

MEDICA® Pro selected for Siemens ADVIA® analysers at City General Hospital, UK

Scientific | Case Study

The Client

The University Hospital of North Staffordshire (UHNS) NHS Trust recently undertook a major redevelopment of its hospitals, opening a brand new, 768 bed, multi-million pound hospital and consolidating services from the North Staffordshire Royal Infirmary, the City General and Central Out-patients onto the City General campus.

As part of the development, the Trust awarded a tender to provide a centralized water system which, initially, was intended to provide purified water to the pathology laboratory, as well as to the clinical analyzers in the biochemistry laboratory.

The Client's Needs

Siemens Healthcare Diagnostics was awarded the tender to provide five ADVIA 2120i analysers, four ADVIA 2400 analyzers and two ADVIA Centaur® XP systems, connected by the new Apto™ Automation system, the first Apto installation in England. Both the ADVIA 2400 and ADVIA Centaur XP analysers require a supply of highly pure water, and there was concern that the centralised water system may not be able to provide water of sufficiently high purity, or to meet the laboratory's need for 100 % uptime.

Either the quality of water from the centralized system needed to be improved, or an independent, high quality water supply was required for the analysers. Veolia Water Technologies has a long- standing relationship with Siemens, and had already developed a duplex water purification system – an essential requirement if analyzer downtime is to be avoided – that specifically supports automated equipment from Siemens.

In addition, the laboratory already used a standalone Veolia Water Technologies MEDICA Pro water purifier to supply general laboratory water, so staff were familiar with Veolia Water Technologies equipment. This, coupled with Veolia Water Technologies's excellent relationship with the Trust, made the Company an obvious choice to perform an evaluation of the site.

The Solution

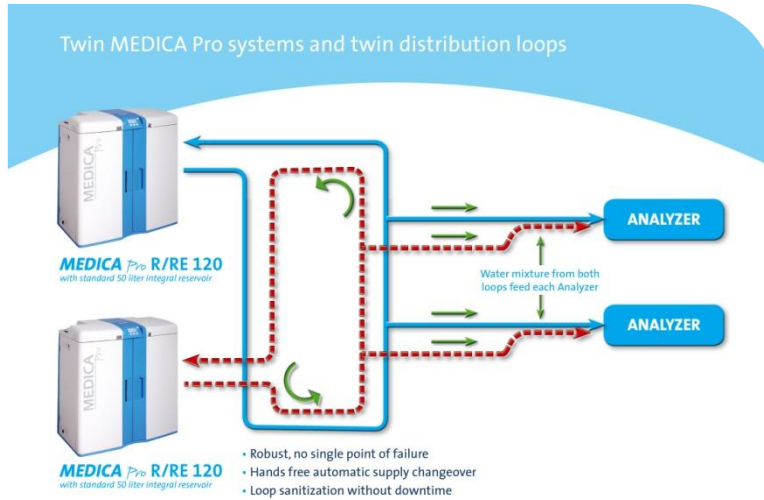
In December 2011, Veolia Water Technologies was invited to visit the site with Siemens to assess the situation, and discovered that the proposed centralised water system relied on a single distribution loop.



As a consequence, whenever sanitisation or maintenance of the system was necessary, the flow of water to the laboratory analysers would be interrupted, potentially for several hours..

The laboratory handles between 4,000 and 5,000 patient samples a day, and lengthy periods of downtime would have a massive impact on the delivery of results. Clearly, the biochemistry laboratory's analysers required an independent water purification system.

Process Description



Solution Cont'd

Possible solutions to the problem were presented to Siemens and the Trust by Veolia Water Technologies and an alternative supplier, and Veolia Water Technologies was chosen to provide two MEDICA Pro-RE 120 units – a duplex installation – as well as a manual dispenser for a general laboratory water supply, under a managed service agreement with the Trust.

Installation of the MEDICA units was straightforward; Veolia Water Technologies had already developed a duplex system which was simply connected to the power pole system specified by Siemens, enabling highly pure water to be consistently delivered to the laboratory analyzers. Since each individual MEDICA unit has the capacity to support the analyzers independently, the laboratory has in-built 100% redundancy, ensuring a constant supply of high quality water, even during system maintenance procedures.



The Benefits

City General is a new hospital offering state-of-the-art facilities, including a busy biochemistry laboratory handling between 4,000 to 5,000 patient samples daily. Building on its established relationships with the UHNS NHS Trust and Siemens Healthcare Diagnostics, Veolia Water Technologies successfully completed the installation of a duplex MEDICA Pro-RE 120 system, ensuring consistent delivery of high quality purified water to maintain accurate results from the laboratory's ADVIA analyzers. As Dave George, National Projects Manager for Siemens Healthcare Diagnostics, commented:

“Our long-standing relationship with Veolia Water Technologies has been fostered by the Company being willing to collaborate and to develop the duplex system, as well as having the right equipment and attitude.”

Veolia Water Technologies

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