

CHASSIS DYNAMOMETER

for Light Duty Vehicles

The test bed is operated in cooperation between the Graz University of Technology and FVT mbH.

BRAKING POWER

200 kW asynchronous motor
48" roll

TEMPERATURE

Adjustable from -30 °C to +40 °C

MAXIMUM SPEED

200 km/h

VEHICLE MASS

maximum 3500 kg

ADJUSTABLE HUMIDITY

PERFORMANCE TESTING

MODES OF OPERATION

The dynamometer can be run in stationary and transient operation. Both braking and towing operation is possible.

STATIONARY OPERATION

Constant traction or constant driving speed

TRANSIENT OPERATION

Simulation of driving resistance forces according to actual vehicle speed and acceleration based on settings for vehicle mass and load road parameters

EMISSION ANALYSIS

- EXHAUST GAS ANALYSIS FROM UNDILUTED EXHAUST GAS
- INSTANTANEOUS EMISSION DATA (max. 2 Hz)
- FTIR FOR 30 EXHAUST GAS COMPONENTS (regulated and non-regulated)
- PARTICLE MASS & PARTICLE NUMBER (CPC 23 nm, 10 nm und 4 nm)
- BRAKE- & TIREWEAR



REQUIREMENTS

DIMENSIONS of the test-vehicle

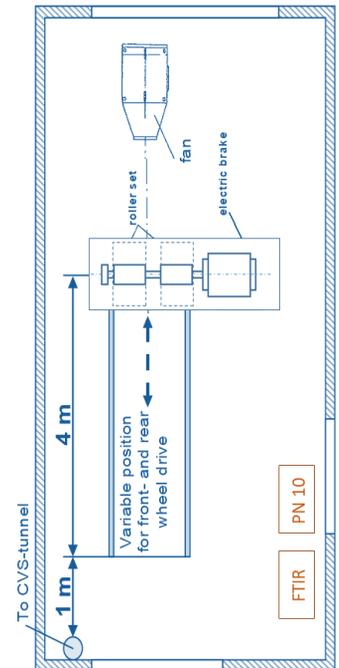
- **Height:** max. 2.6 m
- **Front-wheel drive:** max. wheelbase 4 m, rear overhang max. 1 m
- **Rear-wheel drive:** max. wheelbase 4.5 m, front overhang max. 1 m
(overhang can be bigger with shorter wheelbase, see figure)
- **Axle load** max. 2400 kg

SPECIFICATIONS of the operating system

- **Driving cycle**
- **Exhaust gas components:** Standard: CO, HC, CH₄, NO_x (NO/NO₂), CO₂, PM, PN;
On demand: PN 10nm, 4nm,
Non regulated species with FTIR, temperatures ..

REQUIREMENTS on vehicle- and engine data

- **Car documents and technical data**
- **Vehicle descriptions:** Deactivation of ABS, instructions for relevant special equipment
- **Special measurements:** e.g. spare parts for catalyst exchange



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