

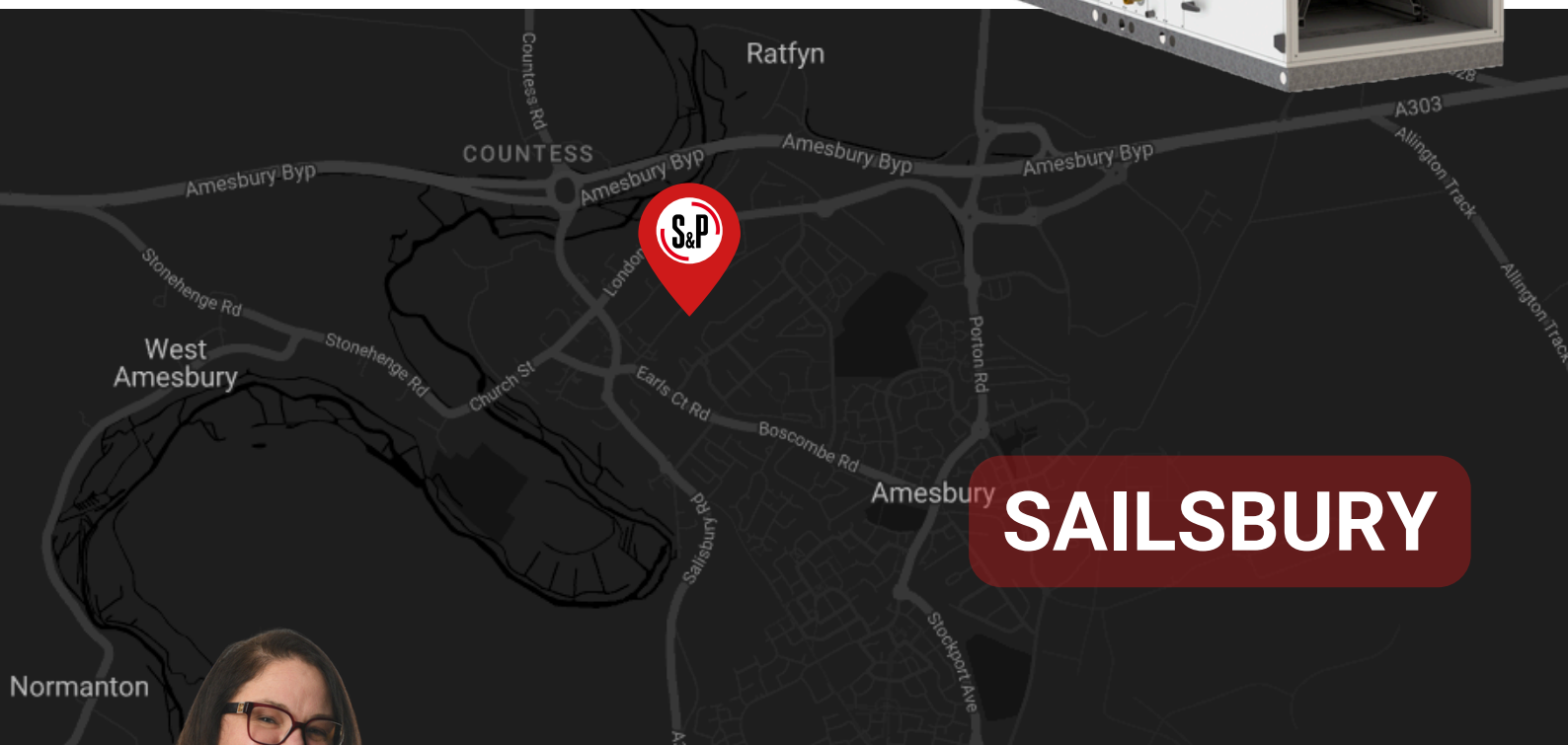
- Weatherproofing (Roofs/ Cowls/ Louvres/ Dampers)
- Dedicated lifting brackets for modular sections
- Run and Standby Fans
- Attenuators (to reduce noise)
- Lighting
- Portholes (to facilitate maintenance)
- Lockable Handles

**The following finishes are available:**

- RAL9002 (a grey-white colour)
- Galvanised Steel
- Stainless Steel
- C4 (Coastal Protection)
- Colour

**The following Site Services Can Be Added**

- Pre-Inspection
- Thermal Wheel Assembly
- Plate Exchanger Assembly
- Flatpack
- Bolt and Seal
- Casing Leakage Test
- Airflow Proving
- Wiring and Initial



Interested in discussing these projects further or exploring potential opportunities? Reach out to **Danielle Sparkes-Mullan**, Project Sales Manager - South West  
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