

CORNING

Clean Water Project

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Clean Water Project Overview

- Primary goal – Achieve zero discharge of process water
- DESGN project team formed for the system design (treatment system, process line modifications, and housing for treatment unit)
- Team installed an ion exchange water treatment system for the plant's process water used in manufacturing



Clean Water Project Benefits

- Reduced the site's annual water usage by 11%
- Reallocated approximately 650 hours annually, which were previously dedicated to cleaning and maintaining the water system to focus on manufacturing
- Reduced the site's impact on the environment and eliminated site's wastewater permit



Clean Water Project: How it Works

- The ion exchange system removes contaminants from the process water while an ultraviolet lamp controls any biological growth in the water
- A closed-loop treatment system allows the water to be filtered and returned to manufacturing for reuse multiple times, instead of being used once and discharged to the local municipality's wastewater system



Clean Water Project: How it Works

- 4,000 gallon storage tank used for storing water
- Process water is treated via ion exchange resin tanks, carbon tank, series of 5 micron filters, and UV light
- System is managed via PLC



Clean Water Project Energy Benefits

- All pumps have been equipped with variable frequency drives to minimize energy usage
- Reduced energy use for pre-treating outside water coming into the plant, and at the municipal treatment facility that is now handling less discharge



Process water after filtration

Clean Water Project Future Implementation

- The technology behind Project Clean Water has been installed at two other manufacturing facilities and the company is looking to expand it at other locations
- Project Clean Water has helped the site reduce natural resource usage, capture cost savings, and provide additional time to manufacture products



Voted as top project of the year by Energy Star Partners

Communication

- Corning's Project Clean Water, initiated at the Optical Fiber and Cable (OFC) Hickory, North Carolina plant, was recently voted as a top project by fellow ENERGY STAR® partner companies, and was presented at the annual industrial partners meeting in Washington, D.C.



Global Energy Management Operations Manager JT Hufnagel accepting a top project award at the ENERGY STAR® Conference held in Washington, D.C.

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