New Regina laundry plant will feature innovative technology to improve patient care

When the transition to the new provincial linen service for Saskatchewan’s healthcare sector is complete, healthcare facilities will be using linen processed in a new plant that is being built in Regina by K-Bro Linen Systems. The new plant will feature a number of innovations that improve linen quality, worker safety, and efficiency, and reduce our environmental impact. Most importantly, better linens will improve patient safety and comfort.

“All of the equipment installed in the Regina plant will be brand-new and state-of-the art, using the most current technologies,” says Sean Jackson, manager for the new Regina plant. “A visually based production management software program called ‘Cockpit’ will be used to help manage the plant. Every piece of equipment will be linked to this system, which can be viewed on hand-held devices. This will allow managers to capture efficiencies in real time throughout the day.”

The production flow is designed as a “hands-off” system that uses overhead rails to transport the laundry. The only points of human intervention occur during the sorting of soiled linens.
at the beginning of the laundering process and the feeding of washed linens into the finishing equipment at the end. This “hands-off” method improves infection prevention and control and worker safety. The split rail system also ensures that soiled and clean linens are never in the same area of the plant, which is an important safety and infection prevention and control measure.

Other infection prevention and control measures include the practice of “universal precautions,” which require that all soiled linens coming into the plant are treated as though they are contaminated. All employees working on the soiled linens side of the plant must pass through a wash-up area before they are allowed to enter the clean side of the plant. Lastly, samples of linen will be sent monthly to a third-party laboratory to test for microbial growth, ensuring the effectiveness of all plant processes.

There are other elements of the plant design that contribute to worker safety and comfort. Recognizing the value of natural light, the new facility contains strategically placed skylights that create a bright and safe environment. Overhead rails and slings that transport large amounts of linens are not located in areas where staff members work throughout the day. Staff break areas are spacious and have natural light.

Environmental impact is an important factor in the design of the new plant. It will be equipped with the latest batch tunnel washers, designed to maximize wash quality and optimize water use. After the filtering and re-heating processes, rinse water is captured and re-used, reducing the amount of incoming water consumed. Incoming fresh water will enter the plant at approximately 1 °C. This cold water is heated by a combination of hot water heaters and a heat exchanger. The heat exchanger uses excess heat from previously heated water and raises the temperature of the incoming fresh water to a temperature of 23 °C, reducing the amount of energy required to create warm water. Another innovation—“light harvesting”—automatically dims the energy-efficient fluorescent lighting by sensing incoming natural light. This, too, reduces energy consumption and leaves a lighter environmental footprint.

The new provincial linen service was created to provide high-quality linen services to healthcare facilities and their patients and residents. New high-quality products, energy saving processes, and laundering innovations at the new K-Bro plant will make a difference in the quality of the patient experience.