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## HOSPITALS



Vacuum packing eliminates torn tray wrap at Europe's 'largest' CDU



**"It's a no-brainer"**  
Ian McIvor, decontamination site manager, Cowlairs

# "It's a no-brainer"

Vacuum packing system eliminates damaged tray wrap at Europe's 'largest' decontamination unit

Continues in Glasgow, possibly Europe's largest decontamination unit, has cut damaged tray wrap to zero by using HES Decon's vacuum packing system, VasoPak, manufactured by Entell Medical of Germany, and enjoying the huge benefits this has delivered.

A few recently presenting on Loan Management at the World Health Federation Congress in Lille, France, Ian McIsaac, decontamination site manager for NHS Greater Glasgow and Clyde, told *Inside Hospitals*:

"I'm more than happy to be representing 6,500 to 7,000 trays a week (yes that's a jaw-dropping 6,500 to 7,000 trays a week) each quarter we're representing nearly three million instruments."

"We're working 24/7, covering the whole of Greater Glasgow – all six seven acute hospitals and their 103 operating theatres. There's a 24-hour turnaround at each tray, with an eight-hour fast track if required."

However, as Ian explained, damaged tray wrap was a major problem. "There were cancellations in operations and reprocessing. To increase efficiency and eliminate waste,



"I started to implement a Loan Management programme over two and a half years ago – it's making a huge difference. Vacuum packing is the most recent element. The VasoPak machine's great, very simple to use."

As Ian explained: "Quite a number of trays were having to be re-processed due to damaged tray wrap. We took out the conveyor system, originally installed in the clean room, which reduced 52 injury points."

"In Glasgow, because there are seven hospitals, a lot of trays are shipped from one hospital to another. If these are only one type of a certain set



Ian McIsaac, decontamination site manager for NHS Greater Glasgow and Clyde

new looking at extending the vacuum packing to some of the smaller trays for which we'll use a smaller bag."

Glasgow Royal Infirmary in particular is asking for more trays to be vacuum packed, which shows they're more than happy with it. In fact, they've been very supportive of the vacuum packing."

Ian explained: "The training of the staff here at Cowdries was done by HES Decon's area sales manager, Harry Wobley. Currently, we have just one VasoPak machine and all the rest of the staff and some of the rest of the technical officers have been trained to use it. It's a very simple and quick process."

"Christian Campbell, our customer service manager, went to the distance to explain to staff there how to handle the vacuum pack trays and how to open the bags."

When a set is returned in theatre it's just a simple tear of the seal and the pouch is open and the staff's pocket, which is ready to use.

"We find the staff only need to do it once and they've got it said Ian. The staff like it too. They're on receptive to change if they see it's going to be a benefit. They don't like to have to re-process sets and they don't like to have to operate having to be cancelled. They know it's all about patient care and increasing efficiency."

"From our perspective there are less cancelled operations – and certainly fewer due to damaged wrap of vacuum packed trays."

"Following the success, we've also installed a VasoPak at our other off-site unit in Greenock – the decontamination centre for three hospitals in Inverclyde."

"We only use one size of plastic bag at present, the bigger bag, which is ideal for the one-off and heavier sets. But we're

and there's damage to the tray wrap there would be a cancelled operation. So, to help prevent cancelled operations, it's an immediate advantage to vacuum pack the problematic trays. But there have been many other improvements."

Ian said: "HES Decon's Matt McCannick came in to see us and explained the VasoPak system. We took a unit on trial in February 2013."

"We used the process for just one of the hospitals to start with – Glasgow Royal Infirmary. We started with problematic trays, one-off and loan kits. Through our quality system, we know which trays are being repaired as problematic. We kept the trial going for as long as we could."

"I was an instant success. It's now rolled out to every hospital and we've not had one damaged vacuum packed tray since we began using the system. So there have been no cancelled operations due to damaged tray wrap and no need to reprocess

trays. This prevents surgeons having to alter their lists, causes less time at theatre level and means less 're-work' for us. It's very time-saving and cost-saving. The vacuum packing didn't take up to 30 minutes."

"If we were to reprocess a tray you're looking at ten minutes in the wash, twenty minutes in the clean room, plus the handling, decontam and service."

Ian explained: "Over a similar period to that when we've been using VasoPak, there were 814 incidents of damaged tray wrap. We're down to just three a week now – that might be due to us or because – but most of the vacuum packed trays have been damaged."

"With the average cost to reprocess a tray standing at £11, on those previous 814 instances we've already saved £34,684. Each cancelled operation costs on average £11,000, and there were three due to damaged tray wrap during the similar period, so that's a further £39,000 saving. So the total saving is less than a year is already £57,664."

That's a fantastic return a relatively inexpensive, easy-to-use piece of kit, which also protects instruments during transit."

Ian explained: "The power of the vacuum draws the air through slightly onto the instruments to prevent them moving, dusting, rattle and helps to prevent any damage that might occur."

"The VasoPak soon purchased through capital funds," said Ian. "We paid it through a validation process at a laboratory to check on the vacuum and the air being drawn out of the pack. We assumed to know, would it pull in dirt or air? There was no proof of that."

"I tested it with talcum powder too. It was all fine. The HES said: One-step disinfection wrap we use it a 99.6% barrier and it prevented any of the air entering the vacuum system."

