

The world's first 3D-printed, drivable vehicle to debut

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History will be made when the world's first 3D-printed car drives out of McCormick Place in Chicago, Ill. During the six-day IMTS – The International Manufacturing Technology Show 2014, the vehicle will be printed over 44 hours then rapidly assembled by a team led by Local Motors with the historic first drive set to take place the morning of Saturday, September 13.

Called the Strati, the vehicle will be 3D printed in one piece using direct digital [manufacturing](#) (DDM), which is the first time this method has been used to make a car. Mechanical components, like battery, motor, wiring, and suspension, are sourced from a variety of suppliers, including Renault's Twizy, a line of electric-powered city cars.

"The Strati was designed by our community, made in our Microfactory, and will be driven by you," said John B. Rogers, Jr., CEO of Local Motors. "This brand-new process disrupts the manufacturing status quo, changes the consumer experience, and proves that a car can be born in an entirely different way."

The innovative and bold vehicle uses the material science and advanced manufacturing techniques pioneered at the U.S. Department of Energy's (DOE) Manufacturing Demonstration Facility at Oak Ridge National Laboratory (ORNL).

"This project represents the unique opportunity DOE's National Laboratory System offers to the industry, to collaborate in an open environment to deliver fast, innovative, manufacturing solutions," said Craig Blue, Director, Advanced Manufacturing Program and Manufacturing Demonstration Facility at ORNL. "These partnerships are pushing the envelope on emerging technologies, such as large scale additive manufacturing, and accelerating the growth of manufacturing in the United States."

"The Strati will be showcased in AMT's Emerging Technology Center. The ETC was created to present manufacturing 'technologies of the future' from leading companies, universities, and government research labs," noted Peter Eelman, Vice President – Exhibitions and Communications, AMT – The Association For Manufacturing Technology. "This feature returned IMTS to its roots as a forum where the latest technologies are first seen. This year is no exception, and we

are confident that this will be the most exciting ETC effort yet."

"The BAAM (Big Area Additive Manufacturing) machine can be used for actual production. The deposition rate of 40 pounds per hour of carbon reinforced ABS plastic and the large size mean that large parts, like a car, can be produced using additive technology," said Andrew Jamison, CEO of Cincinnati Incorporated.

The vehicle proves the viability of using sustainable, digital manufacturing solutions in the automotive industry. Local Motors plans to launch production-level 3D-printed vehicles that will be available to the general public for purchase in the months following the show.

More information: localmotors.com/blog/

Provided by Local Motors

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