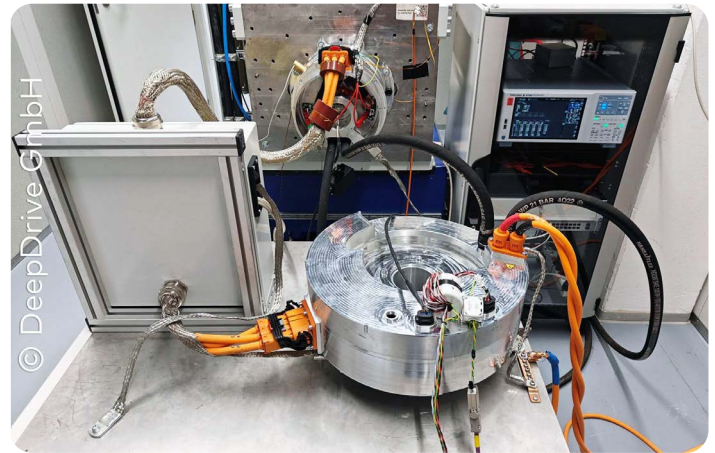


High-Precision Measurement Data Acquisition From Development to Series Production



The Customer

DeepDrive, a Munich-based high-tech company, is well on its way to becoming the market leader for electric motors in the automotive industry and beyond. The company's patented dual-rotor motor technology is an answer to the most pressing challenges of today's electric vehicles (EVs). It not only enables high-volume electric vehicles with a range of over 800 km, but also offers car manufacturers significant cost advantages in series production. At the same time, DeepDrive technology significantly reduces CO₂ emissions and can potentially save several gigatons of CO₂ over the lifetime of an entire EV fleet. DeepDrive technology is versatile in design and can be integrated both as a wheel hub drive and as a classic central drive.

The Challenge

Efficiently measure new technology

DeepDrive's products based on innovative dual-rotor motor technology - the wheel hub motor and the central drive - are revolutionizing the market. They consist of three components developed in-house: the motor, the inverter and the software. In test bench and laboratory tests, the performance data of the individual components must be precisely determined and transferred in high quality - throughout the entire development process from prototype to series production.

The Solution

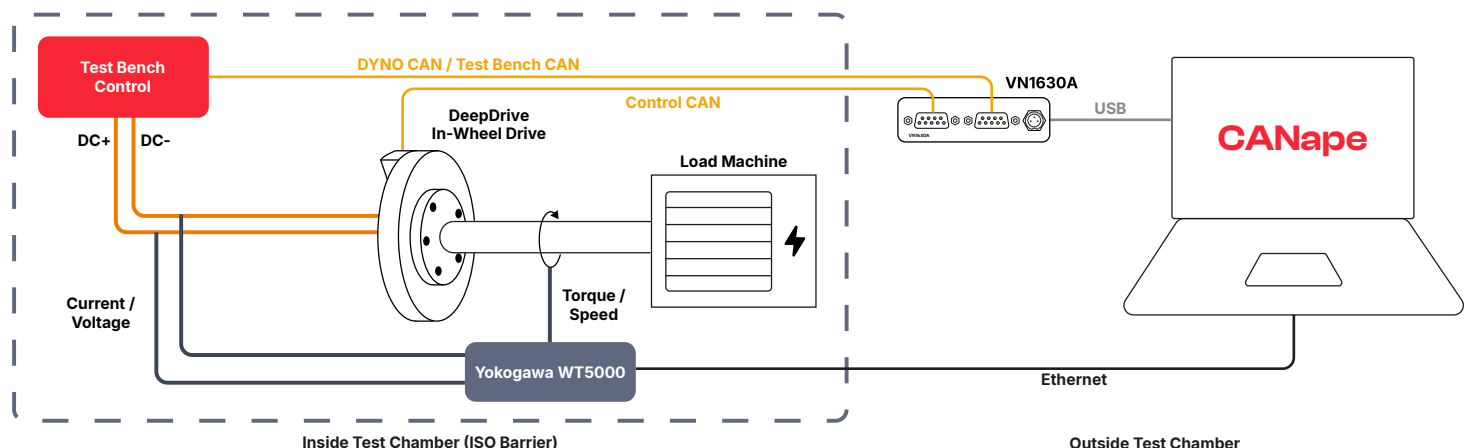
The power data, including the efficiency, is recorded with the Yokogawa Power Analyzer WT5000. This measures voltages, currents and mechanical output power and calculates all relevant power parameters. A newly developed driver ensures direct, secure and stable streaming of the power data to CANape in real time. CANape also controls the test bench. For in-depth analyses, the internal data of the inverter can optionally be accessed via the VX1000 measurement and calibration hardware thanks to megasampling streaming.

The Advantages

- > Reliable and high-precision acquisition of power data for all development steps
- > Automated processing of data directly in CANape
- > Reliable data acquisition even in EMC-affected measurement environments

More Information:

www.vector.com/canape



Schematic test setup