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ADDING and REPLACING MINI World Rally Championship Team Sees 3D Printing as Critical Tool; Plans to Print 15 Production Parts for Each Car in Initial Run of 20 Cars

For race car team, the process costs as little as one-fifth the amount of traditional methods

MINNEAPOLIS--(BUSINESS WIRE)--

Add after the semicolon in headline dated May 12, 2011: Plans to Print 15 Production Parts for Each Car in Initial Run of 20 Cars

3D Printers were used to produce final plastic parts, including the black, hood-mounted air intake shown. (Photo: MINI WRC)

Add after paragraph one, first sentence: And it says the technology is being used to manufacturer finished components for actual use on the car.

Add after paragraph three, last sentence: The team now has a manufacturing list of 15 components to be 3D printed for each car, and it plans an initial production run of 20 of the limited edition cars for both its own use and to sell to other race teams.

The corrected release reads:

MINI WORLD RALLY CHAMPIONSHIP TEAM SEES 3D PRINTING AS CRITICAL TOOL; PLANS TO PRINT 15 PRODUCTION PARTS FOR EACH CAR IN INITIAL RUN OF 20 CARS

For race car team, the process costs as little as one-fifth the amount of traditional methods

(NASDAQ: SSYS) Stratasys today announced that its Dimension 3D printers and Fortus Production 3D Printers played a critical role in the development of the new MINI John Cooper Works World Rally Car (WRC). And it says the technology is being used to manufacturer finished components for actual use on the car.

The MINI Cooper WRC Team used the additive manufacturing machines to create a full-scale mock-up of the vehicle directly from the CAD (computer aided design) files, and it used the technology extensively on other assemblies and components of the vehicle.

The MINI WRC Team relied heavily on 3D printing throughout the car's two-year development cycle. To design the test car, engineers used Stratasys FDM 3D Printing technology to create large parts of the engine bay, gearbox, steering assembly, vehicle interior and even engine components, such as intake valves. In addition to prototyping parts

for the test track, the MINI WRC Team even produced some end-use parts for the finished car. One of the most visible of these is the ergonomically styled gearshift display and control panel, which is mounted on the steering column. The team now has a manufacturing list of 15 components to be 3D printed for each car, and it plans an initial production run of 20 of the limited edition cars for both its own use and to sell to other race teams.

The development of the car, which will be featured in this year's World Rally Championship, has impressed upon MINI WRC Team the importance of 3D printing in saving time, reducing tooling costs and enabling more design freedom of complex geometric parts.

"We would find it nearly impossible to build another car without using FDM technology," said Paul Doe, chief design engineer. "We would never have dreamt of building the parts we did without the Stratasys machines. Using composite parts would have cost up to three to five times more."

"MINI WRC Team's use of FDM technology to develop a race-worthy car for WRC demonstrates that it's both efficient and cost effective," said Tim Heller, managing director of Stratasys Europe. "It's nice to be considered an indispensable part of the prestigious team's operation."

MINI WRC Team used Stratasys Dimension 1200es 3D Printers and Fortus 400mc Production 3D Printers with polycarbonate and ABS materials.

MINI WRC Team Details

The MINI WRC Team made its debut in the FIA World Rally Championship in Rally Italy, Sardinia in May and for 2011 will be competing in just six European rallies with two MINI John Cooper Works WRCS. This is ahead of a full assault taking in all rounds of the championship in 2012. MINI has a great rallying heritage and so for its two cars the team has chosen the numbers 37 and 52, which were carried by the cars winning the Monte Carlo Rally in the sixties. Driving number 37 is Spain's Dani Sordi with his co-driver being fellow Spaniard Carlos del Barrio. Kris Meeke from Northern Ireland is driving number 52, and his co-driver is Paul Nagle from Southern Ireland. This programme was initially announced last July, but even before then a lot of development had been done by MINI's partner in this project Prodrive, one of the most experienced and respected operations in rallying. This UK based company from Banbury has no less than six World Rally Championship titles to its name. It was founded by team principal David Richards, who was himself a very successful rally co-driver. "MINI powered by BMW Motorsport": The heart of the MINI John Cooper Works WRC is the 1.6-litre, four-cylinder Di turbo engine, which is also available in the MINI production models. The production engine was further developed by BMW Motorsport for the use in various categories according to FIA Super 2000 regulations. The power transmission takes place via an Xtrac 6-speed, sequential gearbox. For its outings on the rally stages, the MINI Countryman chassis has been fitted with a roll cage developed by Prodrive, which exceeds the strict safety requirements of the International Automobile Federation (FIA).

Stratasys, Inc., Minneapolis is a maker of additive manufacturing machines for prototyping and producing plastic parts. The company markets under the brands Fortus 3D Production Systems and Dimension 3D Printers. The company also operates RedEye On Demand, a digital manufacturing service for prototypes and production parts. According to Wohlers Report 2010, Stratasys supplied more additive manufacturing systems in 2009 than any

other manufacturer, making it the unit market leader for the eighth consecutive year. Stratasys patented and owns the process known as FDM.(R) The process creates functional prototypes and manufactured goods directly from any 3D CAD program, using high-performance industrial thermoplastics. The company holds more than 285 granted or pending additive manufacturing patents globally. Stratasys products are used in the aerospace, defense, automotive, medical, business & industrial equipment, education, architecture, and consumer-product industries. Online at: www.stratasys.com

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Source: Stratasys, Inc.