

# Coming clean

There is a lot more to designing a clean room than just installing barrier washers, as *LCNi* finds out

“**W**ith a cleanroom, we generally think of mad scientists and the space age but cleanrooms have expanded across a multitude of industries, among them the food industry and even cosmetics,” says Wim Demeyer of Lapauw. “Given the fact that a cleanroom is designed to keep particulate and microbial contamination away from the manufacturing process, it implies specific and very strict conditions. The best known being controlling the number of particles of different sizes.”

Although it’s basically workwear processing, Demeyer explains that a cleanroom laundry must adhere to the strict rules and specifications of the cleanroom it provides services to, down to the corresponding cleanroom class, which reflects on the machinery that is used.

In the UK, some NHS Trusts have them and some don’t. Hospitals with cleanrooms do work for other Trusts as a matter of course as it makes sense to maximise resources or they outsource the work. LTC Worldwide has long been the leading consultants to the UK laundry industry providing training, consultancy and textile testing services to laundries, the clients of laundries and the laundry supply chain. Joint managing director and also treasurer of The Society of Hospital Linen Service and Laundry Managers, Steve Anderton says: “Its really specialised and there are different classes of clean room. Its important not to mix up ‘cleanroom’ with ‘barrier washing’. In France, for example, I believe a nursing home has to have barrier washers but not in the UK. The main issue with barrier washers is the space requirement. In the UK most nursing home laundries are in broom cupboards! So space is limited.”

“Micronclean are the leaders in the field of clean room along with Elis and



they provide theatre drapes which need to be processed in clean room conditions. Fenland, Elis and Johnsons also have barriered laundry rooms for the provision of mainly food industry and some pharmaceutical workwear. These are not necessarily clean rooms but generally have EN14065 in place (BS EN 14065:2016 Risk Analysis and Biocontamination Control (RABC) in Laundries). In the past 12 months LTC have implemented EN14065 into probably 25 Hospitality and Workwear laundries some barriered some not.”

## Dedicated machinery

At Lapauw, the offerings are the Mediwave and Medistream, a dedicated cleanroom washer and cleanroom dryer. The Mediwave is a barrier-washer but Lapauw designed the machine from the onset with cleanrooms in mind, sporting a whole range of cleanroom options that allow you to configure your machine to the appropriate cleanroom class:

- The cleanroom seal closes the gaps between frame and drum, reducing the risk of leaks to an absolute minimum.
- With the 316-option, all wetted parts are 316 stainless steel, allowing it to be used with reverse-osmosis or ultra-pure water.
- Heating options include indirect steam heating and electric heating.
- The controlled exhaust prevents contamination of the contents of the drum by ambient air that comes in via the exhaust.

In its basic configuration, the Mediwave

offers features that provide additional protection and comfort in a cleanroom environment:

- The Glass Reinforced Polymer (GRP) cover is an easy to clean surface that is void of sharp edges and crevices where germs and soil can grow into, which upholds hygiene and cleanliness in the cleanroom itself also.
- The GRP cover is also shaped in such a way that it’s easier for the operator to load and unload the machine. A welcome feature in an environment where the temperature sensation can be up to 10°C higher than under the same conditions in a normal work environment. The onboard RABC function guarantees thermal or chemo-thermal disinfection,
- The Medistream is a true dedicated cleanroom dryer, designed to prevent any contamination on the garments and cleanroom. The features include a HEPA filter that is mounted behind the heating element and a cantilever drum, which omits drive wheels and, thus, possible particle contamination from those wheels.

Like the Mediwave, the Medistream also features the GRP cover, which is mounted on top of the stainless steel front cover of the dryer itself. This double cover also provides maximal thermal insulation, which is important to leave the airflow in the cleanroom as undisturbed as possible.

The dryer also features an air flow of 4,000 m<sup>3</sup>/hr. Combined with the 1400 liter inner drum, the air flow assures up to 2800 air refreshments per hour, allowing

## CLEAN ROOMS

drying times of under 25 minutes.

The Lapauw cleanroom range consists of Mediwaves of 600, 800, 1100 and 2000 litre drum contents, and a dryer with a drum contents of 1400 litre, later to be expanded with a dryer with drum contents of 1800 litre and 1000 litre.

The Medistream 1400 dryer assures maximal compatibility with the Mediwaves of 1100 and 800 liter and optimal production in under 50 minutes with only two operators. Both Mediwave and Medistream also provide data transfer to laundry management packages.

Meanwhile, Anja Urinjek sales and marketing manager at Krebe Tippo, a major player in barrier washer manufacturing who tells LCNi that things are looking good with an uptick of barrier washer orders. "We have extended the sales of barrier machines to several additional countries in Eastern Europe but also some big Governmental projects in Africa, which is quite amazing, since everything that has to do with Government always takes a crazy long time. To be honest, some of the area is quiet, or was quiet, for a long time after last year and

projects are happening now and others were doing amazingly a lot. But it's always like that some ups some downs.

"We are very, very satisfied this year, I'm pretty sure it can be a record year for us, if the capacity of production will handle everything that sales does. And since we do have such amazing partners that we are working with I can tell you I'm so very grateful to each and everyone of them because in these soon to be two years we saw that we are together in bad and good times. As head of sales, I can't imagine anything better." ■

## PRIMUS VIEWING

The sparkling new Alliance virtual showroom in its healthcare section offers the benefits of an open platform everybody can use and also 'talk' to Alliance sales personnel or local distributors. Visitors can utilise it to request assistance remotely in place of face to face and come back any time 24/7 to learn more.

"For example, under Healthcare you can find the concept and the solution," says Christophe Sisternas. "The products are available in all sizes and configurations and are displayed in 3-D format so you can turn them through 360° to see all sides, look inside doors and play around with set up. When you find what you need you can then simply get in touch with your local distributor:

"Everything new is flagged, just as at a show, so you know about new features and developments immediately."

Adopting the barrier solution simplifies and optimises the laundry process, protecting employees and patients, and preventing the spreading of micro-organisms, viruses and superbugs. The Primus

barrier concept can stop pneumococchial infection caused by unsatisfactory linen hygiene. And linen is a factor in transmission. so laundries must have a high level of hygiene to combat risky pathogens.

Compact batch washers are also available for smaller operations such as care homes in the ofmr of Primus. FXB washers. Trace-tech® management software provides the reporting, monitoring and configuration capabilities needed to take quick decisions for optimisation of the barrier washers.

A video takes visitors on an exploration of BS EN 14065:2016 Risk Analysis and Biocontamination Control (RABC). The Primus range of barrier washers offers maximum protection for patients, and staff and eliminates spreading of super bugs.

● **Check out the Alliance virtual showroom at <https://showroom.primuslaundry.com/>**

