

RENOVATION, AUTOMATION POWER HEALTHCARE PLANT

Facility reopened for business in January 2021 following extensive renovation, technological upgrades

By Jason Risley

fter undergoing a renovation of the facility during the peak of the COVID-19 crisis that hit the U.S. in 2020, and giving their Camden, NJ, location a complete overhaul, Hospital Central Services Cooperative (HCSC) Linen Services resumed processing healthcare linen rental goods out of the facility in January 2021. From that point forward, HCSC has used its upgraded machinery and technology to grow its business in Camden and the surrounding area from 30,000 clean lbs. shipped per week when it reopened its doors to roughly 450,000 lbs. per week today.

FOCUS ON SERVICE & SAVINGS

HCSC Linen Services has a total of five linen processing plants, serving healthcare customers in four states-Pennsylvania, New Jersey, Delaware, Maryland and Washington, DC. In addition to the Camden plant, the company operates acute-care facilities in Allentown and Kingston, PA; Asbury Park, NJ; and Baltimore. HCSC's outpatient medical/ambulatory care services division also operates in Allentown, where the company's headquarters is located. HCSC has the ability to service the full continuum of care-from acutecare and rehab hospitals to behavioral-health facilities, surgery centers, outpatient clinics and other care settings that require high-touch service offerings. Presently, HCSC provides linen rental services to more than 140

hospitals/rehabs/long-term care facilities and over 2,200 ambulatory-care facilities. The company uses data from this vast network to recommend best practices for its healthcare clients.

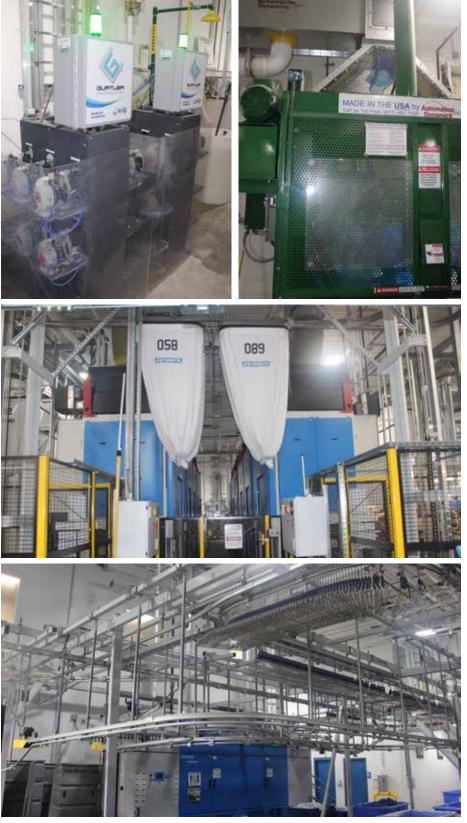
HCSC has a database of more than 28,500 hospital beds in its system to draw information from. Through the company's management systems, a facility's usage on major patient items can be compared to other facilities of similar bed size and type, and benchmarks can be established and goal setting implemented toward generating savings.

Operating at a plant efficiency measured at 145 lbs. per operator hour (PPOH) allows HCSC to remain competitive with other healthcare providers in the greater Philadelphia area. The Camden location is a 37,700-squarefoot facility that was built to handle 30 million clean lbs. of linen annually. Located on the Delaware River waterfront near the Walt Whitman Bridge, it is ideally situated to serve hospitals in New Jersey and nearby Philadelphia through its easy access to interstates 76, 676 and 95.

In addition to its favorable location, the Camden facility seeks to be a true partner to its customers. "HCSC conducts regular educational programs for hospital staff with the purpose of increasing the awareness of the proper use of linen, thereby improving linen utilization to reduce costs, loss and enhance efficiencies," says Eric Stas, regional general manager at HCSC, who oversees both the Camden and Asbury Park locations.

IN THE PLANT

Soiled linen begins its journey through the facility when it enters through the soiled loading dock. Each cart is moved from the truck to a scale that tracks its weight. A system developed by Linen-Master tracks these carts as they enter the facility. From here, soiled linen moves from carts into the JENSEN Futurail TransSort sorting system, where HCSC employees sort items by type. The system in place at the Camden facility was designed in a "U-shape" configuration on a mezzanine level that has 36 floor-mounted bins with builtin weigh scales. When they reach the desired weight, these soiled goods drop down from the soil-sorting area. Once the soiled goods are ready to move to the wash aisle, they are transported from the bin to a conveyor belt that moves the soiled goods to slings located on the lower level. These slings move to the tunnel washers via a JENSEN Futurail overhead rail system. Slings on the JENSEN Futurail system drop textiles onto loose goods elevators that move upward to load the textiles into one of two JENSEN Senking tunnel washers in the plant. This unique system was put in place through a collaborative effort with JENSEN to accommodate the low ceiling height of the building. Due to the height limits, it wasn't feasible to have the slings drop soiled goods directly into the tunnel washers from above.



