

# Hospitals on their metal

Queen's Hospital, Burton-on-Trent, joins others in praising high quality, custom-fabricated steelwork that adds the finishing touch to impressive endoscope decontamination units

Passionate about the quality of service delivered, Wendy Kirk, hospital sterile services unit manager / decontamination lead, at Burton Hospital NHS Foundation Trust, told Inside Hospitals: "I wanted height adjustable sinks in the new, centralised endoscope decontamination unit, something we'd not had before, but the amount of space available was a problem."

"Procurement requested prices for a standard size sink from a number of the manufactures on NHS Supply Chain. One came in from Neocare, whom I'd not heard of previously. When I mentioned what we were looking to do with the new department, Paul Arnold, of Serchem, our manual wash chemical supplier, recommended Neocare. I looked again at the quotation and called Neocare's Steve Ladley and told him our problems."

"Steve came in the next day, while we were still a building site," explained Wendy. "I showed him the area where we were hoping to put two double drainer, height adjustable sinks. Steve measured the space and told me that standard sinks wouldn't fit. But he said: 'Have you considered turning the bowls round the other way?' I realised that would work and actually be more convenient for manually



High quality, ergonomic design helps staff

cleaning the scope.

"To ensure the drainers were the correct size, Steve asked which baskets we were using. As we didn't have one available Steve obtained the measurements from the supplier, Cantel Medical. He made the whole process really easy for us."

Proud of the recently opened department and the quality of all the associated steelwork, Wendy said: "We've two, foot operated, independently operated height adjustable sinks with a purpose-fitted touchscreen computer mounted on a swing arm on the sinks' backplate. The siting of the screen was Steve's suggestion - it's been a real benefit."

"It's important we don't have dirty and clean drainers next to each other, so dirty are on the outside and clean in the middle - with operators working from the outside in at each sink. There's an integral dispenser for the automatic dosing Serchem chemical and a mounting for the company's ScopeTech machine. The taps are hospital grade, infection control approved. Steve advised on all of that, his after sales service is just brilliant."

Wendy said: "Steve arranged for the sinks to be fitted after the AERs were installed to avoid the risk of damage and scratches. He polished them up himself and left



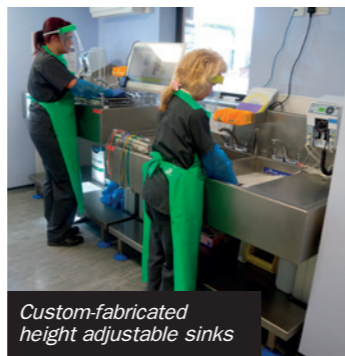
Wendy Kirk



us a special cleaner. The sinks are beautifully made. There's a small lip to ensure there are no drips and the bowl is close to the edge to save operators stretching."

Steve Ladley explained: "You'll find that some other manufacturers buy the bowls in and weld them into place. Ours are custom-built as part of the unit."

"Also, we usually make the bowl 500mm x 500mm x 200mm deep - an optimum size for the scope's manual wash. This size gives a saving on chemicals and the cost of the sink. In fact over the lifetime of the unit some



Custom-fabricated height adjustable sinks

users save the cost of the sink on chemicals."

Steve said: "The connector to the taps is Neocare's WRAS-approved, anti-microbial flexi-

hose - PE lined, not EPDM. Ours won't grow biofilm as others do.

"As it's impregnated with silver ions any microbes in the water are killed when they touch the walls of the hose, and the flexi-hose lasts for ten years."

"Also, with others the sink's waste is chrome on brass, screwed into the bowl on a rubber seal. This can be a problem waiting to happen. It stays damp and offers an ideal environment for Pseudomonas Aeruginosa to colonise."

"Ours are custom-made, by ourselves, in Marine Grade 316 stainless steel and welded into place, which prevents any issues with Pseudomonas. So our sinks are fully compliant with HTM 04."

The extent of the electrically operated height adjustable travel of the sinks is an impressive feature too. "The vertical adjustment is 350mm," said Steve. "Others are usually only 150 to 200mm."

"We designed our sinks with advice from ergonomics professionals on the position of the bowl, to reduce the risk of stress on the wrists, elbows, shoulders, neck and back. Operators can be stood for long periods of the day, so it's important that all aspects of the design are taken into account."