"We've had vacuum packed trays sitting for a year and there's no problem with the vacuum. We're now packing at a rate of a vacuum packed tray at a laboratory for two years, which would help with the infrequently used, one-off situations."

"We're also using vacuum packing to protect the delicate endoscopes, which come over from endoscopy for hygiene, provide decontamination in our new STERIS V-SPRINGS."

"Everything at Cowdries is aspects and, with that there's asking for vacuum packed. I can see that we might need to add another machine."

"Using the VasoPak, I'm surprised the

inter-departmental relations we previously had, simply because we're being seen to work together rather than as individual departments."

Nick Thomson, the instrument hygiene officer at Glasgow Royal Infirmary, is very supportive of vacuum packing. It works very well for everybody. The introduction of the system shows

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pouch is held over two metal rods which open the pouch up as it is pushed forward so that it easily covers the wrapped set. The unrollable end set is then swung around, enabling the open end of the pouch to be placed in the heat steriliser. The specific from the instrument is then attached to the pouch's vacuum valve."

Once activated by the foot pedal, VasoPak quickly seals the end and draws the vacuum. Although not used at Cowdries, the system can also include an indicator card that is placed inside the pouch and turns from red to green to confirm that the vacuum is successful."

When the process is finished the operator simply lifts over the lock on the vacuum valve and the process is complete – all in a matter of seconds."

The safety pouch can also be used by theatres as a return bag. Tracy Whaley, regional sales manager HES Decon, said: "Following the success of VasoPak is now on trial at a growing number of leading UK hospitals, in Scotland, the North West, Yorkshire, the Midlands and Wales."

"VasoPak is available through capital purchase, as chosen by Cowdries, or through a rental option. With rental there's no charge for the equipment, just a slightly higher charge for the pouches, with a minimum number of bags used per month."

"When you consider the cost of a cancelled operation and the time and cost of reprocessing sets, VasoPak quickly pays for itself."

You can see the system in operation on YouTube search VasoPak.

For further information, call HES Decon on 01793 646791, e-mail: [info@hesdecon.net](mailto:info@hesdecon.net) or visit [www.hesdecon.net](http://www.hesdecon.net)



# “VacioPak has delivered over £67,000 of savings in less than a year”



Loading the wrapped tray set into the pouch



The turntable and set is swung round and the open end is placed in the heat sealer



Operating the foot pedal seals the pouch and draws the vacuum



Sliding over the vacuum lock completes the process



Vacuum packed trays ready for despatch

**Ian McIvor**  
decontamination site manager for NHS Greater Glasgow and Clyde

“We’ve not had one damaged vacuum packed tray since we began using the system. So there have been no cancelled operations due to damaged tray wrap and no need to reprocess any of the vacuum packed trays.

“Over a similar period to that when we’ve been using VacioPak, there were 844 incidents of damaged tray wrap. We’re down to just three a week now - that might be due to us or theatres - but none of the vacuum packed trays have been damaged.

“With the average cost to reprocess a tray standing at £41, on those previous 844 instances we’ve already saved £34,604. Each cancelled operation costs on average £13,000, and there were three due to damaged tray wrap during the similar period, so that’s a further £39,000 saving. So the total saving in less than a year is already £67,604.

“That’s fantastic from a relatively inexpensive, easy to use piece of kit, which also protects instruments during transit.”

**Allison Marshall**  
sister in charge - orthopaedics Queen Elizabeth University Hospital, Glasgow

“Orthopaedic trays are heavy, they’re awkward to carry. Torn tray wrap was an ongoing problem. So they were one of the ones the nursing staff working group targeted for vacuum packing.

“The difference it’s made is dramatic. It’s like ‘night and day’. It’s instilled a great deal of faith that trays which had previously given us problems are now safely wrapped and free from tears.

“Loan kits are often a one-off and the kits are rare, and if there’s a problem it can cause a real issue. So the integrity of the trays needs to be intact.

“Vacuum packing has provided reliability. We know we’ll get the trays OK.”

“Orthopaedic trays are heavy and cumbersome. And the journey they make can lead to tearing of the wrap. Not anymore, thanks to vacuum packing.

“The tight vacuum packing is holding the tray contents. It helps keep the tray static on a surface. It all helps with the journey of the tray, from decontamination to us, from the store to theatre and sometimes from us to another hospital.

“The vacuum packing is fantastic. It’s all very positive.”

## STOP PRESS

### VacioPak for endoscopy

With its cassette-based transportation system, CISA, BES Decon led the way in the UK with a solution to protect endoscopes from cross-contamination following reprocessing in an automated endoscope reprocessor.

Other systems have been in place to transport scopes from their storage place to point-of-use, though not all offer the same degree of protection against cross-contamination. Systems have therefore been introduced in recent years to protect dried, reprocessed scopes from cross-contamination during transportation, and for longer-term storage.

The Entrhal VacioPak system, being used so successfully to protect sterilised instrument sets from damage to their sterile barrier system, has recently been launched for transportation of endoscope trays.

At each site BES Decon tests to confirm that an endoscope, once removed from its drying cabinet will retain its microbiological condition, if completely dry, for the test period of seven days or longer within a VacioPak for Endoscopy system.

The hardware and the core consumables for the VacioPak for Endoscopy system are identical to those for the standard SSD VacioPak system, with just the optional extra of tray liners where required. However, the major benefit for users is that the cost per scope is a fraction of that of other systems on the market, and the drying/storage system is verified microbiologically.