CMT-380 Hybrid Concept Comes Complete With Jet Turbine

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Small companies developing electric supercars with Ferrari-rivalling performance may seem fairly common these days, and the latest entrant into this niche market segment – Capstone Turbine – seems determined to follow in the footsteps of other fledgling electric car start-ups.

Capstone Turbine is pushing traditional hybrid and electric vehicle barriers with the introduction of the CMT-380, a high-performance, hybrid supercar powered by lithium-polymer batteries and an ultra-low emission, range-extending microturbine engine.

Yes, you read correctly. The CMT-380 features an ultraclean and quiet jet engine under the hood of the borrowed Factory Five Racing GTM body.

With this unique powertrain combination on board, the CMT-380 is claimed to be capable of travelling from 0-60 mph in just 3.9 seconds, reach a top speed of 150 mph and drive more than 500 miles on a single tank of fuel.

The microturbine engine develops about 40 horsepower and runs on diesel or biodiesel. The set-up features an electric generator and turbine components mounted on a single shaft that are supported by air bearings--so there are no liquids to lubricate or cool the microturbine. It is so clean that it doesn't require any exhaust after treatment to meet stringent clean air requirements of the California Air Resources Board or EPA 2010.

While driving, the car can operate on 100% battery power in zero-emissions mode for a range of up to 80 miles. When the batteries reach a pre-determined state of discharge, the microturbine quietly fires up and recharges the batteries on the fly to extend the driving range up to 500 miles--similar to the set-up used by the upcoming Chevrolet Volt and most other range-extended plug-in hybrid vehicles.



Capstone Turbine CMT-380 concept car

Electronic Arts Chief Creative Director Richard Hilleman, creator of popular video games, developed the concept for the high-performance hybrid-electric microturbine vehicle with support from Capstone Turbine, the world's leading clean technology manufacturer of microturbine energy systems.

The project is still in the concept phase and will be fully on display at this week's 2009 Los Angeles Auto Show.