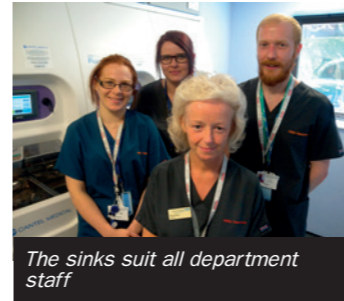
Steve explained: "It's not just about height adjustment. It's also about the depth and position of the bowl, the position of the bowl in the sink and the height and travel of the height adjustment. The optimum mixture of these three elements will provide the perfect Health & Safety sink for each operator."

These principles are certainly appreciated by the EDU team. With a user's perspective, sterile services assistant Tania Elsby said: "I'm quite small and the new sink makes my job easier, it helps me do it a lot better."



"As they're height adjustable there's no need for a step, like a colleague had to use before. They're ergonomically correct. They tick all the boxes. Everything's to hand. Having the computer over the sinks is ideal. We're not having to walk around the department for various things."

Tania added: "There's a slight lip on the edge of the sinks so there are no drips off the front. That's good for Health & Safety. There's also a narrower gap from the edge to the bowl so you're not having to stretch and reach



The sinks suit all department staff

all the time. Your whole body posture is a lot better."

Another feature of the sinks are the 300mm high rear splash panels, which are fitted as standard. These help to prevent contaminated water or detritus from being accidentally splashed onto surrounding walls, making the clean-up of the immediate area simple and reducing the risk of secondary contamination.

"We fit antibacterial feet to every item," said Steve. "These can be easily interchanged with castors for manoeuvrability."

On the clean side, the purpose-made steelwork includes a computer table with easy clean, open mesh shelf below and sturdy, wall-mounted shelf above.

Neocare's problem solving, custom-fabrication service answered a "cry for help" from Wendy when an unforeseen 'problem' arose associated with the department's choice of Cantel



Purpose made rack houses 33 manifold and tube assemblies for various scopes

Medical's new RapidAER: how to store the manifolds and tube assemblies which the scopes are connected to before being loaded into the machines?

"We were looking for some sort of rack that would house the manifolds," explained Wendy. "The washer-disinfector supplier didn't have one available at the time and their clinical lead advised that the connecting tubes needed to hang down to allow them to drain."

"I wondered how we could solve the problem and called Steve, telling him that we were about to go live and needed it fast."

Sure enough, Neocare came up with the solution. "Steve asked for a rough drawing, which Daniel Collins, the deputy production manager, drew and emailed over. Steve sent a 'proper drawing back to us the next day. We approved it and loaned Steve a manifold so he could ensure they were a perfect fit. The purpose-made rack, which holds 33 manifolds, with a drip tray along the bottom to catch any liquid, was installed within two weeks. Steve fitted it personally."

"We're a partnership site for Cantel Medical and have already had a number of people coming to see the department. They've all been impressed with the manifold housing."

Transporting the reprocessed scopes presented another issue, as Wendy explained: "Due to our being a centralised unit, on site but away from the main hospital, staff have to use a hand operated electric tug to take a trolley loaded with scopes to and from the EDU to theatres and endoscopy. I looked at what's available but there wasn't anything specifically made for scopes"

"We needed something that would be robust, weatherproof and ensure a tight, snug fit for the CleanaScope trays to ensure the delicate scopes would not bounce around in transit and risk them being damaged."

so that he had all the correct dimension. He consulted at each stage of the process to ensure all the requirements were being met and brought in a part finished prototype. It was fine and the trays were a snug fit. Steve suggested a number of things throughout the design and manufacture of the trolleys that have made ideal.

"Due to our fast turnaround of scopes, my requirement was not for a wide trolley, just one to hold two rows of trays. We now have three trolleys - two in use and one in endoscopy. The trolleys are wiped down with infection prevention and control approved antibacterial wipes, and there's a 'Clean' and 'Dirty' sign



Custom-fabricated trolleys ensure safe transportation of scopes

depending on the current use of the trolley. Visitors have been equally impressed with the build quality of the trolleys."

Wendy added: "I know that anything I need in the future I can go to Steve and he'll solve it for me being a centralised unit, on site but away from the main hospital, staff have to use a hand operated electric tug to take a trolley loaded with scopes to and from the EDU to theatres and endoscopy. I looked at what's available but there wasn't anything specifically made for scopes"

"I've not had to recommend Neocare to visitors. The quality's apparent and they ask who the supplier is immediately they see the equipment."

