



## Making Rio de Janeiro Better by Reclaiming 100% of Process Water

### Reclaiming 100% of process water

As the world moves toward a low-carbon economy, water will play an increasing role in supporting clean technologies. That makes it critical for energy transition initiatives to take into account their impacts on water consumption and how organizations will ensure the proper management of water resources.

At Flowserve, we're committed to safeguarding water as a valuable resource as well as supporting our customers as they take steps to build a sustainable future.

### Closed-loop system maximizes our water use

Flowserve specialists pursued an ambitious plan to reclaim 100% of the water used in the operations at our facility in

Rio de Janeiro, Brazil. Team members saw an opportunity to keep all processing and testing water in a closed-loop system — thereby conserving clean water instead of drawing more from the municipal supply.

### Taking the initiative to improve

The project team identified operations throughout the Rio plant in which water could be better managed.

In addition, there are two rainwater reservoirs originally built for cleaning the plant's exterior and irrigating the landscape. Although they had not worked as envisioned, they were available to be incorporated into a new system designed to conserve process water.



## Re-using our production facility and water resources

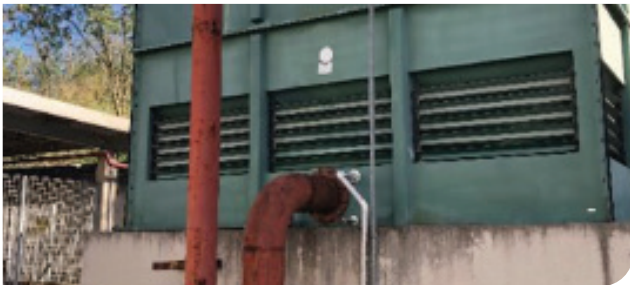
The closed-loop system was designed and implemented by installing piping to connect:

- Reservoir 1 with the hydrostatic test area
- Reservoir 2 with the main water tower
- The performance test area with the wash cabin



*An automated system delivers reclaimed water to the wash cabin.*

With these changes in place, all water now flows to the water treatment station and then to the main water tower, completing the closed-loop cycle.



*An independent laboratory regularly performs chemical and biological tests on both the reclaimed water and rainwater.*

After any needed treatment, the water flows to the main water tower and returns to the system.

## Capturing and reusing our water resource

Our Brazil facility can reuse 100% of the process water that would have been discharged into the municipal wastewater system. Further, we now capture rainwater and add it in our operations. This maximizes a precious natural resource and offsets the consumption and cost of water from the municipal system.

## Supporting sustainability

Flowserve is proud of this innovative water reclamation program; it's a clear example of how we're enhancing sustainability across the enterprise and providing end-to-end flow control solutions that support energy transition initiatives. We leverage our 225 years of flow control experience and global resources to enable customers to optimize their flow loop processes and increase their energy efficiency.

And, each gallon of fresh water we conserve is a gallon that can be available to benefit our neighbors across Rio de Janeiro. That's how Flowserve makes the world better.



Read Flowserve's approach to [energy transition](#).

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