

Sector: **Healthcare**

Project: **James Cook Hospital, South Tees**

Taking away dust,
uncertainty **and risk**
to patients' lives in a
critical environment.



Understanding the Challenge

Construction of a new TomoTherapy Unit for the James Cook Hospital was particularly challenging for the main contractor as the workspace was surrounded on four sides by busy treatment areas.

It was essential that hospital staff were able to go about their daily tasks with minimal disruption and that patients and visitors were not put at risk during construction works.

The contractor had to ensure that no dust could escape into treatment areas due to the risk of cancer patients coming into contact with aspergillus spores in airborne dust – a major threat to patients whose immune systems are at their weakest during radiotherapy treatment.

Creating the Right Solution

Before any works could commence the client, principal contractor and Infection Control all agreed that a 'belt and braces' approach was required to be certain patients were not exposed to dust. RVT Group provided assurance that staff, patient and visitor safety would be maintained at all times throughout the construction process.

- ✔ The contractor initially constructed internal barrier walls with MDF and carefully taped and sealed all joints. At this early stage RVT were called upon for specialist advice.
- ✔ Two DUSTEX™ ventilation systems were installed and ran continuously, removing dust from the area that exited through a
- ✔ To prove no dust was escaping from the work area, a magnahelic differential pressure gauge was installed and monitored three times a day with a sign-off sheet to log that negative pressure was being maintained at all times.

Providing Real Benefits

With RVT Group's input, expertise and specialist equipment, all parties involved were satisfied that patients would not be affected in any way by dust that may be produced during construction works. The hospital's ZERO tolerance on airborne dust was maintained ensuring patients lives were not exposed to risk.

The contractor demonstrated its commitment of care for those in close proximity to works, and built on its reputation for the highest standards of project management in the most critical environments.



DUST CONTROL SOLUTIONS



The innovative self-contained extraction/filtration unit called DUSTMASTER extracted dust at source keeping airborne dust to a minimum.



VENTILATION CONTROL SOLUTIONS



Two VENTEX systems were installed and ran continuously, creating a negative pressure removing dust from the area and exiting through a skylight window via HEPA filtration.



AIR PRESSURE MONITORING

To prove no dust was escaping from the work area, air pressure was monitored three times a day with a sign-off sheet to log that a negative pressure was being maintained at all times.

World-class solutions for world-class success

We're focused on delivering solutions that overcome our customers' challenges, and firmly believe that a team with a real can-do attitude can achieve anything.

With proven success on some of the world's most prestigious projects, we ensure our customers keep working efficiently and effectively and get the job done safely wherever they are.

Contact us to discuss out how RVT Group can help you overcome your next challenge in the Healthcare Sector on **+44 (0) 844 324 0601**



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