Underlying the quality and compliance, Steve Ladley said: "We manufacture everything to ISO 14544 Part 5 cleanrooms standard, which requires items

Turning again to Neocare, Wendy explained: "I thought it would be worth me asking and Steve came up with a competitive price. I told him what my requirements were and loaned him a tray

to be as smooth and indentation free as possible, without any holes. We apply that principle to everything we build for sterile services and endoscopy decontamination departments. We maintain the integrity of the steel with a minimum of welding and inclusions."

"We use European certified stainless steel and will custom fabricate anything. It's all bespoke."

The work for Queen's Hospital, Burton-on-Trent, is typical of other projects where Neocare has provided custom-manufactured solutions for busy departments, such as Hull and East Yorkshire Hospitals NHS Trust, Gloucestershire Hospitals NHS Trust and Barnsley Hospital NHS Foundation Trust.

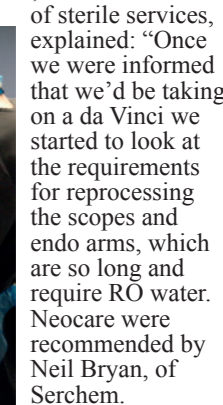
Taking height adjustable sinks to a whole new level, one recently custom-made for Hull and East Yorkshire Hospitals NHS Trust to suit scopes and endo arms for a da Vinci surgical robot is a real 'work of art', as Janet Clapham, the trust's head

of sterile services, explained: "Once we were informed that we'd be taking on a da Vinci we started to look at the requirements for reprocessing the scopes and endo arms, which are so long and require RO water. Neocare were recommended by Neil Bryan, of Serchem."

"The custom-made sink was a one-off, so we didn't need to go out to tender. We had a single source waiver for a sink specifically designed to suit the da Vinci endo arms, scopes and accessories."

Jan explained: "We worked with da Vinci's manufacturer, Intuitive Surgical. We needed a bowl for the soak and manual wash, and a separate one for RO water for the final rinse, which has to be delivered at 3.5psi. The quality steel had to withstand the aggressiveness of RO water. That was a particular consideration."

"The manual washing controlled tap to ensure that staff cannot shock the scope by putting water on it that's too hot. The rigid scope and endo arms have a 30 minute soak then we brush, rotate the



end of the arm and flush the two ports with RO water.

“To achieve all this the sink is quite a beast. It’s height adjustable - controlled by a dual foot pedal. As the staff are stood by the sink for quite a time while they’re undertaking the procedure, Steve has ‘dulled-down’ the stainless steel so that’s it’s not too bright.”

Jan added: “We’ve only just go live and the sink has performed well. It’s smooth, neat, with no niches or sharp corners, so it’s easy to wipe down.”

The quality of the custom-made sinks and tables for the new endoscope decontamination unit at Gloucester Royal Hospital led to Neocare being called upon to satisfy an altogether different problem, as Ian Godsell, senior



Jan Clapham



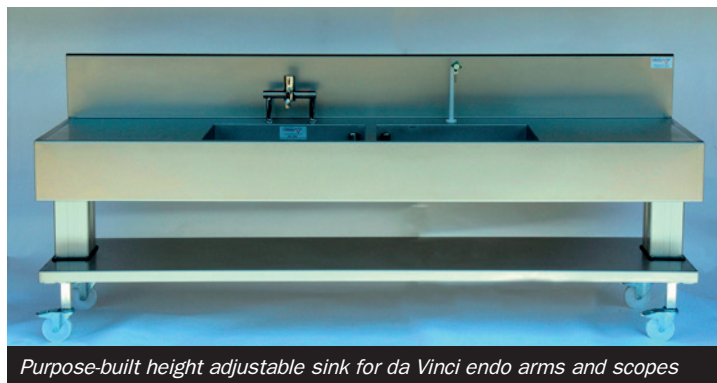
Sinks at Royal Gloucester

project engineer with BiLFIGER the trust’s PFI partner, explained: “When we were benchmarking prices for the various items of steelwork I spoke to Steve Ladley, of Neocare. They have supplied the rise and fall sinks, tables and shelving for the department - all custom-made to our requirements in Marine Grade 316 stainless steel.