ABOVE: (Clockwise from top) HCSC Linen Services has a nearly 40-year partnership with Gurtler for its chemical products; Automation Dynamics machinery disposes of plastic in the soil-sorting area of the facility; a view of a row of dryers surrounded by fencing for employee safety; and a view of the garment-processing area of the plant. On the opening page: employees feed flatwork into an ironer.

The two tunnels both have 14, 130 lb. (59 kg.) modules. These Senking tunnels both use UV light at the end of the wash process to help reduce lint and boost cleanliness. Quality is of the utmost importance at the company. "HCSC routinely researches and tests new linen for whiteness, tensile strength, thread count, size and weight," says Christopher Snyder, quality assurance specialist at HCSC. "Our quality-assurance program gathers random sampling data, performs statistical analysis for each of our plants, and monitors wash effectiveness and quality of the goods."

The plant operates with a pairing loop, which pairs similar types of goods together. For example, items like sheets, blankets and towels will drop down back-to-back and be paired together for the wash process. Empty carts from the mezzanine soil area drop down and are sanitized in a cart washer for reuse.

Clean goods are transported to dryers via an automated system, which is enclosed by a fence to restrict access and ensure employee safety. From there, goods head to the flatwork ironer lines. At its Camden location, HCSC made use of thermal ironers for the first time. Bath and thermal blankets are processed on a JENSEN Express Blanket system that handles the feeding, folding, stacking and conveying of these items. Bed linens are processed on a JENSEN Express Trio machine. A JENSEN Turnus automatically separates pillowcases prior to feeding them to the small-piece machines. This machine turns to break up cakes of linens, and feeds employees smaller loads at a time to run through

an ironer. After these items are processed, a JENSEN Bottom-Up Stacker stacks the pillowcases and moves them via a conveyor belt to the packout area to be placed in carts for delivery to healthcare customers. These items move via a JENSEN Jenway automatic conveyor system with "track-andtrace" functionality.

Hospital garments are folded on JEN-SEN Alpha machines. Specialty items get handled in the garment section as well. A JENSEN Metricon system processes garments before moving the items into an Omega steam tunnel for finishing. Each garment has a label that is scanned for tracking.

A separate washroom has an assortment of JENSEN JWE series soft-mount washer/extractors, including two 130

BELOW: (Clockwise from top left) A pair of dryers that handle specialty items in the plant; a view of the soil-sorting area on the mezzanine level of the Camden facility; HCSC Linen Services staff pose for a picture near the entrance to the building; and a row of soft-mount washer/extractors for processing smaller lots of healthcare textiles.



lb. (59 kg.) washers and three 200 lb. (90 kg.) washers, as well as several JEN-SEN JTD series tumbler/dryers that handle specialty items such as cubicle curtains, mops, rags and more. These machines operate a formula similar to that of the tunnel washers. These small washing machines also use bleach to remove stains. Adjacent to this washroom is a bulk chemical-storage area that features a chemical-dispensing system from Gurtler Industries Inc. This system helps calibrate and ensure that the wash formula is ready for the machine, while a Gurtler monitoring system ensures the facility's machinery is getting the proper chemistry. HCSC and Gurtler have had a long-standing partnership of almost 40 years.

The plant is powered by three 60 HP boilers. Two of these boilers are on, with one off as backup in case it's needed to keep the facility functioning. Also in the mechanical room area is the company's water softeners, water tanks, as well as a water-reclamation system that saves energy by turning previously processed water into heated water for cleaning goods.

The aforementioned LinenMaster system scans and weighs both the soil and clean carts of linen. This allows the laundry to verify packout quantity. Carts are staged and lined up by account. In order to best serve its hospital customers, HCSC has complete separation of soiled and clean textiles with physical barriers. SonicAire machines are used daily for an hour to blow down lint and keep the facility clean. The plant is also certified to TRSA's Hygienically Clean Healthcare standard.

To maximize linen longevity, HCSC has a sewing and repair department, with several sewing stations as well as patching machines for repairs. An operating room (OR) department processes emergency medical service (EMS) packs.

INVESTMENT IN FUTURE GROWTH

While the COVID crisis was a trying time for the linen, uniform and facility services industry, it also presented an opportunity to improve operations. HCSC Linen Services did just that at its Camden location by renovating its facility and upgrading its machinery. As a result, the company is now reaping the rewards by boosting its business in the competitive healthcare sector.

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