



## Case Study

# North Tees Hospital

Howorth upgrades theatre to bring it in line with modern surgical requirements.

### Challenge

The client's existing theatre, originally built in the 1970s, was inadequate for modern surgical requirements. The cramped operating environment and restrictive layout posed challenges to staff flow and infection control requirements, necessitating upgrades.

The theatre primarily served maternity procedures, eliminating the need for an Ultra Clean Ventilation system. However, it did require new operating lights, medical service pendants, and theatre control panels.

As with any operating theatre refurbishment, the main challenge was conducting significant building and engineering work whilst the theatre department remained operational, aiming to minimise disruptions to its day-to-day functioning.

### Solution

The client had significant experience working with Howorth at this site and a sister hospital in Hartlepool. Through their framework for operating theatre specialist works, they engaged Howorth to undertake feasibility, subsequent design, and the refurbishment and upgrade of the theatre.

Replacing the ventilation system with a new HTM 03-01 compliant Air Handling Unit posed challenges due to larger units required under the latest guidelines. Our in-house design team overcame these challenges while meeting all the updated HTM guidelines' performance requirements.

During construction, our team collaborated directly with NTH Solutions Capital Projects team to prepare the operating department for the refurbishment work. Regular daily, weekly, and monthly meetings were held to review progress, costs, and any potential issues.

To minimise disruption and accelerate the project, certain elements of the work were completed outside of normal working hours.

### Outcome

The early engagement of our design team with the client's project team and users led to an understanding of any potential challenges and the implementation of solutions to minimise disruption.

The project was completed within the agreed timescales, accommodating changes to the scope of works, and staying within budget.

The finished project has had a positive impact on patients, providing a more efficient and pleasant working environment for surgical users.

Furthermore, the theatre is now equipped for the next 20+ years of service, with ongoing support from Howorth's Service & Aftersales Team.