

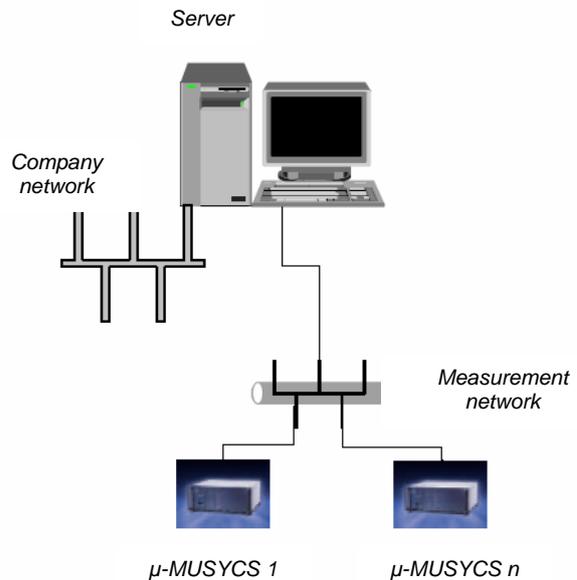
Sunroof Life-Cycle Test

imc's hardware & software forms an excellent framework for small test rig applications. Not only for data measurements and online result extractions but also for open loop control purposes. New test benches belonging to ArvinMeritor provide a typical example for this. The German manufacturer for car components has recently constructed new sliding roof quality & life-cycle test rigs using imc's modern technology. Five fully automated test rigs can be used to develop, test and improve the quality of sliding roofs.



ArvinMeritor sliding roof

could theoretically store up to 200 different measurement cycles but from time to time the server downloads the data from the measurement system's storage.



The modular system structure of multiple test rigs

In the present case, a measurement data server is not only used to store and administrate the incoming data. In addition it performs the following roles.

- Parameterization of the measurement device
- Programming of test sequences
- Data storage
- Administration of 5 measurement & control systems
- Automatic data evaluation and result reporting
- Communication with a database

The measurement systems take on three jobs. The complete data acquisition, a closed loop control function and the online result calculation. Therefore the μ -MUSYCS systems used don't work as ordinary data loggers. On the contrary, the server distributes the different tasks and test cycles to the different imc devices which automatically perform the measurement and excitation task. During the measurement itself all data will be stored on the measurement system's internal memory. With a capacity of 500 MB a system

Apart from measurement & control every system is able to calculate a variety of online functions. A high performance but easy to access 'Personal Analyzer' has more than 100 mathematical, statistical and analytical online functions at its command - a very useful and unique feature of all imc measurement systems. It provides the user with instant results even while the process is running. Thus time consuming offline data evaluations can be avoided.

To evaluate the data offline, engineers and technicians of ArvinMeritor can use FAMOS, imc's off-line data analysis and evaluation tool. With the help of FAMOS, measurement data can be handled easily; they can be loaded, displayed and results of calculations and evaluations can be documented.

With its over 300 different functions and its interplay with the imc measurement devices, FAMOS provides every ArvinMeritor user with the performance he needs on his way to getting results quickly and accurately.