



Tec Center Attendorn now two years old

➤ KIRCHHOFF Automotive's road to becoming a global development supplier

The world of carmakers and their suppliers is undergoing a continual process of change. One aspect to be considered in this changing world is that of value-added depth. The prediction that the value-added chain was likely to shift increasingly to the automotive suppliers seems to have been confirmed.

With this redistribution of responsibilities, the expectations resting on the shoulders of suppliers are constantly growing, particularly with regard to their expertise and their ability to independently drive and implement the development of new innovation.

In view of these changes, KIRCHHOFF Automotive set up the Tec Center as a development and prototyping center in Attendorn, right next door to the S & E center.

The aim is to be able to reproduce the entire process of product development under one roof. The development of a new product starts by preparing design concepts, taking the customer-defined installation space and requirement specifications into account.

The increasingly short development periods given in the car industry and the call for cost-optimized development processes are leaving less and less time for constructing prototypes and running trial series. This results in a higher degree of technical risk. When equipping the development center, great emphasis was placed on selecting tools designed to assist theoretical product development, without, however, neglecting the precise validation of the constructed prototypes by means of tests.

A great number of varying R&D calculation tools are available, such as Hyperworks, Abaqus, Dyna etc. to help design the products.

In a simultaneous process, production methods are also designed and the producibility of the metal parts is verified by way of forming simulations..

Once the design has been approved, prototypes are then constructed at the Tec Center. Apart from hydraulic presses for manufacturing the metal parts in cold forming processes, a prototype oven is also available for producing components by means of hot forming and subsequent hot stamping.

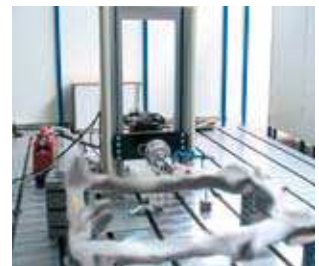
The assemblies are then completed in downstream joining operations.

After the products have been gauged, depending on requirements and in accordance with specifications, service strength tests or other tests can be carried out on the hydrodynamic testing facilities available at the center.

In the laboratory it is possible, for example, to analyze component failure with the help of a universal testing machine or to carry out metallographic tests to detect any causes of failure.

The setting up of the KIRCHHOFF Automotive Tec Center in Attendorn over the last two-and-a-half years and the continuing addition of development know-how are important steps in becoming a competent partner to the international automotive industry.

Christoph Wagener



Creating product designs during the design concept phase

Upper pictures:
CAD, joining, gauging and testing prototypes at the Tec Center in Attendorn