



Case study – Onsite Laundry at a Hospital in Quebec, Canada

A large conveyor laundry system was used in the hospital to clean clothing as well as bed sheets, linens and towels. The laundry had been installed with a trench drain beneath it. In the evaluation phase, we observed that hot water in the range of 38°C – 45°C exited from the laundry at an average flow rate of about 30 gallons per minute. The flow was intermittent, cycling from for about 2 seconds on and 2 seconds off. It was also noticed that very large pieces of linen were in the drain water.

Ecodrain proposed a modular heat exchanger system composed of panels of heat exchangers, based on the core technology of turbulators in the cold water to boost heat transfer, with the drain water flowing on top on a flat smooth surface so that the drain water and lint could easily flow over the device without clogging. Ecodrain also designed a special drain water distribution system which took the intermittent flow exiting from the drain and turned it into continuous flow over the heat exchange panels to maximize the heat transfer.

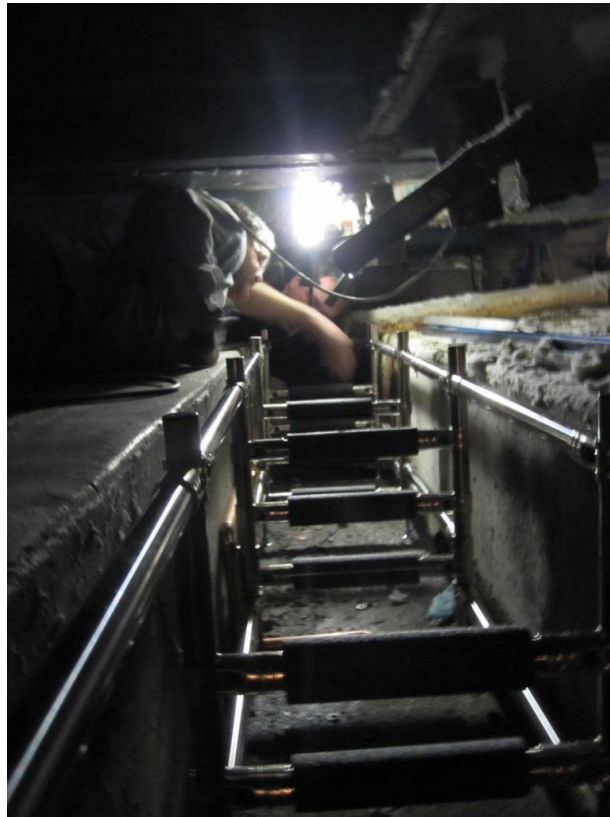


Image 1 – Installation in progress beneath the conveyor washer.



Image 2 – Ecodrain M1000 Heat transfer panels being installed beneath conveyor washer



Image 3 – Real time heat trace chart indicating the substantial heat recovery (pre-heating of cold water) in the hospital laundry system, achieved by installation of the modular Ecodrain M1000 heat exchanger system.