

# 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

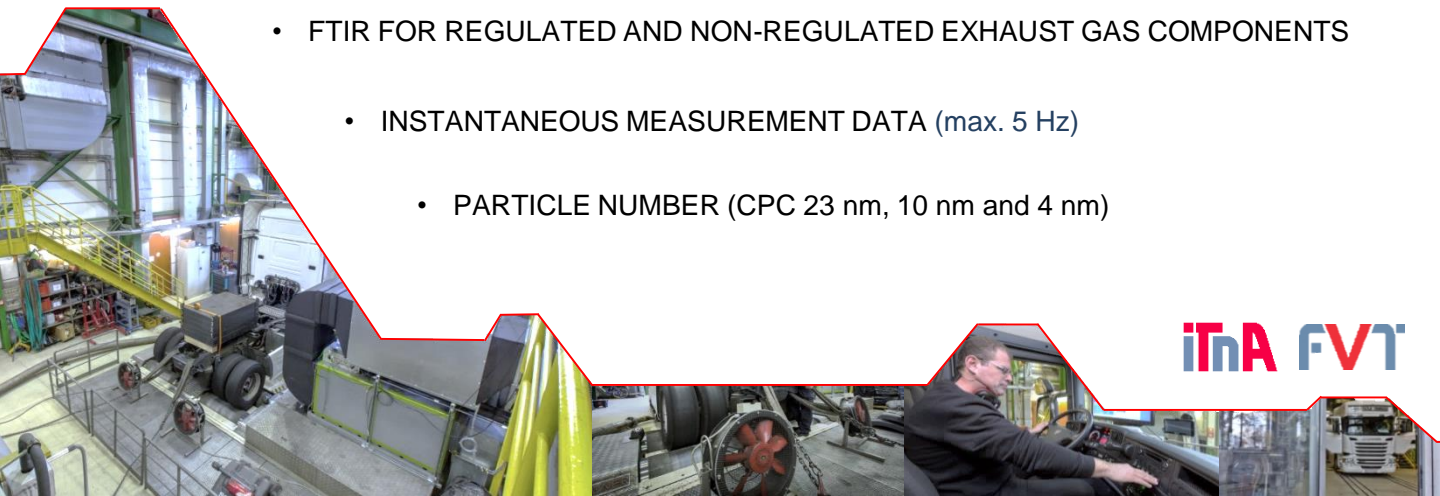
Constant traction or constant driving speed

### TRANSIENT OPERATION

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

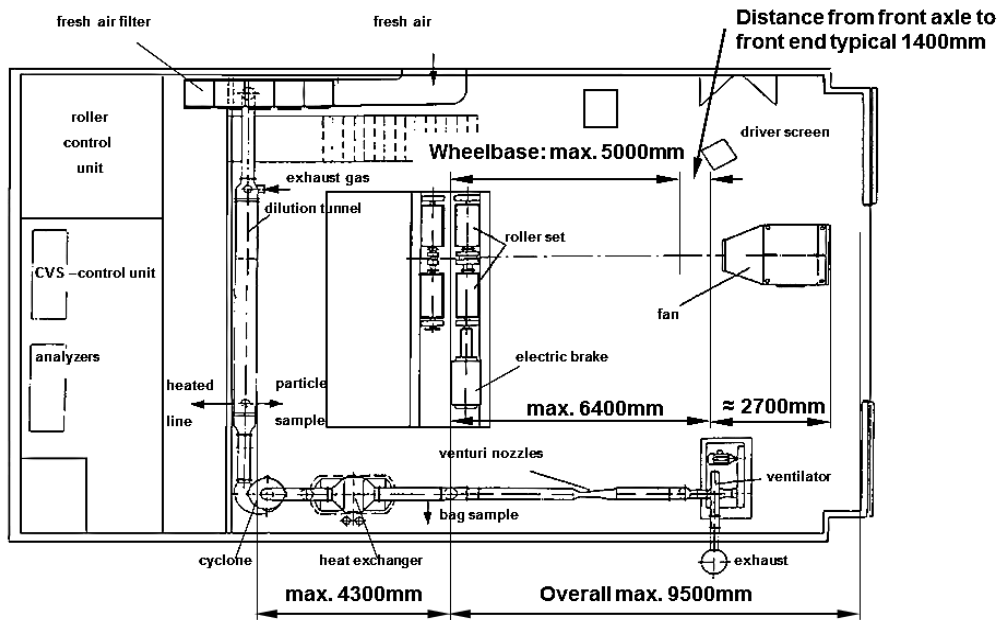
## EXHAUST GAS ANALYSIS

- FTIR FOR REGULATED AND NON-REGULATED EXHAUST GAS COMPONENTS
- INSTANTANEOUS MEASUREMENT DATA (max. 5 Hz)
- PARTICLE NUMBER (CPC 23 nm, 10 nm and 4 nm)



## REQUIREMENTS on the test-vehicle

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



## COSTS exkl. VAT

Roller test bed including emission tests	500,-	€/h
Roller test bed without emission tests	410,-	€/h
Scientific staff	105,-	€/h
Mechanicians	62,-	€/h

## CONTACT

Prof. Dr. Stefan HAUSBERGER

+43 (316) 873-30260

hausberger@ivt.tugraz.at

Dr. Konstantin WELLER

+43 (316) 873-30284

weller@ivt.tugraz.at