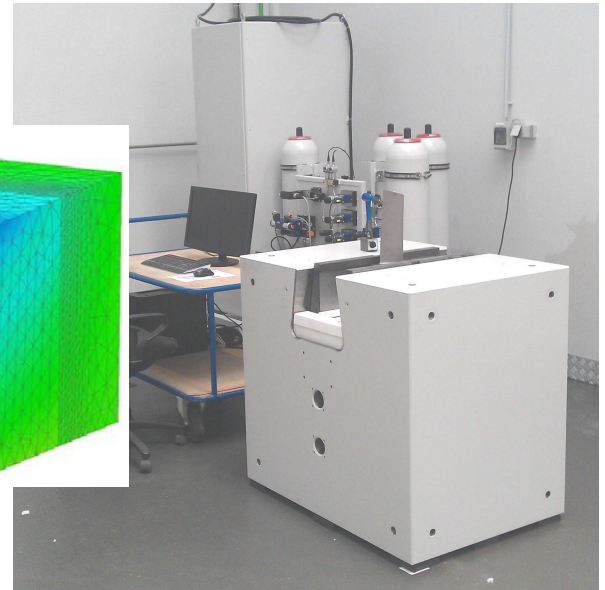
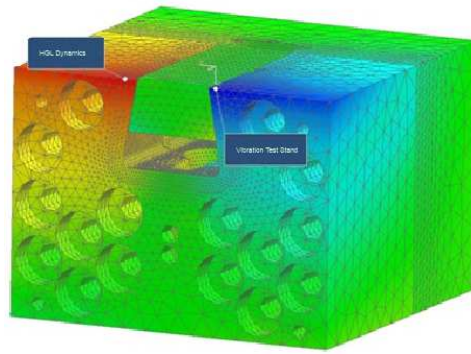




## High Accuracy

## Vibration Test Stand

- *Software controlled Hydraulic clamping*
- *High Accuracy acquisition of Blade Resonances*
- *Blade Database*
- *Easy to use*
- *Export to Excel, ASCII or SAP system*
- *Scalable for customer blade range*



### Overview

The **QZee Vibration Test Stand** is designed for the high accuracy acquisition of blade resonances and modal parameters at the lowest possible influence of the clamping situation on the results.

### Cost-Reduction

Quality Test Solutions by MAUL-THEET make it possible to do your tests during the process of production. Hence, it is possible to detect tolerance deviations earlier, which allows you to do reworking in time.

### Time-Reduction

To reduce the test time, we implemented automation for the following processes:

- Hydraulic clamping
- Auto resonance detection
- Test-Object Management (Blade Database)

With that automation the measurement task transforms to an few-click action.

### Simplicity

Our philosophy of design is: high accuracy at simplified usability.

The test stand user interface is made to be operated by production personal with only few training at measuring vibrations.

### Measurement Method

The use of hammer excitation and acquisition of the blade response by Microphone or Laser Doppler Vibrometer ensure the high accuracy of measurements.



## Software

The main focus while developing our software was to make it easy-to-use, but although very functional. The result of that is a software, that can be used by nearly everybody, for simple measurement tasks. The following key functionalities are available:

- Serial Measurement
- Mode Shape Determination
- R&D Test Measurement
- Test-Object Management (Blade Management)
- Analysis & Reporting
- User & Rights Management

## Database

All data is saved in a local database, which makes our software easy extensible. On request we also can offer a centralized server solution.

## Analysis & Reporting

Beside export of the data to Excel or SAP, it is also possible to directly print reports or labels or do analysis tasks.

## Remote Administration

We offer a discrete application for remote administration, which makes it is possible to change settings or define tasks on the test stands, from within the office, through a network connection.

## Applications

- Component testing on gas turbines
- Compressor blades
- Turbine blades

## Complete System

We deliver complete systems, from test stand hardware to software, from one source.