

Westmatic Blower/Dryer systems at MARTA Laredo

of engineers to X-ray, scan, and test the existing wash bay to figure out the flow of the water. We had to cap a few lines and integrate a few new lines, but we were able to accomplish these tasks successfully."

The new Brady garage was a one-year project, from date of order through fabrication, delivery and installation of the bus washing systems.

Once all the systems were energized, Westmatic's factory-direct personnel visited MARTA and gathered bus drivers and other personnel who use the system for training. Over the course of a week, MARTA's drivers test-drove the system while garage personnel studied system and component maintenance.

### Clean results

MARTA officials say they're impressed with the wash quality of the Westmatic systems.

"The people using the system are, overall, happy with it," Harclerode says. "Westmatic did an excellent job training our staff, and I haven't got any negative feedback on the cleanliness of the buses. This project was a success."

Compared to MARTA's older systems, the Westmatic bus washes deliver better cleaning performance on both the front and rear-ends of agency buses. Furthermore, the system is far less maintenanceintensive than the older systems, and consumables like detergents and water are reduced.

"The efficiency of these systems is extremely important," says Steve Perry, superintendent of bus maintenance at MARTA. "These systems save a lot of time, and we get the clean end-result that we're looking for."

"No one wants to see dirty buses driving out of our facilities," adds Samir Sheth, MARTA engineer. "It's a matter of customer satisfaction, as our customers are tax-paying stakeholders. That's also why MARTA has a quality control system department, ensuring all buses are clean - inside and out."

By procuring a system that can consistently and thoroughly clean buses to optimal results, Wawro says that MARTA is in a great position to increase customer satisfaction and even ridership.

"MARTA's customers will feel confident that the vehicle they're entering is safe and properly maintained, and that all starts with the vehicle's clean image," he says. "That's the kind of value that an efficient, well-maintained wash system can bring." 🔠



Dual Reclaim water recycling systems at MARTA Perry





Westmatic Blower/Dryer System at MARTA Brady Mobility Center

# MARTA runs clean with Westmatic

The Atlanta agency and Westmatic teamed to retrofit wash systems into two existing facilities, and install a system into a newly-built garage

## By Richard Tackett

For the Metropolitan Atlanta Rapid Transit Authority (MARTA) in 2015, replacing bus wash systems in its multiple maintenance locations was a matter of necessity. The systems at MARTA's Perry and Laredo facilities were each 25 to 30 years-old, well past their usable life, and were beginning to break down. The systems were becoming costlier to operate than replace, and in some cases MARTA employees had to resort to hand-washing buses after wash system failures.

"Those systems had been installed since the buildings around them were constructed," says Remy Saintil, director of facilities at MARTA. "They weren't very efficient regarding conservation. We often dealt with streaks, and other issues relating to the wash quality of our buses."

Furthermore, the agency was designing a new maintenance property – the Brady Mobility facility. For a brand-new facility, it was critical that MARTA obtain wash systems that reflected its sterling reputation

in the Atlanta area and across the transit industry. MARTA is one of the top 10 transportation agencies in the U.S. With a fleet of over 500 buses, maintenance and cleanliness is a priority.

Saintil says MARTA was looking for a more modernized system which would provide better overall wash quality and significantly more water conservation. After a research process, the agency settled on new systems from Westmatic Corporation, Buffalo, NY.

# **The Westmatic system**

MARTA sought a machine that is more efficient in the way it uses water, chemicals and electricity. Less consumables means lower operating costs.

Westmatic's systems are made in America and were designed for the Scandinavian and other European markets where, on average, the cost for consumables like water, chemicals and electricity are up to four times higher than in the United States.

"Because we utilize those European standards and designs, our systems are incredibly efficient compared to other systems being delivered in the United States. We pride ourselves on manufacturing and supporting equipment that has the lowest life-cycle cost of any machine on the market today." says Steve Wawro, president of Westmatic Corporation.

