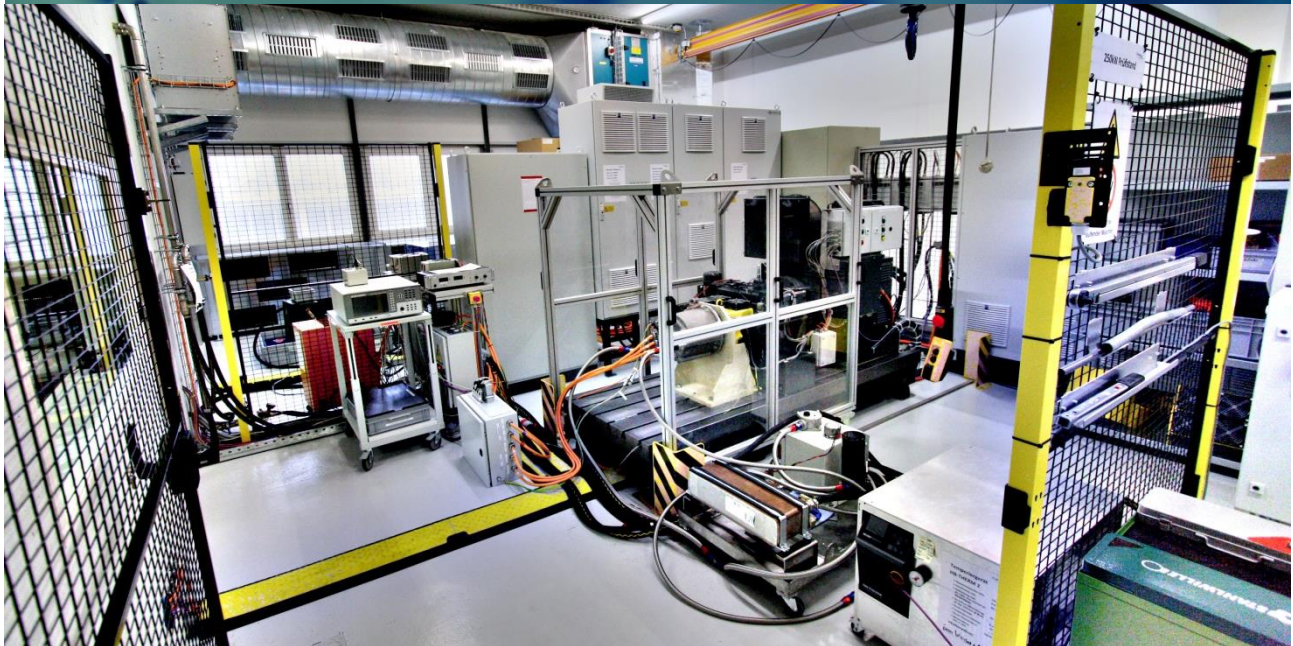


drive:tek:lab and Motor Measurement Services



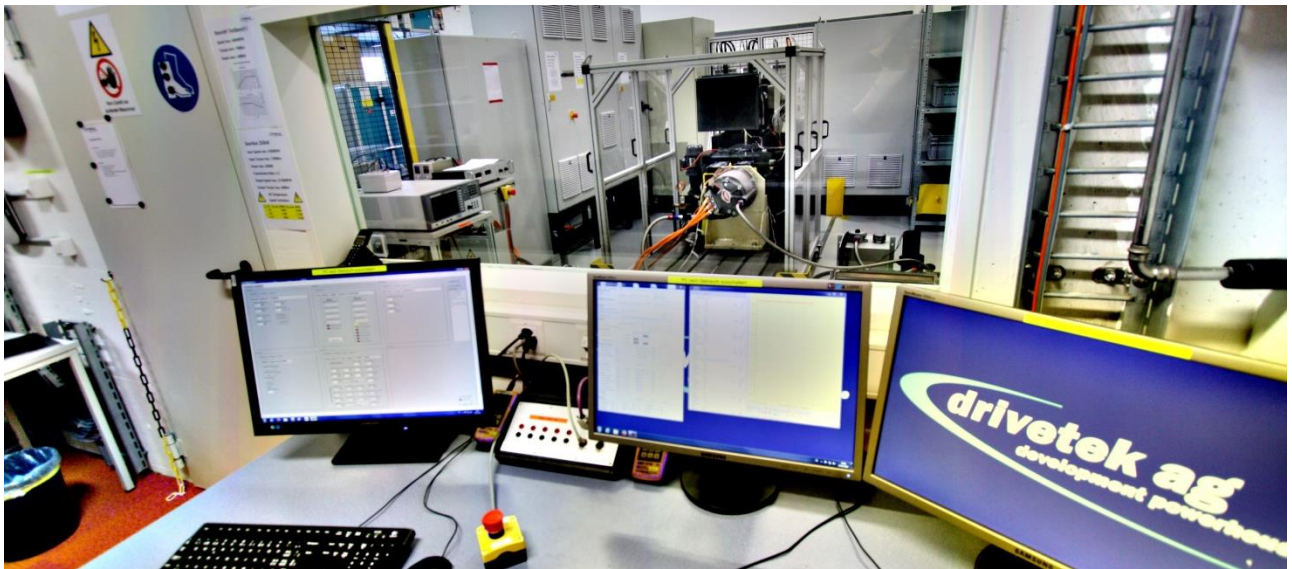
The drive:tek:lab is a tailored laboratory for testing, validation and characterizing a broad range of electric drive systems and motors (DC, Brushless, AC Induction, Synchronous, etc.) in different configurations as well as for parametrization and optimizations of electric machines.

