

FROM MUSTARD TO MICROBUBBLES: HUBER HDF KEEPS DEVELEY'S U.S. OPERATIONS COMPLIANT AND EFFICIENT



BACKGROUND AND CHALLENGES

Develey is a global leader in the production of mustard, sauces, and condiments, with a longstanding heritage dating back to its founding in Munich, Germany in 1845. Over the decades, the company has expanded its footprint significantly, now operating 18 manufacturing sites across 10 countries and distributing products to more than 65 global markets. In 2018, Develey made a major investment in the U.S. market by establishing a 126,000 square foot, state-of-the-art production facility in Tennessee—their first manufacturing site in North America. The \$20 million facility was warmly welcomed by the local community and government leaders and brought many new jobs to the region.

While the facility quickly ramped up production to meet growing demand from U.S. retail and co-packing customers, it also presented an additional operational challenge: wastewater management. Due to the nature of condiment and sauce production, the facility generated a considerable volume of high-strength process wastewater requiring pre-treatment before discharge. Without sufficient pre-treatment, this wastewater would contribute to rising operational costs and concerns about the facility's ability to meet discharge regulations over the long term. To maintain compliance and ensure reliable, cost-effective treatment performance, Develey needed to identify and implement a robust wastewater solution tailored to the facility's specific needs.

PROJECT DATA

Client: Develey Mustard & Condiments

Location: Dyersburg, TN
USA

Project Type: Pre-treatment
DAF

HUBER Technology, Inc.
Solution: HUBER Dissolved
Air Flotation Plant HDF 3

Completion Date: January 2020

"The HUBER DAF has been running well for years without any issue. HUBER service stops by about once per year for maintenance and inspections, and has been a pleasure to work with."

— Maintenance Facilities
Manager, Develey Mustard &
Condiments



SOLUTIONS PROVIDED BY HUBER TECHNOLOGY, INC.

After evaluating multiple treatment technologies, Develey selected the HUBER Dissolved Air Flotation (HDF) system to replace its existing wastewater treatment setup. The HUBER HDF offers a compact, high-efficiency design capable of handling the facility's demanding wastewater characteristics, which includes influent concentrations of up to 9,000 mg/L COD and 2,500 mg/L total suspended solids (TSS). Designed for a peak flow rate of 132 gallons per minute (GPM), the HUBER HDF is well-suited to meet the facility's production volume and variability.

The HDF system uses microbubbles to separate suspended solids and fats, oils, and grease (FOG) from the wastewater, delivering exceptional removal rates with consistent, reliable performance. Its small footprint made it ideal for integration into the existing plant layout, while its automated operation significantly reduced the need for manual oversight.

IMPLEMENTATION & EXECUTION

- Q1 2019: Engineering in collaboration with Develey team.
- Q4 2019: Installation of HUBER HDF into the existing wastewater building.
- Q1 2020: Commissioning, operator training, and system optimization.

HUBER's engineering team collaborated with plant operators to ensure seamless integration with minimal downtime.



HUBER Dissolved Air Flotation Plant HDF 3

RESULTS & BENEFITS

After installing the HUBER Dissolved Air Flotation system, the facility experienced significant improvement in the wastewater treatment process. The HDF system effectively managed high hydraulic and pollution loads, removing over 95% of suspended solids and fats, oils, and grease (FOG) from the wastewater stream. This not only ensured consistent compliance with local discharge regulations but also significantly lowered operational costs. With its automated controls and low-maintenance design, the system required minimal operator oversight, reducing labor demands and improving reliability.

Operational & Environmental Gains:

- ✓ Enhanced contaminant removal: Achieved >95% reduction in TSS and FOG, decreasing the organic load on downstream systems and reducing the risk of permit violations.
- ✓ Lower sludge handling costs: Concentrated solids removal reduced sludge volume, minimizing hauling and disposal expenses.
- ✓ Improved sustainability: Cleaner effluent and energy-efficient operation support corporate environmental goals and reduce the facility's ecological footprint.

CONCLUSION

Develey's decision to implement the HUBER HDF system proved to be an effective solution to their wastewater treatment challenges. The system's compact footprint, robust performance, and low operational demands provided the facility with a reliable and scalable treatment strategy. By efficiently handling high-strength wastewater with minimal operator intervention, the HUBER HDF significantly enhanced overall treatment performance. As a result, the facility achieved consistent compliance with discharge regulations, reduced operating and labor costs, and positioned itself for sustainable long-term operation in the U.S. market



ABOUT HUBER TECHNOLOGY, INC.

Headquartered in Denver, North Carolina, HUBER Technology, Inc. operates a 206,000-square-foot state-of-the-art facility that houses offices, training centers, and advanced manufacturing capabilities. This enables us to design, produce, and deliver a wide range of wastewater treatment equipment, from dewatering screw press systems, headworks screens, grit handling, septage receiving, tertiary filtration and equipment and drying of biosolids equipment for use in the water and wastewater industry.

