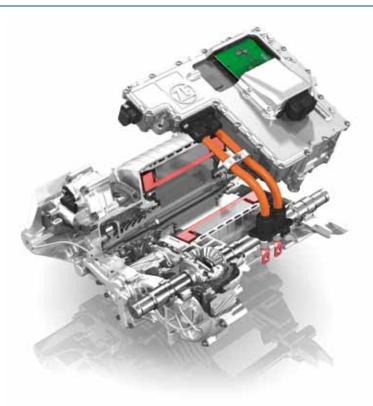


ZF Friedrichshafen AG



ZF is a global leader in driveline and chassis technology as well as active and passive safety technology. The company, which acquired TRW Automotive in 2015, is now represented at about 230 locations in some 40 countries. The two companies, which were still independent in 2014, achieved a sales figure exceeding €30 billion with 134 000 employees. As in previous years, both companies have invested approximately 5 percent of their sales in Research and Development (recently €1.6 billion) in order to be successful with innovative products.

ZF is one of the top three automotive suppliers worldwide.

The company was founded in 1915 for the development and production of transmissions for airships and vehicles. The "Motion and Mobility" slogan clearly states the company's core mission: Right from its foundation, ZF has developed and manufactured innovative products for all people around the globe who want to move things reliably, comfortably, and safely, and experience the ultimate in efficient mobility. Quality, technological leadership, and innovative power have always defined the Group's identity – today as much as ever.

In the field of e-mobility, ZF offers system components including power electronics



for a wide variety of applications from a single source. In this context, the technology company follows a modular approach, which satisfies all functionality requirements as well as the commercial demands of vehicle manufacturers. The ZF portfolio includes all components for the cost-effective electrified driveline including control units and power electronics, starting with individual hybrid modules, plug-in hybrid systems, through to all-electric concepts.

The electrification of the driveline will enable us to achieve future emission targets. Here, downsizing of power electronics to integrate an electric motor and PE into a transmission is a possible key in reducing the costs of hybrid systems. Reducing installation space, weight, and the number of interfaces and components, as well as increasing efficiency are the drivers of innovation for new developments. ZF focuses on a broad technology spectrum in terms of power electronics: from power modules and passive components to signal electronics and system integration.