CASE STUDY

ENVIROGEN GROUP TECHNOLOGY ENSURES RESILIENT 24-HOUR ENDOSCOPY UNIT SERVICE FOR HORTON GENERAL HOSPITAL

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With increasing patient numbers and a greater demand for endoscopy services, Horton General Hospital, run by the Oxford University Hospitals NHS Foundation Trust, undertook a 12-month building project to construct a state-of-the-art, specialised endoscopy unit. Envirogen provided the latest reverse osmosis technology to ensure a reliable flow of purified water for three Automated Endoscopy Reprocessors (AER).

NHS
Oxford University Hospitals
NHS Foundation Trust

"We've been working with Horton General Hospital for over 10 years," explains Kylie Clarke, Healthcare Sales Manager South, at Envirogen. "We installed their current chemical sanitisation systems and have been servicing and maintaining it ever since. We were delighted to be chosen to be involved in this exciting new building project to house a new endoscopy department and all associated decontamination functions."

"Horton General is a busy and thriving hospital. Increasing patient numbers, a greater demand for endoscopy, and changing guidelines meant that the whole endoscopy unit and all associated reprocessing functions needed replacing. With three new Wassenburg Automated Endoscope Reprocessors (AERs) selected to provide the capacity to clean multiple endoscopes per hour, they needed a reliable and resilient source of Reverse Osmosis (RO) purified water 24 hours a day. We were chosen on our ability to deliver a n+1 duplex solution with twin EndoTherm Mini reverse osmosis (RO) units. Even during planned maintenance to one RO system, complete water purification will be available on demand to all washers, with no interruption to supply."

This 12-month project was complex and involved a large network of internal and external stakeholders and contractors. During this construction period, all endoscopy unit services were relocated to John Radcliffe hospital, over 20 miles away, so it was crucial that project be completed on time and on budget. Our strong project and engineering teams are familiar with working on complex plans so we were able to guide and steer the development to ensure that everything ran smoothly.

DELIVERING THE LATEST TECHNOLOGY WITH N+1 RESILIENCE BUILT IN

Kylie Clarke led Envirogen in delivering the solution, "We've installed many RO systems over the years to feed the Wassenburg range of endoscope unit reprocessors so they were very happy to recommend us. The duplex EndoTherm Mini is the perfect solution here as it provides full resilience for the hospital and delivers purified water that exceeds the current standards detailed in HTM 01-06."

"The EndoTherm Mini uses a reverse osmosis process to clean and purify incoming water removing ions, particles, bacteria and other dissolved molecules. Ultrafiltration and UV treatment ensures that water can be stored safely and provided on demand. This purified water is supplied directly to the AERs and is used in all cold wash processes to ensure microbe and contaminate free endoscopes."

"We recommended a duplex design for Horton General for non-stop service. Each EndoTherm Mini works independently of the other but is capable of supplying all washers. This ensures that when planned maintenance work is needed, there is still plenty of water to enable all AERs to work at full capacity. We also supplied a powerful HMI display with secure PIN access ensuring up to the minute reporting whilst key settings are protected."

> **KEITH BYRON,**
> **Operational Estates Manager, Horton General Hospital, says:**
> ***"Envirogen were the natural choice for us. We've been happy with their service for over 10 years now. They lead the field in reverse osmosis technology and have real expertise in the healthcare sector. Resilience is key for us, we can't afford to have the endoscopes out of action and can-celling operations just isn't an option. The duplex Endotherm Mini gives us exactly what we need, when we need it. We now have a reliable supply of very high quality water so we can ensure that our AERs work to maximum efficiency."***

KEY OUTCOMES:

- Endoscopy unit can now reprocess many more endoscopes in a day
- Switching from chemical to thermal sanitisation will save the department time and money and minimise disruption as the sanitisation process takes place out of working hours
- Other hospitals in the trust are now following Horton General Hospital's example, using developments in endoscope reprocessing to save time and money and grow their endoscopy service.
- A long-term PureCare service maintenance contract ensures that the RO plant continues to operate at maximum efficiency.

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ABOUT THE CLIENT

Horton General Hospital, run by the Oxford University Hospitals NHS Foundation Trust, serves the growing population in the North of Oxfordshire and surrounding areas. Providing both inpatient and day-case beds, it also provides outpatient clinic services.

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ABOUT ENVIROGEN

Envirogen is a leading international provider of water and wastewater treatment solutions. We solve complex challenges relating to water availability and quality, and help our customers to increase productivity, reduce costs and meet environmental and sustainability targets.

We do this through offering:

- Best in class water and wastewater treatment and process filtration technology
- Expertise in design, project management and engineering
- World class manufacturing and servicing capability

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