



The Transfluid HTV700 hybrid system. PHOTO: TRANSFLUID

charging into Torqeedo's Deep Blue high-voltage marine drives. The project, which has received funding from the Bavarian federal government, will provide propulsion power ranges from 50 to 200 kW and fuel cell power of 30 to 120 kW and will have flexible options for hydrogen storage.

Torqeedo completed several major projects and deployments for customers around the globe in 2021 and 2022.

A major operator of tourist boats on the waterways of Berlin, Germany, has refitted a 20 m vessel with a Torqeedo Deep Blue 50i electric propulsion system that includes three large lithium-ion batteries with a total of 120 kWh storage capacity, more than enough to power a full day of cruising. The operator is planning to convert two sister ships.

Circular Explorer, a unique custom designed vessel for cleaning up plastics and other litter from the surface of the water, was launched this year and deployed to Manilla Bay in the Philippines. It is powered by two 50 kW Deep Blue electric motors and 40 kW lithium batteries with 24 steerable solar panels.

A major milestone was achieved in 2022 when Mahi Two became the first solar-electric 100% autonomous vessel to cross the Atlantic Ocean. The uncrewed 4 m vessel left the coast of Spain in September and reached Martinique six months later. It was powered by a Torqeedo Cruise 2.0 pod drive and a pair of 24 V Torqeedo batteries, which were 100% recharged by solar panels.

In the Americas, recent projects have included a fleet of electric picnic boats and an electric replica historic canal boat in Washington, DC., and a fleet of water taxis in Toronto, Ontario, Canada.

TRANSFLUID

Gallarate, Italy
www.transfluid.eu

PRODUCT LINE

Hybrid and full electric plug and play systems

COMPANY NEWS

Transfluid has designed and manufactured industrial transmissions and other driveline components since 1957, and for years these products have been the backbone of the

company. Now it has developed new hybrid and full electric plug and play systems for industrial and marine applications.

With these systems, the company said it can offer complete solutions, as well as the technical support required by manufacturers to implement them.

Applications include earthmoving and agricultural machinery, forklift trucks, airport ground support equipment and railway vehicles.

Transfluid said the products are fully certified and have passed the most severe tests dictated by certification authorities.

UNIQUE ELECTRIC SOLUTIONS

Holbrook, N.Y.
www.uesmfg.com

PRODUCT LINE

Electric and fuel cell electric vehicle propulsion systems

COMPANY NEWS

Unique Electric Solutions (UES) said it has repowered a Class 8 chassis with a high-torque motor, 600 V lithium-ion phosphate batteries and all associated drive electronics and software to help Solo Advanced Vehicle Technologies (Solo AVT) meet its goal of closed road testing in 2022. The heavy truck platform will be compatible with any autonomous driving software.

In January the company said Total Transportation Corp., a provider of transportation services in New York, New Jersey and Pennsylvania, picked its unique EV battery electric repower solution to convert six existing school buses from diesel to electric. The buses will operate in New York City for the Department of Education.

UES said it has seen dramatic growth in demand of electric conversions, also known as repowers, resulting in its move to a larger facility in Holbrook, N.Y. The 15000 sq.-ft.

facility will operate as a regional repower production center and become its headquarters. The company will maintain its engineering office at the Advanced Energy Research and Technology Center (AERTC) at Stony Brook University in New York.

VOLVO PENTA OF THE AMERICAS

Chesapeake, Va.
www.volvopenta.com/en-us

PRODUCT LINE

Technology for renewable fuel, electric and hybrid industrial and marine applications

COMPANY NEWS

The Volvo Group has set clear goals to be a net-zero emissions company by 2050. Committing to the Science Based Targets initiative (SBTi) provides a pathway toward these targets in line with leading climate science. As part of the Volvo Group, Volvo Penta said it is accelerating its sustainability development to reach zero emissions and leveraging the Volvo Group's R&D. Volvo Penta is engaging with customers, supply chain partners, governments, societies and other stakeholders to pursue electrification and fuel cells.

Major electromobility milestones in 2022 included the first production deliveries of electric drivelines for Rosenbauer fire trucks and the delivery and integration of the first of a series of prototype fully electric terminal

TICO announced its collaboration with Volvo Penta in late March 2021, and by December the first of several emissions-free, fully electric terminal tractor prototypes were ready to undergo testing with TICO's fleet partners. ILLUSTRATION: VOLVO PENTA