The laboratory infrastructure is optimized to provide a versatile and stable environment and is designed to keep adaption time and cost for different test setups moderate.

The high power level of up to 250kW and the wide range of power supply options, makes the drive:tek:lab an outstanding test facility for electric machines and complete drives. The operator room is separated from the test cabins and protected for a safe and convenient test environment.

Technical Data

Test Stand 250kW	Vascat 250kW – 740Nm – 6'000rpm – continuous with Gearbox 1:2.5 – 250kW – 300Nm – 15'000rpm Rexroth Inverter with drivetek Active Frontend – 250kW
Test Stand Dual Axis	2x Rexroth Asynchronous Test Bench 1x 44kW – 210Nm – 8000rpm – continuous 1x 24kW – 155Nm – 7500rpm – continuous
EUT Supply	2x Gustav Klein LGDP-IU – 100kW – 600VDC – $\pm 240A$ 1x Gustav Klein RTS-DC – 250kW – 1000VDC – $\pm 400A$ AC 3x400V – 16A, 32A, 63A, 160A
Measurements	250kW: Kistler KiTorque – 50, 200, 500, 1000Nm – 0-20'000rpm Dual Axis: Kistler KiTorque – 100Nm, 500Nm – 0-20'000rpm ZES Zimmer High Precision Power Analyzer LMG670 – 4-Channel with Torque/Speed input – 1000VDC – 600Arms – up to 10MHz – for complete efficiency characterization and harmonics measurements of the drive system



Cooling Regulated Cooling System for Equipment under Test (EUT) with Heat Exchanger. Liquid Cooling H₂O with Anticorit – Cooling Capacity 30kW
 Oil and other coolants on request
 Air Cooling System – Cooling Capacity 50kW

Overhead Crane 2000kg

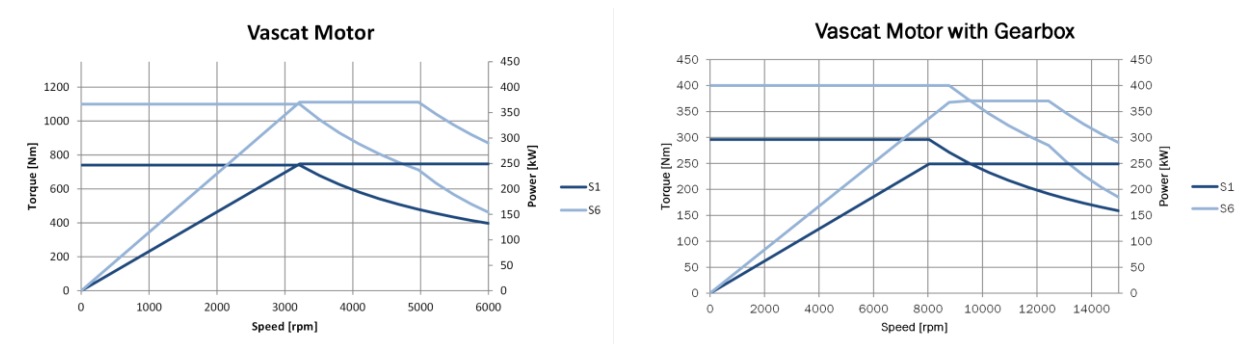
Additional capabilities The fully equipped drivetek electronics laboratory with a broad range of power supplies, measurement equipment is located next door.

EMC pre-compliance conducted emission measurements based on FFT

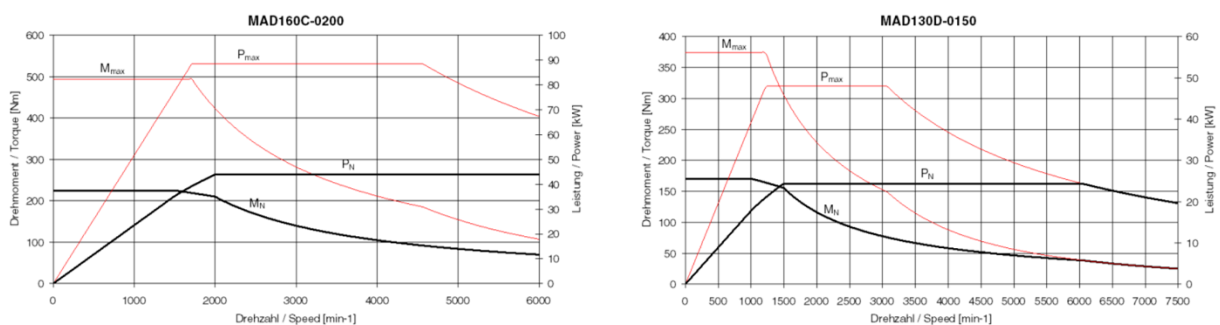
Broadband measurements up to 1000VDC and 500Arms – 2MHz

Regulated Coolant Temperature and up to 20 Channel Temperature Measurement.

250kW Test Bench – Motor Characteristics



Dual Axis Test Bench – Motor Characteristics



Preliminary Datasheet. drivetek reserves the right to change specifications and design without notice.

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