



## Concept development and planning of sustainable, high utilization testing facilities

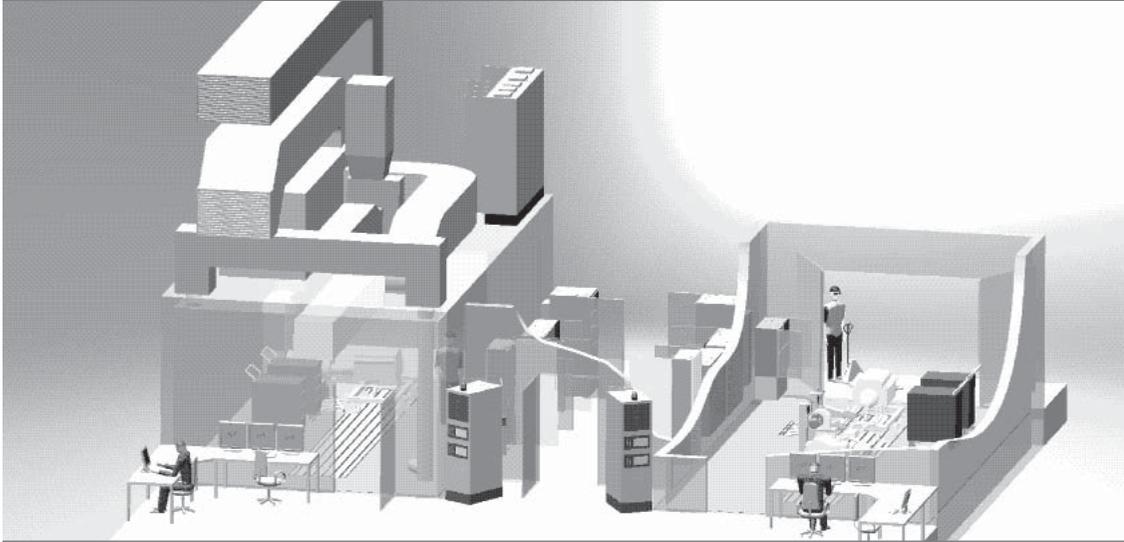


Fig. 1: Layout Engine Test Bench

In our line of business, development and testing departments are continually being forced to find new product development methods as a result of the growing complexity and variety of engine drive systems, near constant tightening of emission regulations on a global basis. Additionally, new methods are also being driven by changes in the fuel sector and globalization, as well as continual cost pressure. These new methods enable our customers to meet the occasionally contradictory requirements of drive system development and application, while still meeting restrictive deadlines, tasks and expense targets. The personnel responsible for test bays and test facilities are under growing pressure as the resulting sophistication drives investment costs upward in today's marketplace, which demands large investments for new measurement and test facilities that will provide intelligent and sustainable solutions for handling future testing tasks.

When the initial decisions for test system purchasing are made, the first and most important step is to precisely specify the requirements needed for the planned use. Here, particular focus should be placed on medium and long-term usage and not just on the immediate testing task. With over 30 years of experience in the planning and construction of test systems, FEV can offer tailored support. We can help to convert specific and complex tasks into complete specifications and concepts, which meet all test system requirements for a single cell or a complete test bay.

Beginning with the concept development and planning stages and moving towards realization, FEV not

only considers the technical requirements, but also the operational and economic criteria as well.

FEV starts with technical and operating requirement profiles to establish and realize custom-made solution concepts. Special focus is placed on the following:

- Engine, powertrain, transmission and component test benches
- End-of-line test benches
- Special test benches (such as cryogenic test rigs, cold temperature chassis dynamometers and battery test benches)
- Test bench subsystems

In addition, FEV also can provide the following solutions:

- Operational and weak point analyses
- Requirement specifications
- Concept studies and feasibility analyses
- Concept planning, approval and implementation planning

Based on a portfolio of over 300 test benches and our direct operating experience on more than 100 test benches, we will be able to develop the right concept solution to meet your specific requirements and tasks.

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