



Maximum Flexibility for Simplified Measurements

IDEAL Automotive Oelsnitz GmbH has optimized processes at its Slovakian production site with ZEISS T-SCAN CS+.

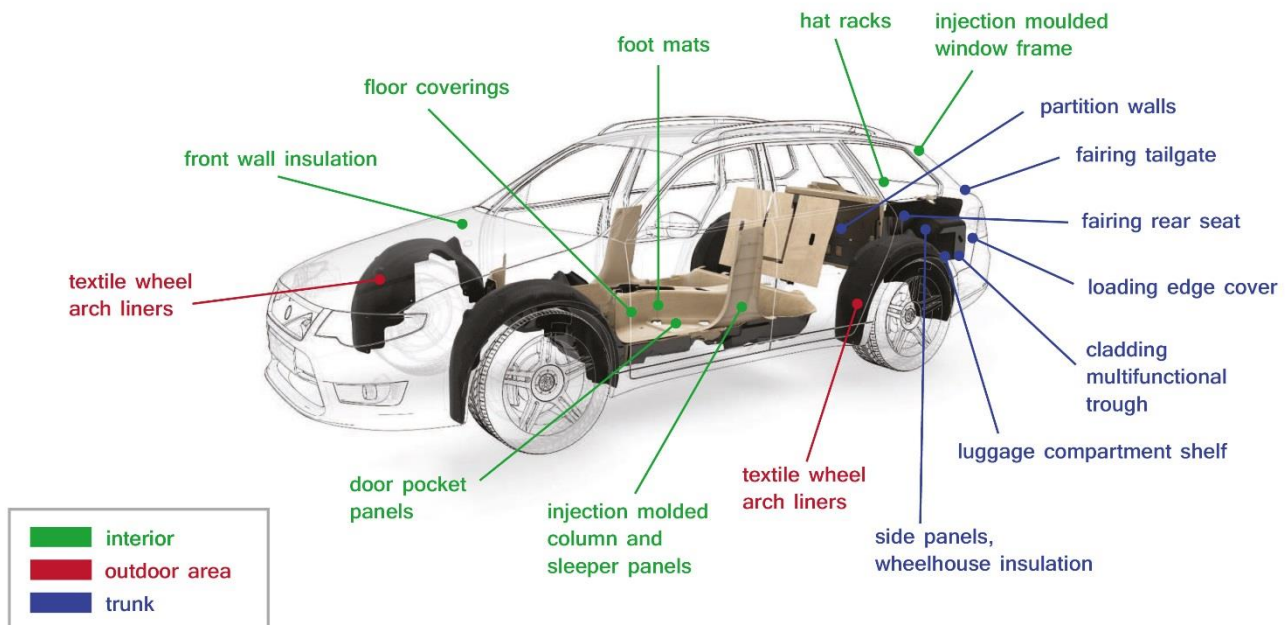


SYSTEM / APPLICATION	ZEISS T-SCAN CS+
FIELD	Automotive system supplier
CUSTOMER	IDEAL Automotive Oelsnitz GmbH

TASK

A vehicle's technical features are not the only thing customers consider when buying a car. They increasingly focus on comfort and design – particularly on the interior. IDEAL Automotive Oelsnitz GmbH produces textile lining components for a vehicle's interior, exterior, and trunk. As system supplier for brand-name manufacturers like Audi, BMW and Mercedes-Benz, the company offers comprehensive industry expertise and knows how to meet its customers' demanding requirements. In addition to the look, functionality, and durability of its products, cost efficiency plays a key role. Hence, the need for optimized processes. The German company saw particularly strong optimization potential for the quality-assurance measurements of parts manufactured at its sites abroad. As the individual locations did not have their own measuring equipment, all test fixtures had to be transported to headquarters in Germany where the company has its own measuring lab, equipped with a contact measuring system. Here the company checked, if the parts met the OEMs' requirements. It was a complicated logistical feat: the test fixtures – known as 'cubing models' – can weigh up to a ton, are quite large, and had to be shipped by truck to Oelsnitz in Eastern Germany and back again. This process meant that, for several days, the fixtures could not be used in production to align the parts. This caused

significant costs. To solve this problem, the automotive supplier began a pilot project for optical and mobile measurements – with ZEISS T-SCAN CS+ – at its site in the Slovakian city of Bratislava, approximately 600 km away from Oelsnitz.



Product portfolio of the IDEAL Automotive Oelsnitz GmbH

SOLUTION AND PRODUCT

Now everything works a lot more smoothly: "The mobile scanner has made us significantly more flexible. My colleague and I take turns traveling to Bratislava every two weeks to measure the parts – because the measuring system remains stationed in Germany," explains Jochen Rödel, a measuring technician at IDEAL Automotive Oelsnitz. "We travel there, set up the system, measure, dismantle our equipment, and then head back." The employees at the Slovakian production site requested the ZEISS system. They first researched the different options on the market and identified ZEISS T-SCAN CS+ to be the best scanner for their needs. The modular system is user-friendly and suitable for many different applications. The hand-held laser scanner makes intuitive and highly precise 3D scanning quick and easy.

"ZEISS T-SCAN CS+ does everything we had hoped for," confirms Rödel who has been using the scanner for more than a year. The three elements are perfectly aligned: the hand scanner, the tracking camera, and the touch probe. The major benefits of the system are its speed and the precise results. 210,000 points are captured every second – more than with any other method. The acquired data provide a detailed look at the actual condition of the component. This can also be compared with the nominal values stipulated in the CAD model. Thus, errors can be identified quickly and easily thanks to a false color comparison of the component surface.

Particularly when scanning large parts such as the cubing model, operators benefit from the excellent ergonomics of ZEISS T-SCAN CS+ allowing fatigue-free measurements. The light, compact scanner housing also makes capturing difficult-to-reach areas a breeze.



Cubing model

RESULT / BENEFITS FOR THE CUSTOMER

Even with tolerances of up to two millimeters for textile products, IDEAL Automotive Oelsnitz not only wants to ensure precision, but also be customer-oriented. The company is only responsible for developing the components. "We are involved until the start of batch production, and we use measuring technology every step of the way," explains Rödel. The geometry, cut, and placement of the components have to be inspected meticulously and must meet manufacturer's requirements. This is where the ZEISS software scores. Problems that occur in production can be solved through component testing. "Learning by doing," is how Jochen Rödel sums up the process. He also counts on the expert service his company receives from ZEISS: "We get immediate support if we have problems or difficulties."

When performing measurements at the Slovakian factory, Jochen Rödel not only gets to know new approaches and different ways of thinking about his work, but also often discovers optimization potential. "The measurements are ideally suited for improving products so that they meet customer requirements. This process speeds up development." His colleagues are keen to implement these recommendations, and they are all impressed by the ZEISS system. "Whenever we arrive with the scanner, people are curious, but slightly hesitant at first. However, everyone is convinced by the time the results are in." Thus, it is planned for additional production sites in the Czech Republic and Poland, that have just opened and are gradually being equipped for production, to benefit from ZEISS T-SCAN CS+ as soon as possible.



ADVANTAGES / STATEMENT

- **Maximum portability means high flexibility**
- **Less logistics expenses for factories abroad**
- **Precise measurements and optimization impress even sceptical employees**

"With ZEISS T-SCAN CS+ we are mobile. Our customers benefit from a faster development process based on the measuring results."

Jochen Rödel, Measuring Technician, IDEAL Automotive Oelsnitz GmbH

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