

CASE STUDY

Enhancing Laboratory Water Purity at a Leading Ivy League University with Burt Process Equipment's Advanced RODI System





Overview

A prestigious Ivy League university sought to enhance the quality of its laboratory water systems to support its wide range of scientific research and applications. They partnered with Burt Process Equipment to develop a solution that would meet their stringent requirements for water purity and reliability.

Challenges

The university needed a system that could integrate seamlessly with existing facilities while adhering to rigorous standards for water purity. The challenge was to design a system that was efficient, reliable, and capable of handling high throughput demands without excessive maintenance.



Solution

Burt Process Equipment provided a state-of-the-art RODI and RO system tailored to meet the specific needs of the university. The system included:

- Pre-treatment Skids: Equipped with duplex carbon filters for chloramine removal, duplex water softeners, and 10-micron cartridge filters to protect and extend the life of RO membranes.
- RODI and RO Systems: Capable of producing up to 10 gallons per minute (GPM) of purified water, including ASTM Type 2 water from the RODI lab portion. The system featured high-pressure stainless steel pumps, 4-inch RO membranes, and comprehensive monitoring with conductivity and flow sensors.
- Storage and Distribution: Two 300-gallon polypropylene tanks were installed, complete with sophisticated monitoring and control mechanisms, including hydrophobic vent filters and pressure sensors. The distribution system included Grundfos stainless steel pumps, UV treatment for TOC and bacterial control, and final polishing filters to ensure the highest water purity.



Implementation

Burt Process Equipment's design facilitated a seamless integration into the university's existing infrastructure, minimizing disruption and enabling easy maintenance. The pre-assembled skids ensured efficient installation and start-up, supported by Burt Process Equipment's comprehensive setup, which included pre-plumbing, pre-wiring, and thorough system testing prior to shipment.



Results

Following the installation, the university experienced a significant enhancement in both the purity and availability of laboratory water. The system not only met the rigorous purity standards required but also provided a reliable and consistent supply of high-quality water, essential for the university's diverse and critical research activities. The automated controls and robust system design significantly reduced maintenance demands and ensured continuous operation.

Conclusion

Burt Process Equipment's tailored RODI/RO water system solution exemplified their ability to meet the specialized needs of academic institutions, delivering efficient, reliable, and high-quality water treatment systems. This project highlighted Burt Process Equipment's commitment to providing solutions that meet the exacting standards of top-tier educational institutions.



For more information on Burt Process Equipment's innovative water purification solutions, visit www.burtprocess.com.

