

Comparison of fuels in combustion engines

Equipment of an engine for quick change of fuels in the fuel circuit.



Two kinds of fuel are changed in the engine repeatedly without mixing. Thus also small differences in the specific consumption, the emissions and further values measured at the engine which are influenced by the fuel will be clearly visible .

The engine is charged by a coupled braking dynamometer (engine test bed).

At the test bed, different load conditions may be adjusted.

The reproducibility of the experiments is secured by

- the speed stabilisation and
 - the automatic gravimetric determination of the specific fuel consumption
- of the MP Computer.



Example of application: Testing the efficiency of fuel additives or of other kinds of fuel pretreatment.

Equipment of an engine

with a 2. fuel container for the 2. fuel and a 3. fuel container (Mix) for the mixed fuel from the reflow and with manual valves for adjustment of four different conditions of the fuel supply:

supply from container **1**
reflow into container **1**

supply from container **1**
reflow into container **Mix**

supply from container **2**
reflow into container **Mix**

supply from container **2**
reflow into container **2**

Containers **1** and **2** are prepared to be alternately placed on the balance for consumption metering.