

In-demand expertise in leak and functional testing

ZELTWANGER is a pioneer in the e-mobility sector



In this interview, Andreas Baur, Managing Director of ZELTWANGER Dichtheits- und Funktionsprüfung, talks about the beginnings and prospects of an electrifying future.

(Tübingen, 12/12/2018) Whether it's in business, politics, or for users: E-mobility requires a completely new way of thinking from everyone. It will change our entire lifestyle. This makes electromobility a lucrative growth market that goes beyond the automotive industry. The



Tübingen-based company ZELTWANGER is an expert in the field of leak and functional testing and prioritizes innovations in the field of automation. This combination is unrivaled in the industry – and is also in high demand in the field of electromobility. Andreas Baur, Managing Director of ZELTWANGER Dichtheits- und Funktionsprüfung, talks about the beginnings and prospects of an electrifying future.

Mr. Baur, is the electric drive replacing the combustion engine?

I'll let the numbers speak for themselves: By 2030, a market share of 21 percent is expected in Europe for electric motors; in the USA, it is 9 percent and in China, 29 percent. So the combustion engine is not dead – on the contrary, it has a long future ahead of it. However, the combustion engine is changing.

The moves towards electric drives has, however, hugely impacted the automotive industry. Where is this journey heading?

It is the combination that will prosper: In hybrid drive technology, the combustion engine and electric motor complement each other to form a well-functioning, efficient team. Of course engines will change, they always do. The combustion engine still has a lot of potential from a technical standpoint. So, there is no either-or situation – the combustion engine will also remain a strong business area.

There is still a notable extensive electromobility offensive: All automotive manufacturers are investing heavily in the electrification of drives and in battery production. Who is benefiting from this?

So far, battery cells have mainly come from Asia. The Chinese company CATL is currently planning the first battery cell plant on German soil in Thuringia. The high-voltage batteries in which the cells are integrated are usually built by automotive manufacturers.

What role does ZELTWANGER play in this?

Battery production is a real technological challenge. Complex manufacturing processes must go hand in hand with ongoing quality testing that is integrated into the process. These two worlds need to be optimally connected and a broad process and automation knowledge is required – this is in our DNA.

So ZELTWANGER provides automotive manufacturers with equipment for the production of electric cars?

All premium German manufacturers purchase our high-end testing equipment. But we don't just supply devices, we also provide services related to leak testing as well as adaptations for connecting test objects to our devices. Holistic leak testing means perfect cooperation between three components: the test object, the adaptation, and the device solution. As the only comprehensive system provider on the market, we analyze the product, determine your specific needs, and ensure long-lasting knowledge transfer with training.

How does this close collaboration come about?

ZELTWANGER has been following the topic of e-mobility right from the start. This means we were the first leak testing expert to enter the e-mobility development departments of automotive manufacturers – those responsible for e-mobility had no experience in leak testing at the time!

What's more, e-mobility not only consists of the battery, but involves many different aspects: The e-machine (drive motor), electrical connector, charger, or control unit, supplier or final assembly – we test everything that can be tested using the medium of air.

Why is ZELTWANGER so far ahead here?

ZELTWANGER has always focused on the quality of our customers' products: Only those who have an overview of everything can offer their customers lasting benefits and real added value. As a system provider, we provide cooperation between services, adaptations, and device solutions. Our high-end testing devices all have an OPC UA interface, meaning they are all ready for Industry 4.0 – this is unique on the market. This means they can be easily integrated into process workflows.

Has electromobility become a permanent area of interest for ZELTWANGER?

Of course, it is important to stay up to date with the development of e-mobility because it will continue to grow steadily – both in terms of its own development and its application. There is a hype surrounding it right now. E-mobility is just one area – but one that needs to be further developed. After all, we are technology leaders and need to strengthen this position – nationally and globally.

ZELTWANGER Holding GmbH

Technology and quality leader

The Zeltwanger Group has established a well-respected position in the market with its modular assembly and testing systems, which can be constructed individually and flexibly. The main focus is on manually linked "one-piece flow" line concepts and ergonomic single-position systems. In addition, fully automated part carrier and robot-based assembly systems meet customer-specific requirements. The range includes leak testing systems, modular assembly systems, pin assembly systems, and polishing systems for ceramic substrate. For use in the medical and biotechnological field, systems are created in accordance with European and American standards and the "Good Manufacturing Practice" guidelines.