

CHASSIS DYNAMOMETER

for Heavy Duty Vehicles

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

<u>MAX. AXLE LOAD</u>	<u>MAX. SPEED</u>
12 t	120 km/h
<u>MAX. TOWING POWER</u>	<u>ROLLER DIAMETER</u>
240 kW at 48 km/h	0.5 m
<u>MAX. BRAKING POWER</u>	<u>TEST BED TYPE</u>
300 kW	twin roller layout for single driven axle vehicle
<u>MAX. TRACTION FORCE</u>	<u>SIMULATED VEHICLE MASS</u>
22 kN	3.5 t to 40 t

MODES OF OPERATION

The dynamometer can be run with diesel (also synthetic fuels), petrol, natural gas and hydrogen driven vehicles in stationary and transient operation. Both braking and towing operation is possible.

STATIONARY OPERATION

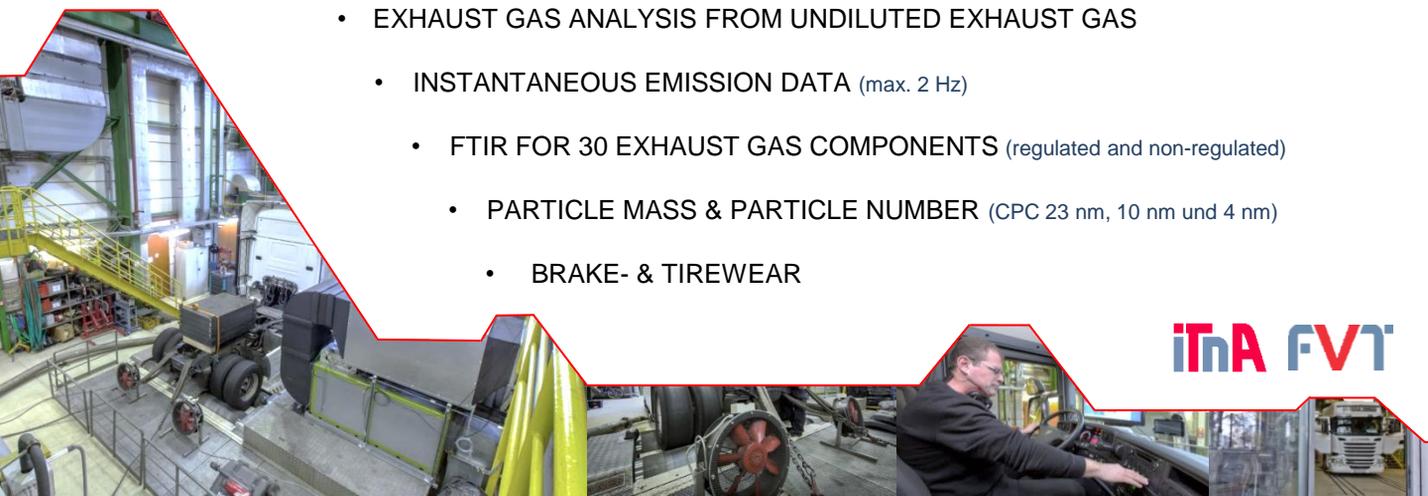
Constant traction or constant driving speed

TRANSIENT OPERATION

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

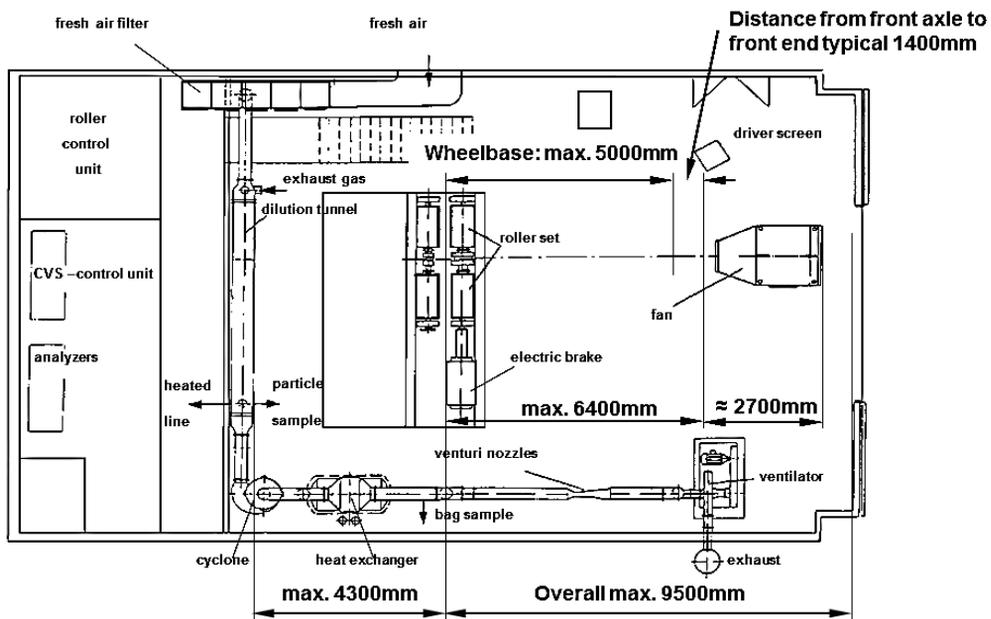
EMISSION GAS ANALYSIS

- 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 on the test-vehicle

- **Tyre diameter:** ≥ 790 mm (dimension larger than 245/ 70 R17.5 or 265/ 70 R17.5)
- **Rear overhang:** ≤ 4300 mm (distance from rear end to rear axle)
- **Vehicle length:** distance between rear axle to front end should be ≤ 6400 mm
- **Wheelbase:** ≤ 5000 mm



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