

Rapid Prototyping | 3D Scanning | Product Design

Nifty ideas become real products faster at Lund

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Aftermarket auto parts designers Lund speed up development with faster reverse engineering

Lund design aftermarket products for cars, pickups, SUVs and heavy trucks

A change to the reverse engineering processes of aftermarket auto accessories firm <u>Lund International</u> has cut development time by nearly 40 per cent.

By updating its hardware and software options the company based in Lawrenceville, Georgia, USA has found a new mobile way to work that is saving them time and money.

Its new piece of kit – a <u>ZScanner 700</u> handheld laser 3D scanner – has been key in the design of products for cars, pickups, SUVs and heavy trucks.

Products including Nifty floor mats, Belmor hood shields and Deflecta-Shield cargo liners have all benefitted from the speed of the new scanner.

- "The ZScanner 700 is far and away our most cost-effective data capture alternative," said Brent Rose, mechanical engineer at Lund International.
- "Nothing else has the mobility to get into interiors and other tight places.
- "ZScanning has opened up some exciting possibilities for new product lines in the near and long term."

Lund previously used a fixed-position scanner but found it cumbersome, time-consuming and unable to operate in tight spaces.

The new scanner allowed it to capture auto interiors that are impossible for fixed-position scanners to reach; capturing scanner sold surface data now takes one-tenth of the time it used to when designers were forced to take castings of interiors to capture contours.



3D scanning with a Z700 3D scanner sold by EMS, Inc

Dramatically reduce time on exterior scanning because of the dramatically reduced setup and data integration steps, and the money saved from the reduced number of prototypes have helped cut the development time by 40 per cent.

Save money and time by reducing the average number of manufactured prototypes the company needs for each product by two-thirds. Because ZScanning produces precise data, the first prototype typically fits perfectly.

Geomagic Studio software is employed at Lund as an intuitive complement to the new hardware.

According to Rose its powerful polygon editing tools and full automation help create high quality CAD-ready data from a scanned polygon mesh.

It helps to smooth surfaces, eliminate irregularities, and produces a standard IGES file that CATIA incorporates with a click.

"With the ZScanner and Geomagic and CATIA software, we can quickly create a true-to-life data model that is far more precise than a manufacturer's CAD model," said Rose.

"As a result, we're working faster, more cost-effectively and with greater flexibility. This is making us much more competitive in our industry."

www.lundinternational.com

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