

## MANUFACTURER INVESTS IN METHODS TO REDUCE CARBON FOOTPRINT

**ABOUT GEMU VALVES, INC.** GEMÜ Group is a family-owned manufacturer of valves, measurement and control systems for liquids, vapors, and gases headquartered in Germany. GEMÜ North America, based in Atlanta, Georgia, is a global market leader for sterile applications and supports markets in Canada, Mexico, and the United States. GEMÜ North America is one of six production and logistics centers in the group along with 27 subsidiaries globally.

**THE CHALLENGE.** In 2022, GEMÜ was looking to build a new, in-house electropolishing process line using new equipment and the latest technologies. They wanted to make sure the new line would not only meet but exceed the Environmental Protection Agency (EPA) regulations for wastewater treatment and air quality, so Jay Tompkins, production manager at GEMÜ, reached out to Sandra Enciso, project manager for the energy and sustainability group at the Georgia Manufacturing Extension Partnership (GaMEP) at Georgia Tech, part of the MEP National Network™, to conduct an environmental compliance assessment (ECA).

**MEP CENTER'S ROLE.** Since this was for a new line, Enciso audited their current process line. Installed in February 2023, the new line was then audited for wastewater and air quality controls, including ventilation measurements from the inside to the outside of the building. GEMÜ will also be able to fulfill the Georgia Environmental Protection Division (EPD) industrial wastewater requirements by revising their water pretreatment and wastewater characterization process.

Enciso worked with Shane Lewis, continual improvement engineer and safety coordinator, to look at better green practices to reduce the company's carbon footprint, as GEMÜ intends to be carbon neutral by 2030. GEMÜ also joined GaMEP's sustainability cohort, designed to develop and implement preventative strategies that achieve cost savings and reduce environmental pollution.

GEMÜ also worked with Georgia Tech's Safety, Health, and Environmental Services (SHES) group to conduct a general safety study for personal exposure, air sampling and noise monitoring. The results were so impressive that the SHES group recommended them for SHARP certification, which is an elite group of small businesses that meet, maintain, and continuously improve an exemplary safety and health program to protect their employees from workplace injuries and illnesses. GEMÜ has collaborated with GaMEP to participate in the German apprenticeship program, allowing students dual enrollment to earn a high school diploma and associate degree, while working part time for GEMÜ to gain the skills needed in local manufacturing industries.

"We consider Georgia Tech a valuable partner. They continue to support our company in many different initiatives and have contributed to our current success. I look forward to hiring more students through the apprenticeship program and seeing how the process improvements we have made reduce our carbon footprint."

-Jay Tompkins, Production Manager

## RESULTS



Built pH treatment into the electropolishing line so the water gets treated @ **100%** before it drains



Increased apprenticeship program from **0** to 2 students and will hire up to 2 more students in 2024



Joined the sustainability cohort with three team members



Will complete a scorecard at the end of the cohort for the company's environmental footprint

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