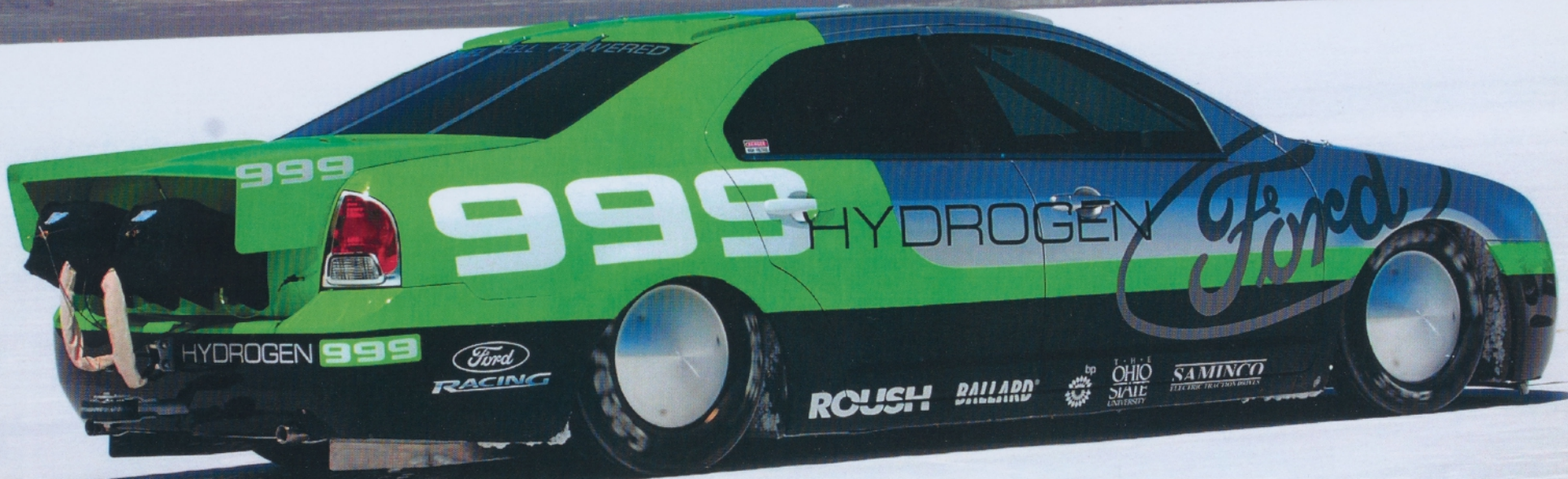




FUSION HYDROGEN 999





FUSION HYDROGEN 999

Land Speed History: 207.297mph

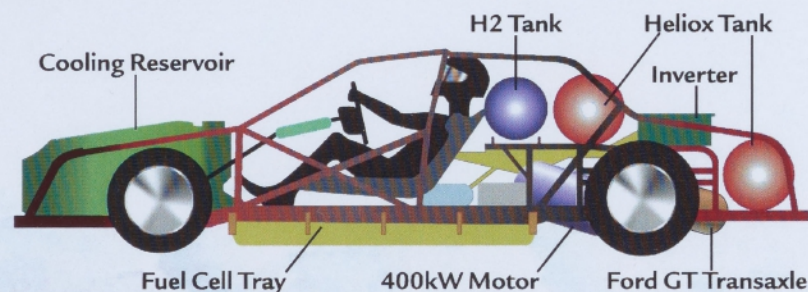
On August 15th, 2007 Ford became the world's first automaker to set a land speed record for a production-based fuel cell powered car when its Ford Fusion Hydrogen 999 raced to 207.297 mph at the Bonneville Salt Flats in Utah to set the record. "What we've accomplished is nothing short of an industry first," said Gerhard Schmidt, V.P. Ford Research & Advanced Engineering. "We established this project to advance fuel-cell-powered vehicles and to do what has never been done before; and we did it." Ford's historic run at Bonneville will further expand the company's technological horizons with fuel cell-powered vehicles because the use of

hydrogen as a fuel could someday play a key role in meeting the energy needs of the transportation sector. The Ford Fusion Hydrogen 999 is Ford's latest environmental innovation and is another step on the road toward commercially viable hydrogen fuel cell vehicles.



Vehicle Specifications

Electric Drive System	400 kW
Cd	0.21
Length	196 in.
Width	72 in.
Wheelbase	113 in.
Weight	6700 lbs.
Ground Clearance	2.0 in.
Fuel Cell System	Ballard 350 kW
Transmission	Ricardo 6-speed manual, sourced from Ford GT
Clutch	Tilton Carbon / Carbon
Cooling System	400 Liter ice water reservoir
Emissions	H2O
Hydrogen Fuel Storage	1.8 kg Gaseous Hydrogen @ 5,000 psi
Heliox Fuel Storage	18 kg Gaseous Heliox @ 2,400 psi
Chassis	1.75 inch OD custom tube frame
Brake System	2 parachutes, Wilwood ventilated discs



How It Works

The Ford Fusion Hydrogen 999 demonstrates Ford's commitment to developing innovative and exciting zero emission products while bolstering our proud racing heritage. The Fusion Hydrogen 999 is powered by a one-of-a-kind Ford-designed 350 kW fuel cell system, comprised of 16 Ballard Mk902 fuel cell rows. The DC fuel cell current is fed to an inverter, which converts the current to AC, and drives the 3 phase 770 hp induction motor. Unlike

traditional fuel cell vehicles where only compressed hydrogen gas is stored onboard the vehicle, the Ford Fusion Hydrogen 999 also stores compressed Heliox (40% Oxygen & 60% Helium) onboard in certified oxygen storage tanks. The use of enriched oxygen onboard the vehicle allows the fuel cells to generate more power than using ambient air and also eliminates the need for the traditional air compressor. Ford fuel cell engineers and aerodynamics specialists worked together to decrease the Fusion drag coefficient from 0.34 to 0.21, significantly improving the vehicle's ability to reach the goal of 200 mph. Moving forward, the lessons learned during the development of the Ford Fusion Hydrogen 999 will feed future fuel cell vehicle development at Ford with a goal of reducing vehicle complexity and cost, while making the designs more efficient.

For More Information: www.ford.com

Partnership



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