

University of Nottingham Centre for Sustainable Chemistry

Overview and Challenge

The School of Chemistry at the University of Nottingham is engaged in world-leading research in sustainable chemistry. Together with pharmaceuticals giant GSK, the university was dedicated to establishing the UK's first carbon neutral laboratory in which to carry out and showcase its research.

Constructed largely from natural materials and using renewable energy sources, the £24m building was to feature a plethora of sustainable technologies, including a green fume cupboard system.

Solution

Laboratory design and equipment supplier Köttermann was commissioned to supply a variable air volume (VAV) fume cupboard solution for the 4,500m² two-storey carbon neutral laboratory building.

VAV controllers automatically adjust airflow according to need, decreasing the volume of air extracted when the cupboards are not in use, providing a more energy-efficient solution than traditional constant air volume (CAV) controllers. To this end, Köttermann used preferred supplier TEL to provide 52 TEL AFA1000 controllers.

Benefits

The university's pioneering Carbon Neutral Laboratories for Sustainable Chemistry have gone on to win a host of sustainability awards, including the 2017 H&V (Heating and Ventilation) News Renewable Project of the Year title.



Said Köttermann's head of projects, Pete Collins: "TEL's VAV controllers were the natural choice for us in this state-of-the-art laboratory. Our extensive experience of these products gives us confidence that we will get the performance, long-term reliability and support required in a project of this nature."

Concluded the university:

"Our team focuses on world-leading research activity in sustainable chemistry, and the focus on sustainability is reflected in the building itself."

World leaders in airflow controls and monitors