

Heavy Duty Engine Test Benches

The dimensions of the test benches for heavy duty engines offer optimum test run conditions. A system for simulating (pressureless) sea water cooling is also available, in addition to supply of all liquid fuels and natural gas:

- Test bench dimensions: 7.5 x 14.4 x 5 m
- Power per test bench: 4,000 kW
- Transient power: 800 kW
- RPM, max.: 3,500 1/min (dynamic)
- Torque, max. : 5,000 Nm (dynamic)
- Load unit: AC machine HD800 for transient tests (tandem assembly possible)
- Natural gas supply (from 50 hPa system pressure)
- Supply and exhaust air: 50,000 m³/h
- Conditioned intake air: 6,500 m³/h
- Conditioned humidity: 50 % relative
- Conditioned temperature: 25 °C

Extension natural gas operation

- Gas controlled system with a system to for adding propane and CO₂
- Gas chromatography to determine the calorific value of natural gas
- Rotary piston gas meter to determine consumption of propane, CO₂ and natural gas
- Propane tank: ca. 1,600 Nm³; CO₂ tank: ca. 15.500 Nm³/ methane city gas max. 1200 Nm³/h

Generator operation, heavy duty engines:

- Cable set for generator operation (0.4 kV/2400 kW), 50 and 60 Hz, charging bench increments: 1 kW
- Power meter with transformer: 4300 A, 3000 A, 2300 A, 1500 A