BY G.F. GUERCIO, CONTRIBUTING EDITOR

CONSERVING H2O

WAYS TO SAVE RESOURCES THAT MAKE SENSE

As the country—both on a public and personal level—becomes more environmentally conscious about water, energy and recycle issues, so too do correctional facilities. Based on numbers alone, whether the population consists of hundreds or thousands of inmates, the savings in water, energy, and associated costs like cleaning chemicals, is an effort more facilities are compelled to undertake. The Green Corrections Initiative (National Institute of Corrections), Green Prison or Sustainable Prison Initiatives (Ohio, Maryland, New York) are among those projects being studied or ongoing in the push to save costs and the environment (see NIC Information Center at www.NICIC.gov/green corrections).

A focus on correctional plumbing will target the usage segments most conducive to change—including water conservation and energy abatement—and those best to provide long-term monetary savings. In the article to follow, industry representatives cite work in this regard: their research, outcomes, challenges, progress and products in an incentive for corrections to go green.

Green Hits the Showers

High Sierra Showerheads incorporate a patented nozzle that breaks up a low-pressure stream

tank; (3) Distribution: solar hot water is disbursed as needed via the hot water heater. Wabash Valley Correctional Facility is noted as the first prison in the Midwest to utilize solar hot water to augment its heavy water demands. The system consists of 15 flat panels supplying water to 200 people with expected savings of thousands of dollars per year.

www.mannplumbinginc.com, 812.334.4003

Green ROI

To date, Aquawing has saved over 2.9 billion gallons of hot

water alone, says Brett Daniels, vice president. "Aquawing is unique and has been able to find success in the corrections marketplace because our patented technologies offer many other benefits in conjunction with ecology. For instance, Aquawing is the only ozone system clinically validated to kill viruses and superbugs like MRSA. Also, our technology can save as much as 90 percent on hot water usage, 30 percent on total water usage, increase quality, decrease wash and dry times which all equate to a quick return on investment (ROI) for the clients."

Aquawingozone.com, 1.888.296.4777

Green Water Savings

"Improving water conservation begins with the flush

Nexus Controller and Element Shower Manifold

valve," states Shawn Bush, CEO, I-CON Systems, Inc. An electronic flush valve system controls runtimes and lockouts as well as water amounts. Reducing water per flush is 90 percent of the savings; 10 percent is the lockout limiting number of flushes. "Our system can take a 3.5 gallon fixture's flush down to 1.6 gallons and a 1.6 fixture down to 0.9 gallons and still pass all plumbing tests and comply with plumbing codes." For showers, a controller directs run length, time of day, and the number to run, all resulting in additional water savings. While the amount of water saved varies, he says, "we typically see 65 percent to 80 percent savings in water."

www.i-con.com, 1.800.240.3578

5 Keys to Boosting Laundry Efficiency

Excerpts of a study titled "Keys to Boosting Efficiency and Productivity at Correctional Laundries" conducted in 2014 by Continental Girbau Inc.

BY JOEL JORGENSEN

#1 Select a high-speed soft-mount washer-extractor. Higher speed washers remove more water from every load, which shortens dry time. Dryers run less often and use less energy and natural gas.

#2 Choose a washer with a sump-less design. Many washers feature an outer sump, which holds up to three gallons of water per washer load. Select a washer without a sump and save up to three gallons of water per load.

#3 Add an ozone system. Ozone systems work best using cold water and drastically reduce the need to heat water, which cuts natural gas consumption. They require fewer cleaning chemicals and PH extremes. This minimizes the need for multiple dilution rinses (and associated wasted water and chemicals).

#4 Use a dryer with a moisture sensing system. These systems automatically sense when a load of laundry is dry and prevent that load from over-drying. This keeps correctional laundries from damaging them. It also ensures the laundries use only the necessary amounts of electricity and natural gas.

#5 Select equipment with highly programmable controls that offer ease of use. This is important, especially if inmates do the laundry. All facets of the wash process (water temperature, extract speed, chemical injection, water levels, number of baths) should be programmable by item type.

Joel Jorgensen is vice president of sales and customer services at Continental Girbau Inc.