Operating in the Green

Textile service companies continue to enhance their focus on the environment

By Carol Patton

It's hard to watch the evening news without hearing something about how our environment is changing—for the worse. Even President Barack Obama's statements in May about how climate change "is not a distant problem of the future," was intended to stimulate awareness and encourage people, businesses and communities to take action.

For years, many textile services companies have done their part to minimize their carbon footprint and reduce their use of natural resources, while still delivering quality products and services. For this article, we've highlighted three TRSA member companies for their innovative conservation practices. These range from developing an energy-saving closed washing system to capturing rain water and acquiring fleet vehicles that run on compressed natural gas (CNG). Every step forward moves us closer to the goal of a healthier planet.

CLOSED WASH SYSTEM

Carl-Johan Bjorkman, owner/operator of Hr Bjorkmans Entremattor AB, a mat launderer based in Malmo, Sweden, recently converted his company's mat-washing process to a closed system that holds up to 98% of the water, even after some evaporation. The remaining 2% is replaced with water gathered from a rainwater tank. For its conservation efforts, the company recently was named a winner in the European Eco-Management and Audit Scheme (EMAS) 2104 Awards program.

Bjorkman also uses an oxygen pump to recycle the oxygen in the tanks and an innovative biodetergent that eliminates odors that commonly develop with closed systems. This process enables him to add very little fresh water to the system, he says. The water runs through a series of tanks where it is filtered and purified with bacteria and enzymes before it's returned to the washer/extractors.

Just as impressive, Bjorkman says new water entering the system doesn't require heating—another energy saver—and the discharge of used and contaminated water entering the city's wastewater-treatment facility is also significantly less.

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Since 2012, he says his company also has applied biotechnology to its cleaning system.

"We are the first mat washing company in the world to rely on biodetergent," Bjorkman says, adding that the bio agent was developed by Innu Science. "It relies on nature's own microorganisms—which are harmless to people, animals, and nature—to do the job. It replaces the use of chemicals and functions best in lower temperatures. Together with the oxygen pump, we have achieved a synergistic effect since bacteria needs extra oxygen."

One unexpected customer benefit of biotechnology is that it increases the surface tension of mats, enhancing their ability to absorb dirt.

Bjorkman started working on this project in 1997. This system was integrated into the design

of his current plant, which was built in 2005. He says there were no additional costs with this specific design, just plenty of savings.

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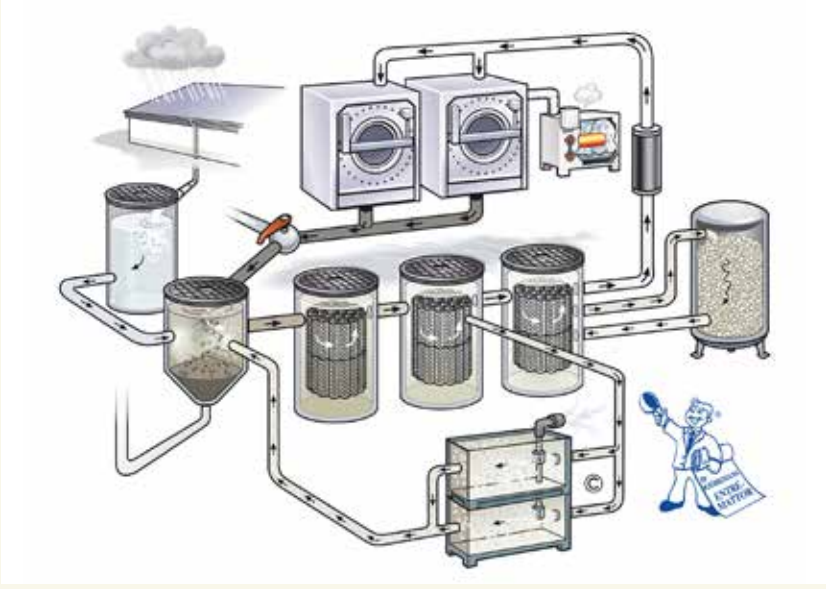
Besides cost savings, the system has had a positive impact on staff morale and could serve as an employee magnet. "Our environmental profile gives (us) meaning and helps our employees be proud of their company," Bjorkman says, adding that the company's delivery trucks also operate on biogas. "We like to think it can (help us) attract more competent resources in the future."

Not to mention helping to expand his company's customer base. He says the company promotes this eco-friendly approach in its marketing materials. That, in turn, has given Hr Bjorkman's a competitive edge by attracting like-minded customers. He points to responses from customer-satisfaction surveys that reveal how more customers are consciously choosing environmentally-friendly vendors.

Still more changes lie ahead, such as potentially placing solar panels on

At lower left is an illustration of the closed water system in use at Hr Bjorkmans Entremattor AB. It features a series of filters and heat-reuse equipment that's designed to conserve both water and energy. At lower right, company President Carl-Johan Bjorkman receives a 2014 EMAS award from European Environment Commission Janez Potocnik.



the plant's roof and working with an energy analyst to develop an energy-savings plan.

"Our vision is being an industry leader in overall environmental work," Bjorkman says.

LET IT RAIN

White Plains Linen in Peekskill, NY, is another operator that demonstrates how being creative and green pays off.

The company, a supplier of linen rentals, ranging from tablecloths to kitchen uniforms, collects rainwater in underground storage tanks, says Len Labonia, vice president of operations and chief operations officer at White Plains.

Three years ago, when the company merged two of its plants, the county required it to comply with a storm water run-off program by creating a retention pond on its lot to capture water.

"We didn't have room to put a pond in because (space) was taken up by our parking lot," he explains. "So we found it necessary to put in underground tanks with 30,000 gallons of tank storage."

The county only required the textile services supplier to capture 10% of the water from its roof. But since the infrastructure was already in place, why not capture more?

And it does. A lot more. The company collects 2.4 million gallons annually, saving about 200,000 gallons of water each month that is filtered and used for washing, he explains.

Labonia says the return-on-investment for the costly storage tanks is roughly 12 years. Still, with utility rates rising rapidly, he says it's just a matter of time before the tanks' ROI cross over from red to black. Or maybe we should say, 'green.'

Meanwhile, the company already has benefitted in other ways. While it's a morale booster for the employees, Labonia says attendees at trade shows typically express interest in conducting business with green companies. He says White Plains promotes its green status every chance it gets, from boasting about its conservation activities with potential customers to placing a TRSA "Clean Green" certification logo on each of its 38 delivery trucks and on the side of its building.

"Next to air, water is the next most important thing to our business," Labonia says. "Without it, we're out of business."

ROI—IT TAKES PATIENCE

Mission Linen Supply in Santa Barbara, CA, is big on heat recovery. Nearly all of its 26 operating facilities now support wastewater-heat reclaimers and boiler-stack economizers, in addition to variable-speed air compressors, says Mark Saposnik, environmental compliance engineer at Mission.

While outfitting facilities with such energy-saving equipment is costly, he expects a two-year return on investment. As an example, he points to variable-speed air compressors that match the speed of the compressor with the demand for air by the plant. He says they already are saving the company approximately one-third in utility costs for that piece of equipment.

At left, are two washer/extractors used in the Hr Bjorkmans Entremattor AB in Sweden; at right is a view of the rain-collection piping at White Plains Linen in Peekskill, NY.