



Cleaning Innovations That Matter.

Betco's Smart Restroom System Promotes Water Conservation

Water is one of our most important resources, and it is running low. According to the [EPA](#), 36 states are either experiencing or anticipating water shortages. These types of water shortages can be severe and potentially life-threatening: in January 2014, for example, [USA Today](#) reported that seventeen rural communities in California found themselves in danger of a significant water shortage when wells and reservoirs in the area ran nearly dry. In February 2014, the [Boston Globe](#) reported that ranchers in both Northern California and New Mexico were selling off their cattle herds, as droughts made it impossible to grow the grass required to feed them. One way that businesses, schools, public arenas, and other facilities can do their part towards addressing waste issues is by installing water conserving systems. This helps fight water waste at its source: fundamentally changing a public space that is used by a large percentage of the population every day. By installing the Betco Smart Restroom System a building can reduce its water consumption by tens to hundreds of thousands of gallons per year. That's enough to help change the tide of water usage in America. It's also a way to significantly cut utility costs. Every year, the amount of water available for safe human consumption and use has to stretch further. The [USGS](#) notes that total water use in the United States peaked in 1980, at approximately 375 billion gallons of freshwater withdrawals per day. However, this water use has remained relatively constant since then, despite the increase in population, food requirements, technology requirements, and even environmental changes such as droughts. Why? Because starting in the 1980s, the U.S. made a commitment to water conservation. Without this commitment, water use would likely have skyrocketed in the past thirty years. The mere fact that we have kept our water use constant since the 1980s, even though [U.S. Census Bureau data](#) indicates the population has grown from 227.23 million in 1980 to 316.99 million as of 2013, it is worth celebrating. This is a clear marker that Americans care about water conservation and are willing to do their part to conserve water. However, it is not enough. We need to cut off our water usage where we waste the most -- such as public restrooms, which use up to 3 gallons of water per flush. Although the [Energy Policy Act of 1992](#) helped set standards for low flow toilets, there is still room to conserve more water with public urinals. As [How Stuff Works](#) notes, a standard urinal can use up to 45,000 gallons of water per year. The [EPA](#) states that 65% of the 12 million urinals in the United States are not water efficient; this means the U.S. is looking at excessive water usage at the rate of several billion gallons every year, all being flushed away. The conserved water can be used to fill wells or water reservoirs, or for communities experiencing droughts. The water can be used to produce food, or to keep plants, animals, and people alive. It's time to stop flushing our most valuable resource away. It's time to invest in a Smart Restroom System.

Betco's Smart Restroom System is a game changer in the area of water conservation. Buildings that choose to install the Smart Restroom System can save tens to hundreds of thousands of gallons of water per year, which will significantly contribute to their water conservation efforts. The Smart Restroom System is also financially beneficial. It is designed to install onto current urinals without requiring expensive tear out of existing urinals. In addition to the low cost of the Smart Restroom System, buildings that install the system will experience savings in terms of



water utility costs. If a building uses the Smart Restroom System to transform existing urinals into water conserving urinals, as well as installing Low Flow Faucet Aerators to reduce water usage at restroom sinks, it can reduce its restroom water usage to a fraction of the original usage and cost. The Smart Restroom System includes the following components:

1. Smart Valve: is a patented lockable urinal flush valve that converts nearly any urinal into a water conserving urinal.
2. Smart Screen: a urinal screen designed to reduce the two primary problems facing water conserving urinals: odor from urine and scale from the repeated application of hard water.
3. Barrier Fluid: a fluid designed for water conserving urinals and floor drains that suppress' odors at the source.
4. Clario Skin Care: a cost effective skin care dispenser and foam soap system that encourages handwashing and reduces the spread of illness.
5. Clario Air Care: a dispenser and metered aerosol system designed to provide continuous odor control in restrooms.
6. Low Flow Faucet Aerators: complete the water conservation project by reducing water consumption at restroom sinks. In addition to reducing water usage, it also helps reduce the energy costs required to heat water.

Buildings are best served when they invest in the entire Smart Restroom System bundle; however, the water conservation elements can be achieved by simply installing the two primary components: the Smart Valve and the Low Flow Aerator.

The SmartValve® is a unique, patented lockable flush valve that turns nearly any urinal into a water conserving urinal, enabling schools, businesses, arenas, and other public areas to begin saving water immediately. The SmartValve® conserves up to 40,000 gallons of water per urinal per year. Since many buildings have five or more urinals per restroom, installing SmartValve® can easily help save 200,000 gallons of water per year -- or more. The SmartValve® is also an extremely cost-effective method of water conservation, since it does not require buildings to remove existing urinals. Instead, buildings can simply replace the flush valve handle on existing urinals. The SmartValve® fits the following commercial flush valves: Sloan Regal, Sloan Royal, Zurn AquaFlush and Zurn AquaVantage. The Smart Valve requires no special tools to install and does not even require the water to be shut-off. Installing a Smart Valve in place of a handle or automated flusher takes fewer than five minutes and begins saving water resources as soon as it is installed. Using the Smart Valve can help businesses or public facilities earn LEED and BOMA 360 certification.

The Smart Screen was designed to complement the Smart Valve and assist in converting standard urinals into water-conserving urinals, while providing a solution for one of the most common problems facing urinals, odor and scale that naturally builds up from repeated application of urine and hard water. The Smart Screen is a sophisticated urinal screen that has been engineered and formulated to counteract odors at the source. It includes an integral block that is made of biodegradable chelating agents and four (4) proprietary non-pathogenic strains of naturally occurring bacteria. This bacteria helps to break down both the natural odor-causing bacteria found in urine, as well as the scale that develops from repeated applications of hard water. The Smart Screen is also infused with Neutrabond Technology, a specially developed



combination of malodor counteractants and fragrances that literally bond to chemical compounds such as sulfur and ammonia, canceling the natural odors present in those chemicals and enabling urinals to remain odor-free. Lastly, the Smart Screen covers the urinal well, preventing users from accidental splash back while using the urinal.

Testimonials

“Nationwide Arena ordered Smart Valves and Smart Screens in November 2012. It has contributed towards earning our LEEDS points and we are on track to save in excess of 2 1/2 million gallons of water this year by using the Betco Smart Restroom System, and would definitely recommend this system as a valuable addition to your water conservation efforts.”

Brad Cleveland Director of Operations Nationwide Arena

“The FARGODOME is an athletic and conference facility with 147 urinals. We tested 10 Smart Restroom Systems for over 30 days with the Ocean Breeze fragrance in one of our main restrooms. The fragrance held up very well. Our initial cost savings was based on only 70 urinals which showed us a water savings of 1,510,000 gallons a year. We feel this is a very good sustainability program for our facility.”

Don Lange Director of Operations FARGODOME

“We have purchased and installed 50 Smart Valves at several of our campuses. Our original concern was odors in the restroom and possible mineral crystals formation in the drain lines. We have had no odor issues and we have seen no crystal buildup. As a matter of fact, our restrooms have a much more pleasant smell due to the Betco smart screen. We are saving over two million (2,000,000) gallons of water per year currently. When we install the valves system wide, our annual water savings will be in excess of fifteen million (15,000,000) gallons with annual water spend savings of \$130,000.00”

Marcelino Moose Fuentes, Jr. Custodial Supervisor Midland Independent School District

History of the Company and Betco's Mission

Betco has been an industry leader among supporting facilities maintenance professionals since 1950. The company's focus is on your needs for tomorrow, where resource integration and application to individual facilities for improving facility maintenance quality, efficiency and effectiveness is the future. Betco consistently leads the way in creating innovative programs and services, including products like the Smart Restroom System.

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