QUANTUM TECHNOLOGIES
PRESS RELEASE

Quantum Announces Advanced High Performance All-Wheel Drive Diesel Hybrid Electric Drive System

Irvine, CA – October 22, 2009 – Quantum Fuel Systems Technologies Worldwide, Inc. (Nasdaq: QTWW) today announced that it has introduced a fuel efficient, high performance diesel hybrid electric powertrain, “Q-Force,” after six (6) years of development. This advanced, proprietary 4-wheel drivetrain can be configured for specialized military as well as commercial applications.

The first application of Quantum Q-Force is in a JP-8 fuel compatible diesel engine-based, battery dominant, series-hybrid electric military Alternative Mobility Vehicle (AMV). A number of pre-production prototypes that incorporate Q-Force have been successfully developed and built for testing and evaluation by selected commands to assess mission suitability, supportability, performance objectives, and guidance on final vehicle configuration.

In one configuration, the diesel engine produces 75 horsepower, the electric motor, 133 horsepower, and the powertrain yields 5,463 foot-pounds of torque after gear reduction. Features of Q-Force include:

- Sophisticated System Control and Data Acquisition (SCADA) system, incorporating Quantum’s proprietary algorithms
- Hybrid control system that minimizes battery size through optimized charge controls and regenerative braking
- Optimized engine operation/calibration and generator performance
- Advanced traction motor/transmission system

Alan P. Niedzwiecki, President and CEO of Quantum said: “Our innovative diesel hybrid electric all-wheel drive system provides high performance, acceleration and extended range, resulting in significant advantages for the U.S. Army in communications, surveillance, targeting, and reconnaissance missions. We believe that Quantum's Q-Force drivetrain is also very well-suited for commercial applications including homeland security, border patrol, park service operations, and light-duty automobiles."

In 2008 Quantum introduced a gasoline plug-in-hybrid electric drive known as ‘Q-Drive’ in the Fisker KARMA 4-door sports sedan. Fisker Automotive, a ‘Green American’ car company co-founded in 2007 by Quantum and Henrik Fisker, was recently selected by the U.S. Department of Energy for a low interest loan of $528.7 million, under the Advanced Technology Vehicle Manufacturing Loan Program.

About Quantum:
Quantum Fuel Systems Technologies Worldwide, Inc., a fully integrated alternative energy company, is a leader in the development and production of advanced propulsion systems, energy storage technologies, and alternative fuel vehicles.

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Quantum's portfolio of technologies includes electronic controls, hybrid electric drive systems, hydrogen storage and metering systems and alternative fuel vehicle technologies that enable fuel efficient, low emission hybrid, plug-in hybrid electric, fuel cell, and alternative fuel vehicles. Quantum's powertrain engineering, system integration, vehicle manufacturing, and assembly capabilities provide fast-to-market solutions to support the production of hybrid and plug-in hybrid, hydrogen-powered hybrid, fuel cell, natural gas, and specialty vehicles, as well as modular, transportable hydrogen refueling stations. Quantum's customer base includes automotive OEMs, dealer networks, fleets, aerospace industry, military and other government entities, and other strategic alliance partners.

More information can be found about Quantum's products and services at www.qtww.com.

Forward-Looking Statements

This press release includes forward-looking statements that are based on certain assumptions and reflect our current expectations and beliefs. Any statements that are not statements of historical fact should be considered to be forward-looking statements. These statements generally include words such as "may," "could," "will," "should," "assume," "expect," "anticipate," "plan," "intend," "believe," "predict," "estimate," "forecast," "outlook," "potential," or "continue," or the negative of these terms, and other comparable terminology. These forward-looking statements include statements regarding the expected performance of the diesel hybrid electric drive system and the suitability of the diesel hybrid electric drive system for commercial applications. There are a number of important factors, risks and uncertainties that could cause the actual results to differ materiality from those indicated by such forward-looking statements including, without limitation, the risk that the drive system will not perform as expected, be commercially feasible, or meet the needs of our customer based. Additional risk factors include those risks discussed in our reports filed with the Securities and Exchange Commission (the "SEC") under the caption Risk Factors. Any forward-looking statement is qualified by reference to these risks, uncertainties and factors. Forward-looking statements speak only as of the date of the document in which they are made and are based on the beliefs, opinions, and expectations of the Company's management as of the date they are made. These risks, uncertainties and factors are not exclusive, and Quantum undertakes no obligation to publicly update or revise any forward-looking statements to reflect events or circumstances that may arise after the date of this press release, except as required by law.

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