TAILORED VENTILATION FOR EXPERT HANDS

iiS Health Clinic equipped with Halton Vita OR solution

A private hospital iiS, the UK's first hand and wrist hospital specialising in hand surgery approached our team with a clear objective: to refit an existing operating theatre to meet standards suitable for delicate, infection-sensitive procedures. The client emphasised the need for a high-grade ventilation system that would ensure superior air cleanliness and meet stringent hygiene standards. From the outset, it was evident that the project would require both technical precision and close collaboration with clinical stakeholders to ensure the environment supported surgical best practice.

Penair Medical, the UK distributor for Halton's hospital and laboratory ventilation systems, together with Apollo Interiors, interior design and fit out company specialising in medical sectors, who run the project, proposed to the customer an advanced alternative to traditional laminar airflow systems, Halton Vita OR Space.

Penair Medical Ltd apollo

The system offers a highly effective and flexible approach to maintaining ultra-clean conditions in operating rooms. Instead of relying on unidirectional airflow, it uses controlled dilution airflow to achieve <10cfu throughout the entire space. The system intelligently adjusts airflow based on microbial load and occupancy, ensuring optimal conditions at all times. Its user-friendly touchscreen panel allows for real-time control, while the design ensures low noise and draught-free operation. Halton Vita OR Space also supports flexible room layouts. Delivered as a turnkey package, it's a modern, adaptable solution designed to meet the evolving demands of surgical environments.

Throughout the project, our team provided comprehensive design support. Commissioning formed a key milestone, involving rigorous validation of airflow rates, filtration performance, and pressure control. We worked closely with hospital engineers to ensure the system was not only installed to specifications but fully operational. The theatre was signed off following successful completion of all performance and contamination control tests.

The result was a fully refitted, ultra-clean operating theatre that met the highest standards of environmental control for hand surgery. The client praised the system's quiet operation, clean design integration, and the smooth delivery process from concept through to handover. By combining advanced ventilation technology with meticulous planning and commissioning, we delivered a solution that supports the clinic's commitment to safety, precision, and clinical excellence.