



Image: © Jassiedesign/Fotolia

## Services

# Quality assurance for vehicles of all sizes

By Dennis Wittenberg, Sales Director Germany, Formel D Group

The Formel D Group offers a comprehensive range of services along the entire automotive value chain for vehicle types of all sizes. The service provider realizes numerous projects in the areas of product development, production, and aftersales for customers from the commercial vehicle sector.



Image: © Formel D

### **Dennis Wittenberg**

is Sales Director Germany at the Formel D Group. In his position, he is responsible for OEM and regional sales across Germany for our service partner.

In vehicle testing, Formel D delivers support for not only passenger cars, but also trucks and buses. These vehicles are put to the test in terms of safety and functionality on different tracks, test benches and public roads. The Group is responsible for both realizing the test

and QA drives as well as technical support. In addition to the physical component of testing, the service provider is also reinforcing its virtual testing activities and expanding its expertise in the specialized area of software tests for autonomous driving.

### **Services for commercial vehicles in product development, production and aftersales**

Formel D also provides customers in the commercial vehicle sector services in the areas of supplier development, control & rework, retrofits, reworking of powertrain aggregates and

trucks as well as in qualitative pre-assembly of components. Compared with production support for passenger cars, these projects require an even greater degree of flexibility, as there is more variation in the production of commercial vehicles.

Furthermore, the Group provides its customers support in service management, including the development of workshop literature. Though the commercial vehicle sector may be more traditional than the passenger car sector, the trend is headed towards interactivity, as is the case throughout the entire automotive industry. Formel D makes sure its projects feature

the highest degree of digitalization possible and optimizes workshop literature for trucks and buses with innovative, digitalized solutions. This range of services in the aftersales sector is rounded off by pre-packaging services and aftersales training opportunities.

Image © Indumess GmbH

To be able to realize different services for commercial vehicles, Formel D has responded accordingly in its subsidiaries, for example by adapting its systems to the weight of the components and aggregates found in trucks and buses.

### Industrial measurement technology for components of various sizes

Services seeing an increase in demand include industrial measurement technology, something that is essential in the automotive and supplier industries to precisely determine the shape, position, and size of components. As this is time-consuming for manufacturers and suppliers in many cases and procurement costs for the required measurement equipment are high, Formel D coordinates industrial measurements for its customers, tailored to their needs.

Together with its service partner, Indumess GmbH, Formel D carries out measurements of components in a wide range of sizes for several customers from different automotive sectors in Northern Germany. Besides axle components and unfinished parts for truck trailers, the company also analyzes pneumatic components for agricultural machinery as well as automatic transmissions for passenger cars. Depending on the type of the pieces, the measurement technicians use tactile or optical measurement systems from renowned manufacturers in the industry, the latter growing in popularity due to their innovative features. One service frequently requested is initial sampling in accordance with VDA guidelines and customer



The coordinate measuring device measures the most complex of components precisely and reliably.

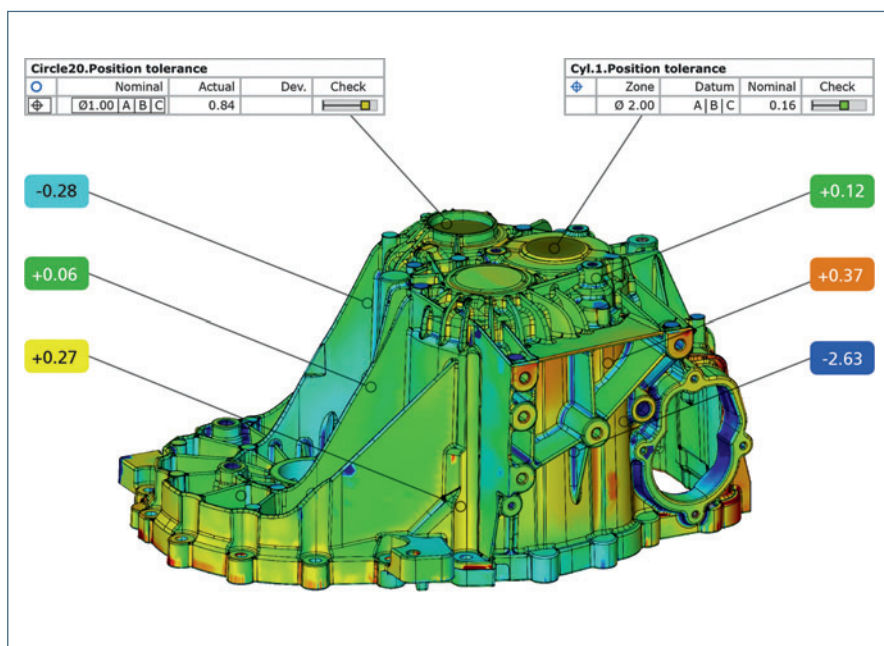
specifications. Formel D carries out the entire process of initial sampling, examining test parts in terms of their design and fit – before series production or after customers have made modifications.

When customers submit a new order, Formel D takes on the logistics aspect and picks up the component requiring testing. After reaching the project site near Bremen, the part is first stored in a temperature-controlled room. This prevents any temperature-related material changes in the metal that can later effect measurements. Stable, tailored clamping setups keep the components from shifting.

Next, experts program the measuring station precisely to the stamped CAD drawings. Provided the digital measuring points match the real ones, data capture is started automatically based on the measurement strategy defined for the component. If the customer does not have a measurement strategy, Formel D is there to offer guidance. Generally lasting several weeks, this process is completed when the Group sends the measurement components including detailed documentation back to the customer, giving them transparent results. On request, Formel D then discusses the results with the customer, providing a holistic approach to service.

### Tailored full-service package

Overall, Formel D offers a full-service package tailored to the exact requirements of its customers. With its experience in quality assurance, Formel D has the expertise required to meet the current and future needs of its customers with cost-effective, flexible, and fast solutions.



A component in false color comparison with the 3D model with deviation flags and positional tolerances.

Image © GOM GmbH

 Website

Formel D  
www.formeld.com