“There are specific requirements for these items under the HTMs and HBNs and these are all fully compliant with



Stainless steel door architraves at Royal Gloucester



Purpose-built height adjustable sink for da Vinci endo arms and scopes

all aspects. Neocare’s work was all very good and they’re now doing other work for us in the hospital.”

Ian said: “The building has just had its tenth anniversary and we were looking at damaged items and how we could alleviate the problem with areas such as door frames and doors. In high traffic areas we have bump rails which are getting damaged as well, so we were looking for a combination of replacement and new ideas.

“We noticed that in the minor injuries bay, in A&E, there was an aluminium cover strip on a corner. That spurred us to think what we could do with all the internal areas where damage could occur.

“In conjunction with our building contractor, we trialled a door frame on both sides, removing the architrave and replacing it with 316 stainless steel, purpose made by Neocare. We left it in place for a trial period and there were no signs of dents or damage in any way, apart from scuff marks.

Ian added: “We had approval to continue from infection prevention and control, and moved onto the doors and walls between the bays in major and minor injuries in A&E. It’s saved us replacing door frames and the recurring problem of future damage and consequent potential infection and splinter risk.

“It’s worked so well that we’re now looking at extending it to other areas of the hospital, including walls and door panels.”

As you would expect, such high quality steelwork certainly stands the test of time. “Everything’s just as it was on day one. It’s not showing any signs of wear,” said Carole Swayne, sterile services manager Barnsley Hospital NHS Foundation Trust.

“When we were looking at other departments while drawing up our spec, we noticed a few issues around the various steelwork items - gaps between furniture, and some things not of the highest quality. We wanted to ensure everything fitted

perfectly.”

Carole explained: “Along with some other suppliers, Steve Ladley, of Neocare, provided us with a quote incorporating all the steelwork we needed, which included custom-building it to

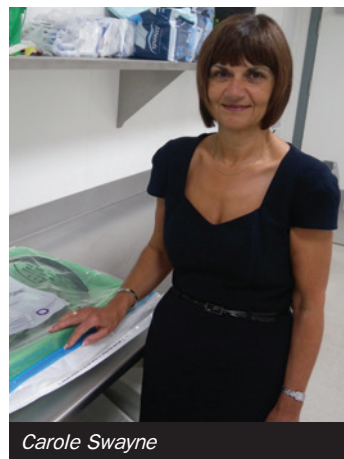


our specification. Following evaluation of the quotations we decided to proceed with Neocare as it offered the most cost-effective solution.

“Steve came quite a few times to ensure everything was OK, it was a fantastic service. Everything’s made with better quality steel than is usually used.

“While I’m no expert you can see the difference in the quality of the build and the grade of the steel. Our estates team certainly appreciate it, as does our project manager, so they knew we were getting a good product which was within our budget and offered excellent value for money.

“The quality of the welding



Carole Swayne

is superb too. They’re all clean, smooth lines.”

As well as the two, double drainer rise and fall sinks the department has a number of custom-made items. “On the dirty side there is a little, purpose-



RO and TMV controlled taps

made table with a drawer for the connectors. There’s a work table for all the writing and working instructions and one in the corner for the filing.

“On the clean side, in the gowning room, there’s a bench for staff to sit on while changing, with space for their shoes underneath.

“There’s an interlocked pass-through hatch with a shelf, so you can pass clean and dirty through.

“Also in the clean room the bench and shelf are just one long, continuous surface, without any breaks - nowhere for dirt to hide.”

Carole said: “We did all the designs together, myself

and Steve. It’s been a good relationship with Neocare. It’s not just about selling the product, you want the after sales too.

“Through having items custom-built to our dimensions and designed to fit awkward corners, so we can utilise every available space, it all came together quite quickly.

“I would certainly go down this route again of having custom-built, using the same grade of steel as well. You need it to last a lot of years.

Carole added: “If anyone has ideas for their own department, I’d certainly recommend Neocare. Steve will work with you to ensure everything is exactly as you want it.

“You’re the customer and nothing is too much trouble.”

For further information, call Steve Ladley of Neocare on 01594 832044 or 07717 001144, e-mail [steve@neocare.org.uk](mailto:steve@neocare.org.uk) or visit [www.neocare.org.uk](http://www.neocare.org.uk)



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