

# Automotive Engineering

## 1. Testing Facilities (Components)



### Wind Tunnel

Modular wind tunnel (Göttingen design), which is used in conjunction with a PIV system to verify of flow simulations (FLUENT). Therefore a particle generator is available for particle injection into the flow.

- Wind tunnel: Length: 3m x Height: 1m x Channel width: 200mm
- Measurement Cell: L: 700mm x H: 100mm x W: 100mm



### Tire Test Stand

- Development of tire testing equipment
- Visualization of tire vibrations
- Recording of any kind of tires
- One or two roller supporting the tire
- Adjustable static radial load
- PC-controlled speed control
- Visualization of tire contact surface



### Vibration Testing System

#### TIRA TV 50350-120

Examination of component vibrations and durability

#### Specifications:

- Rated Power: Sine: 2700 N; Shock: 4000 N
- Swing path max. 25.4 mm
- Sample weight up to 25 kg

