



2016 Top Industrial Water & Wastewater Projects

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From olive harvesting to car manufacturing, efficient and reliable water and wastewater systems are integral to a facility's success. Because of their unique features and demands, projects of this nature face their own set of challenges—and rewards.

From May to July 2016, iWWD encouraged project leaders to submit entries showcasing industry-specific projects in design or construction during the past 18 months.

Nominated projects varied in terms of goal, size and price. iWWD examined the obstacles faced and overcome by all parties involved in each project, as well as the final goals achieved and

successes met. iWWD is proud to highlight these achievements in its inaugural showcase of Top Projects.

Thank you to the project leaders who submitted entries and photos, and congratulations to those honored in iWWD's 2016 Top Projects. **iWWD**

Winner profiles, compiled by iWWD Assistant Editor Lauren Baltas and Associate Editor Bob Crossen, are featured on pages 5 to 17. For more information, contact Baltas at lbaltas@sgcmail.com or Crossen at bcrossen@sgcmail.com.



HONDA

Honda Precision Parts of Georgia, LLC

Honda (HPPG) Wastewater



Location: Tallapoosa, Ga.

Owner: Honda (HPPG) Corp.

Designer: Caloris Engineering LLC

Manufacturer: Caloris Engineering LLC

Cost: \$1.5 million

Size: 20 gpm

“[W]e’ve been able to develop a state-of-the-art process that significantly improves our environmental footprint.”

– HPPG Vice President Mike Jett

The next time you put the pedal to the metal in a Honda Odyssey, Pilot or Ridgeline, you could be relying on a transmission manufactured at Honda Precision Parts of Georgia LLC (HPPG) in Tallapoosa, Ga.

HPPG recently celebrated its 10th anniversary of manufacturing transmissions at its facility and has produced more than 2.5 million transmissions in its 10 years of operation.

All that transmission manufacturing also gives rise to a lot of wastewater—12,000 gpd, to be specific, consisting primarily of light oils, diecasting fluids and water. Disposing of this wastewater was costing HPPG money, so the company sought a solution to reduce these disposal costs. Other goals for this wastewater reduction process included:

1. Providing an opportunity to recycle and/or reuse water recovered from the process;
2. Meet sewer discharge limits imposed by local authorities; and
3. Include additional capacity to allow for expansion, as needed.

HPPG contracted with Caloris Eng. LLC, to purchase a Caloris Concentrix 100 Compact MVR Evaporator. The evaporator can evaporate 28,000 gpd, depending on feed chemistry and cleaning frequency. The compact, energy-efficient unit arrives mostly pre-assembled, reducing installation time. MVR, or Mechanical Vapor Recompression, relies on turbofans to generate heating vapors by compressing the water vapors evaporated from the product.

HPPG aimed to reduce its daily wastewater volume by 90%, and to reuse the water recovered for other needs, including cooling tower makeup water. The evaporator was part of an overall system comprising pretreatment components for oil and water separation, suspended solids filtration, and pH adjustment. It was installed and commissioned in March 2016.

“Partnering with Caloris, we’ve been able to develop a state-of-the-art process that significantly improves our environmental footprint,” said HPPG Vice President Mike Jett. “This project yielded some amazing results. We wanted to improve our process and, once we started working with Caloris, we quickly realized the potential we had to reduce water and energy usage.”

HPPG Facilities Manager Wayne Karcz was equally enthusiastic. “At HPPG, it’s a pretty big deal. There aren’t any plants using evaporation for wastewater recycling. It reduces water and energy use and helps us preserve the water source for everyone in the area,” he said.

“We knew we had an opportunity to help HPPG with their long-term plans. The success of the project has provided them with an opportunity to recover/reuse up to 3 million gal of water per year,” said Caloris Product Manager – Packaged Systems Tom Pyper. [iwwd](#)