Not only are Westmatic's machines incredibly efficient – they're also incredibly compact. This makes their systems very attractive for new buildings, where agencies can often drastically reduce space requirements for new builds. Agencies can cut construction costs, which is perfect for sites needing a retrofitted system – such as MARTA's Perry and Laredo facilities.

Westmatic manufactures its own recycling equipment and has its own water purification system, which Wawro says the company hopes to introduce more and more into the states as environmental regulations become more stringent. In Europe and Scandinavia, water must not only be recycled – it must be purified before entering sewage systems.



"For most public transit agencies, we install drive-through systems," Wawro says. "For MARTA and some other agencies, we've developed an innovative design – a brush machine that safely and effectively washes the front-ends of buses with front-mounted bicycle racks."

In traditional machines, drivers are directed to drive through the entire machine without stopping, which means the vehicle drives into the brushes and pushes them away. Wawro says this isn't ideal, because it relies on a driver to drive through at a certain pace. Too much reliance on driver judgement can damage wash systems and vehicles. For example, some vehicles suffer windshield or mirror damage from hitting the brushes too fast.

In the Westmatic system, drivers are directed to stop by a traffic light. The brushes then automatically come to the bus, so there's less risk of vehicle damage. This controlled method results in safer and more consistent wash results. In MARTA's system, split-length mounted brushes wash above the bike rack, alleviating concerns for damages to the windshield, bike rack, or machine itself.

Once those brushes retract and the driver gets a green light, the driver is directed to drive through and then directed once more to stop. Then, the system washes the rear of the bus with full-length brushes. Westmatic brushes are unique in that they truly overlap, so they don't leave any area of the front or rear of the bus untouched.

"Even though we direct the bus to stop twice, it does not increase the wash cycle time beyond 90 seconds – an industry standard for washing buses in a drive-through machine," Wawro says.

By installing Westmatic's drive-through machines, MARTA could free up a lot of usable space in its wash bays, Saintil says.

"It allows us to reallocate that space toward other storage needs as they arise."

### **Purchase and installation**

Westmatic's presentation, at a time when the agency was looking at several types of washing equipment, impressed MARTA officials. They classified the bus wash as a Capital Improvement Program (CIP) and selected three sites for installations: retrofits of the existing Perry and Laredo facilities, and a new system for the in-design Brady facility.

"We had a senior bus maintenance technician that had worked with Westmatic at a different bus authority," says Mark Harclerode, senior project manager at MARTA. 'For the most part, it was a very positive experience."

Harclerode oversees the project managers responsible for a sizable portion of MARTA's CIP. This includes everything from bus facility upgrades to full facility rehabilitation.

"Other references I checked were also positive," Harclerode says. "Everyone said the system runs well as long as maintenance is kept up-to-date."

Westmatic won the bid process, though MARTA handled each facility's purchases differently.

"For the Perry and Laredo sites, MARTA decided that they wanted Westmatic," Wawro says. "To ensure they got the quality of equipment they wished to procure, MARTA elected to buy direct through a Georgia state cooperative purchasing program."

The cooperative purchasing program, known as the National Joint Powers Alliance (NJPA), gave MARTA the ability to directly purchase their preferred equipment at an already competitive bid price. Using NJPA ensures the owner will receive exactly what they are looking for and what was recommended based on their fleet configurations and options

"It was a turn-key purchase," Wawro continues. "When they purchased our new equipment, they also purchased the demolition of the existing equipment and systems in there. They purchased the installation of the new equipment along with the plumbing work, the electrical work, and all the final startup, testing, training and commissioning for those systems."

For the new Brady garage, Westmatic worked closely with one of MARTA's consulting firms – Maintenance Design Group (MDG). At that time, MARTA already knew of Westmatic and the Perry and Laredo projects were underway. As a contractor for the facility, Archer Western Construction procured the washing systems. In this way, Wawro says the Brady garage was a project that Westmatic was involved with "from the ground up."

The Perry and Laredo garage design work and installations occurred over about two years – including the installation of five machines and the full project of demolition, obtaining permits and licenses, and other necessary work.

Wawro says that retrofitting the water recycling system presented a unique challenge at the Perry and Laredo facilities.

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