



## K0 Clutch-rig Test Bench

Continental Engineering Services (CES) designed and built a fully custom made testrig for hybrid vehicle transmission component test and calibration of a K0 clutch and e-machine.

CES designed and built the test bench from concept to completion with all tasks conducted onsite from; 3D CAD modelling, control software development, electrical & electronic design, instrumentation, telemetry, build and commissioning.

The test bench replicates the full hybrid vehicle architecture for calibration of an electrically actuated K0 clutch and the e-machine together for a smooth transition from test bench into vehicle for development components & vehicle software.

The test bench recirculates generated energy locally via a DC-link to reduce grid-tied losses and incorporates a high power water cooled DC/DC converter as a battery emulator for the e-machine.

### Performance Data:

- › Power: 210kW
- › Speed: 6500rpm
- › Torque: 620Nm
- › Simulation: Torque pulsation
- › Battery emulator: 48 to 800V DC

