

Increase in Sterile Services capacity/capability and risk of interruption to operations minimised thanks to water treatment plant from EWS (UK)

Guy's and St Thomas' NHS Foundation Trust

Neville Fowler, Technical Manager at Guy's and St Thomas' Hospital in London explains how a scoping project undertaken by the Trust, identified the need for a back up Sterile Services Department, to provide cover/security for potential breakdowns within the hospitals current facilities.

Whilst the current facility at St Thomas' Hospital could meet existing demand, it was decided the additional support would come from a new facility to be built in Guy's Hospital, whilst the current SSD at St Thomas' would be refurbished, bringing it up to current legislative standards. As an existing proven supplier to the Trust, EWS (UK) were selected to design, install and commission the water purification package.

The ultimate aim was for the sterile services to be shared between both hospitals, providing increased capacity with the potential to supply services to other hospitals within the area.

The hospital, innovative in their development, saw the opportunity to help maximise staff productivity by combining wash areas within the facility. To achieve this they decided to have 3 separate work flows (all contaminated areas):

- Main instrument wash area
- Endoscopy wash area
- MDU (Medical Disinfection Unit) area

This design would allow staff to move between the areas quickly, effectively and safely, meeting demand as required and maximising the resources available.

The construction process at both sites went through a tender process. CFES Ltd were granted the contract giving them responsibility for building the new facility at Guy's Hospital and the refurbishment at St Thomas'. The Trust purchased the Belimed washer



disinfectors, porous load sterilisers and Getinge Lancer endoscope reprocessors directly through the manufacturers. Whilst EWS (UK) were chosen to supply the new RO water purification system at Guy's and to refurbish and increase output of the current equipment at St Thomas'.

Guy's Hospital

To meet the pure water demand at Guy's, EWS (UK) supplied a duplex RO system, which automatically operates in duty standby mode ensuring regular and equal usage between the units. This duplex design also provides coverage for any scheduled service. A 1000 litre treated water storage tank was installed to buffer the water supply to the washer disinfectors and clean steam generators.

An EndoTherm Mini has been installed to feed the two supplementary Getinge Lancer Endoscope reprocessors. The EndoTherm Mini was originally chosen because of the costs savings that would be made.

Neville Fowler commented **“Within 2 years it would pay for itself with the savings on chemicals and the reduction in staffing costs due to its automatic self sanitisation”**.

The complete development of the new area at Guy's Hospital took 8 months finishing on schedule and budget.



Guy's duplex duty stand by RO system



EndoTherm Mini

St Thomas' Hospital

As the current water purification supplier to this site, EWS (UK) refurbished the existing hot set RO system and created a complete duplex design. As with Guy's Hospital, an EndoTherm Mini was installed to feed the Endoscope reprocessors within the theatres department.

Neville Fowler commented: **“What I like about the EndoTherm Mini is that we don't have to touch them. They require minimal attention. We see the TVC results and they are always zero”.**

The redevelopment of the St Thomas' site took 7 months. Again within the allocated/planned work schedule with all suppliers working closely together to ensure delivery dates were achieved.

To support the water purification equipment supplied to the two hospitals, the Trust chose to take a multi-year PureCare service contract with critical spares pack from EWS. Thus maximising the productivity of the unit and minimising down time with any potential risks being identified during routine maintenance.

The newly developed sites now process 125,000 trays a year through their SSD. They have the largest dental school in the UK with 250 chairs, from which they process 2 million dental instruments a year. Since opening the new department at Guys they also undertake all the SSD work for Great Ormond Street Hospital. In addition the Trust is able to consider additional external work for other hospitals in the area, helping ensure the continued operation of the site and maximising the benefits and return on investment to the Trust.



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