

automotive  
**testing**  
technology international

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Rolf Frech

Bentley's technical chief on developing the British marque's first SUV

# Stingray



Reducing mass without compromising durability: the conflict at the core of the C7 Corvette development program

## Psychoacoustics

How the workings of the inner ear are being modeled to help auto makers deliver an appealing soundtrack

## Škoda safety

The Czech OEM's top safety engineer gives the lowdown on crash testing, Mladá Boleslav-style

## SAIC goes diesel

A new UK powertrain test facility spawns SAIC's first passenger car diesel, for the MG6 sedan

## Aerodynamics

Lamborghini balances road-car style with on-track performance

## Caterham Technology

Renault's new performance-car partner is taking on third-party test and development projects



## Juke Nismo

How Nissan plans to bring motorsport chic to its regular models

## All-year-round indoor test facility



526

Tire manufacturers will have to fulfil more rigorous testing requirements when a UNECE regulation is extended in the near future.

Regulation No 117 sets the limits for snow performance of winter tires marked with the Alpine symbol. Currently the regulation applies to C1 and C2-class tires, and shortly also to C3-class tires, setting strict requirements for snow compaction, ambient temperature and the flatness of test tracks.

To cater for manufacturers' needs to comply with the regulation, Test World has launched an indoor test facility designed purely for winter testing, offering natural snow, ice, wet and dry surfaces and adjustable ground and air temperatures, as well as humidity, all-year-round.

The indoor testing conditions correlate exactly with those offered outdoors, with the added advantage of increased efficiency. Because the potential measurement and recording deviation is smaller in

indoor testing, reaching the same reliability level requires fewer repeats and therefore less track time and space.

The indoor test facilities provide test teams with the possibility to test in real winter conditions year-round and thus offer the opportunity to shorten the development cycle.

### Test World

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## Test automation software

527

Today's automotive test facility users and operators face increasing pressure to generate better data in less time. Delays due to poor test coordination and data acquisition inefficiencies simply cannot be tolerated as the need to continually reduce the cost per data point is relentless. Furthermore, increased operational costs, such as energy, are pressuring test facility owners to find ways to reduce testing times and increase testing throughput.

Jacobs' Test SLATE software provides the critical solution for optimizing testing, capturing the myriad required data points, and allowing for reduced testing times and testing costs. Jacobs is one of the largest engineering and technical services companies in the USA. It provides engineering,

construction, operations, maintenance and technical support services for automotive, motorsport, and aerospace customers to design, construct, commission, operate, and maintain complex technical facilities and systems throughout Europe, Asia, and North America. It understands the need to maximize data productivity, accuracy and security in each of these facilities.

Jacobs' latest software product, Test SLATE, is being integrated into client facilities to provide an integrated test facility control and data acquisition environment that provides drag-and-drop ease for configuring new test sequences, incorporating new measurement systems, or improving data visualization/analysis on the fly.

In a motorsport wind tunnel for example, Test SLATE fully automates tunnel wind and

rolling road speeds, vehicle yaw angle, independent wheel ride height settings and other model or vehicle-specific controls. Test SLATE provides self-optimizing test sequence automation for maximum data quality in the minimum amount of test time. It is also field proven for continuously monitoring facility and test article onboard data parameters at over 20 million samples per second while comparing them with user-defined alarm limits to ensure the health and safety of these systems.

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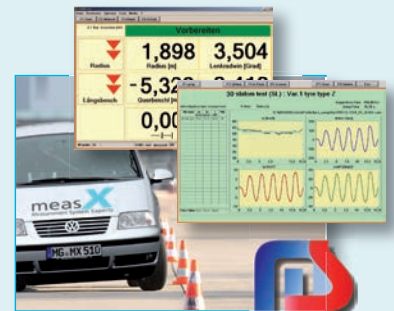


● Rate and check your tests online

● Provide your drivers comprehensive online information during test run



● Acquire data from analogue sensors, CAN and strap down platforms



We are pleased to meet you at the following German exhibitions:

on May, 14. - 16. in Nuernberg, Stand 1603



on June, 04. - 06. in Stuttgart, Stand 11/404



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