

Testing technology for new challenges

20.000 rpm – the new high performance test benches for e-motors and e-shafts

Future electric vehicles will make use of high-speed electric motors in combination with an appropriate power electronics and a reduction gearbox.

Electric motor test benches play a decisive role in the development of these drive systems. Among many other tests completed on the test benches, dynamic retraction tests and efficiency analyses as well as endurance tests can be performed.



The **DASYM** drive and load machines of the series **ECODyn E** are intended for test bench applications in the e-mobility sector. The max. speed is 20,000 rpm. Their high torques and low mass moments of inertia offer speed gradients of up to 26,000 rpm/s and thus very good dynamics for challenging simulations.

- **High dynamic drive technology**
Compact, low-inertia load machines in asynchronous technology with highly accurate speed and torque measurement.
- **Different test bench setups**
Tests for e-motors, e-shafts, back-to-back etc.
- **Environmental simulation and conditioning**
Use of climatic chambers, cooling liquid conditioning, control of temperature, flow and pressure. Separate cooling circuits for the converter and the motor under test are possible.
- **Open Automation**
Test runs and parameters can be freely programmed. The sequence control and test stand control represent the basis of our automation, which includes simulation as well as synchronous measured value acquisition and processing.
- **Customized mechanics**
Our substructures with air suspension and test specimen mounting have a vibration-optimized design, which is especially necessary for high speeds.
- **Solutions for your successful application**
On the electric motor test benches equipped from DASYM, new and further developments can be tested without restriction and thus support your continuous product improvement.



Your success is our challenge!