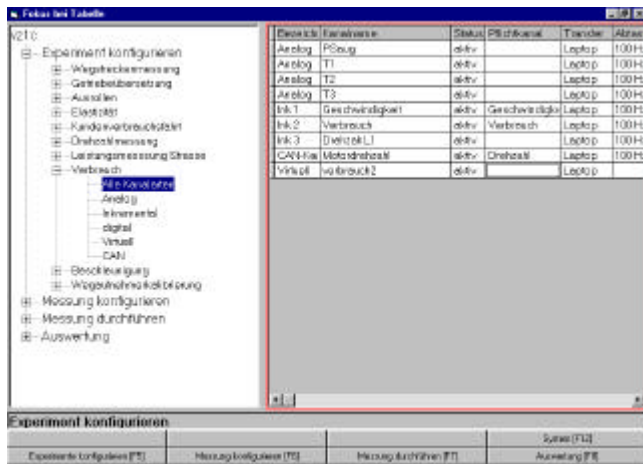




Nowadays, fuel consumption ranks with car performance as the most interesting feature in the eyes of prospective car buyers and car owners, as well in consideration of the issue of environmental pollution. Thus, car manufacturers all over the world try to improve their cars' fuel efficiency and to develop clean running cars.

To compare cars and their performance, international and national standards are devised, which exactly describe what to measure and how to characterize the consumption of fuel. In accordance with such standards, imc and AUDI AG have developed an automatic fuel consumption testing system, the **FVMS**.



The intuitive user interface can be used even during the drive

The system is based on the imc measurement system CRONOS and represents an up-to-date measurement system. It allows the registration of car performance and the fuel consumption. To specify the performance of a car, the following measurements and evaluations can be performed with the help of the system.

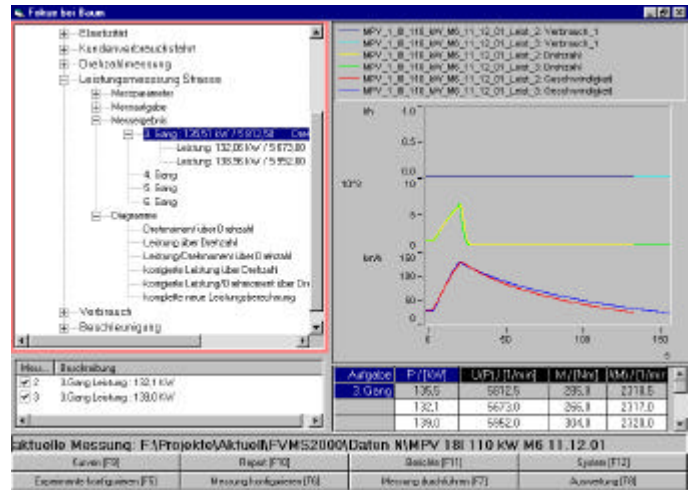
- Consumption tests
- Acceleration tests
- Elasticity tests
- Roll-out tests
- Power measurement
- RPM measurement
- Distance comparison
- Tachometer comparison

All necessary values for calculating the performance of a car can be acquired using the imc hardware. For that purpose, analog inputs or the incremental encoder interfaces can be used. For car-internal values, a CAN-bus interface receives information from up to 100 different messages.

Choices of pre-prepared configurations set-up the system with respect to internal and external measurement standards. The measurement itself can be performed automatically (e.g. start and stop via an external light barrier) or manually. Therefore, the user interface is made to configure a variety of measurement conditions.

For evaluation and interpretation purposes, a variety of reports can be created. They are accessible at the simple click of a button. The same is true for online data display. Different variations can be defined and called up by a simple click with the mouse.

Once the measurement is done, all acquired values can be stored in a company-internal database or they can be used for further evaluations. Towards this end, AUDI has chosen FAMOS, the useful data analysis and evaluation package with its more than 300 different mathematical analytical and statistical functions. Here too, diagrams, printouts and complete reports can be pre-defined and are only a mouse-click away.



Automatic data evaluation and reporting in accordance with valid international standards

