



UP TO DATE LAUNDRY CASE STUDY

WATER & ENERGY SOLUTIONS

redefining efficiency since 1969

Up To Date Laundry (UTD) is one of the largest healthcare laundry providers on the east coast and the state of Maryland's largest commercial laundry facility. Approaching 70 years of operations, UTD processes approximately 50 million pounds of linen at its Baltimore facility.

Problem

Up To Date Laundry facility operates 24/7 which allows little to no downtime to maintain or replace equipment. As a result, of continuous hours of operators, the original Kemco equipment was nearing the end of its service life, leading UTD to investigate replacing system components and adding new equipment.



Solution Overview

The goal was to replace and upgrade the controls to bring the heat recovery system back online as well as incorporate a steam heater for the tempered water system to reduce steam injection and better control tempered water temperature. The Kemco heat reclaimer preheats freshwater by passive transference of heat from wastewater. This reduces the energy required to actively heat water for cleaning and substantially reduces the temperature of the outgoing wastewater. Not only does this heat recovery system benefit the local water systems and the balance of aquatic life, but the anticipated reduction in greenhouse gas from energy production is estimated to be 1,900MT CO₂e annually.

UTD is already TRSA Clean Green Certified and the heat recovery system installation reinforces their green commitment. Kemco's installation of a steam heater, upgrade of heat recovery system and associated controls is projected to decrease its energy use by 387,000 therms (MMBTUs) per year through Kemco's heat recovery system and related improvements.

The biggest challenge for the client was finding downtime in operations which matched availability of their installing contractors to replace and install the new Kemco equipment, as Up To Date's facility operates around the clock and the customer handled their own installation.

"At Up To Date Laundry we are significantly reducing the energy required to heat their process water, saving them money and tons of CO₂ emissions, demonstrating that it is possible to be both good stewards of the environment and good business entities," states Kemco Systems President and CEO, Tom Vanden Heuvel.

"Up To Date Laundry's project is an example of how a modest investment can have a meaningful impact," suggested Michele Pitale, Managing Director of CounterpointeSRE. "With a single improvement, they will reduce the building's OPEX, preserve aquatic life, and provide a large reduction in the building's carbon emission."

Results

The new system affords UTD the ability to reduce the need for reheating water resulting in less energy used, lowered costs for heating and reducing greenhouse gases emitted before use.

Kemco was able to improve the temperature of wastewater that enters the Chesapeake Bay by returning it to an environmentally acceptable temperature, guaranteeing the safety of aquatic life. The Kemco system is anticipated to produce a reduction of over \$6.55MM in utility costs over a 3-year timeframe.