Polytec

Polytec
Education program

PolyLab
Tutorial on non-contact vibration measurements

Why PolyLab:

Our younger generations are our future. To help encourage them to grow, we offer an educational program designed to expose students to state-of-the-art tools for vibration measurement.

This program utilizes our PolyLab setup which was designed as a turnkey University lab covering experiments such as vibration testing and modal parameters (natural frequency, damping, and mode shapes). Students will enjoy working with the portable VibroGo® vibrometer as it is easy to use and offers the possibility for fully digital non-contact vibration measurements, as well as analog data acquisition for visualization of transfer functions and much more.

- The ability to enhance classes and labs by using the latest metrology techniques at no cost
- Complete package of free measurement technology, experiments and accessories
- Practical tutorial with worksheets
- Optional support from our experts

PolyLab

No cost educational program designed to expose students to state-of-the-art tools for vibration measurement.

The PolyLab is a free loaner program. It allows educators to use state-of-the art industrial technology in the classroom for a certain period to time.

Qualified schools will receive the portable laser Doppler vibrometer VibroGo® together with the PolyLab VibroGo® Education Kit, demonstrative experiments, and practical tests in a detailed script for teaching vibration tests and its measuring parameters. Furthermore, PolyLab includes support from Polytec's experts that includes lectures showing the use of laser Doppler vibrometer technology to solve important engineering tasks. As well as, practical examples of how the technology is used for a variety of applications (aerospace, microstructures, electronics, biomedical, ultrasound, etc...).

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Qualified schools receive the latest metrology tools at no cost.

Contact us:
+1 949-943-3033 or info@polytec.com
www.polytec.com/us/polylab

Use latest state-of-the-art technology

1 VibroGo® All-in-One Sensor

Whether for measurements in the field or experiments in the lab, the portable VibroGo® is enabling engineers and researches to complete their tasks with ease. The VibroGo® features battery operation, wireless control and on-board data recording.

Unboxing VibroGo

2 VibroGo® Education Kit

Explore the contents of the PolyLab Education Kit case

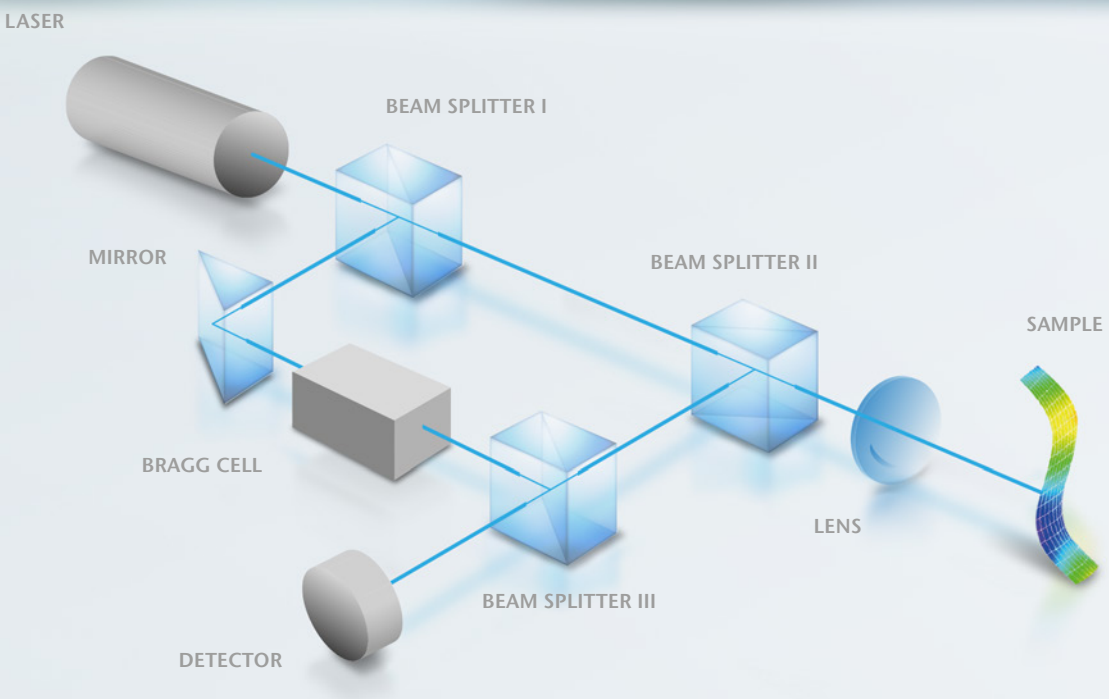
1. 1x Pair of loudspeakers
2. 1x BNC-T adapter
3. 6x Various plates
4. 1x Hardlock, 1x USB Stick: Polytec Update (VibSoft-Software Installation)
5. 2x BNC jack adapter
   1x BNC-I adapter
6. 1x Mounting wax
7. 1x Getting Started Guide
8. 1x Connection box w/ USB-cable
9. 1x Headphones (optional)
10. 5x Hexagon nuts (M6)
11. 1x USB Stick: Polytec Update (DeskSoft-Software Installation)
    1x USB Stick: ”Documents EduKit“
12. 1x Jack adapter
13. 5x BNC cables
14. 1x Retro-reflective tape
15. 1x Cantilever beam test

3 Tutorial with theory and hands-on guide to experiments

Polytec's application team composed a comprehensive lab tutorial. The theory section covers basics of vibrometry and dynamics of a mechanical structure in time and frequency domain. Various hands-on experiments are included.

Go to basics video

More on technology

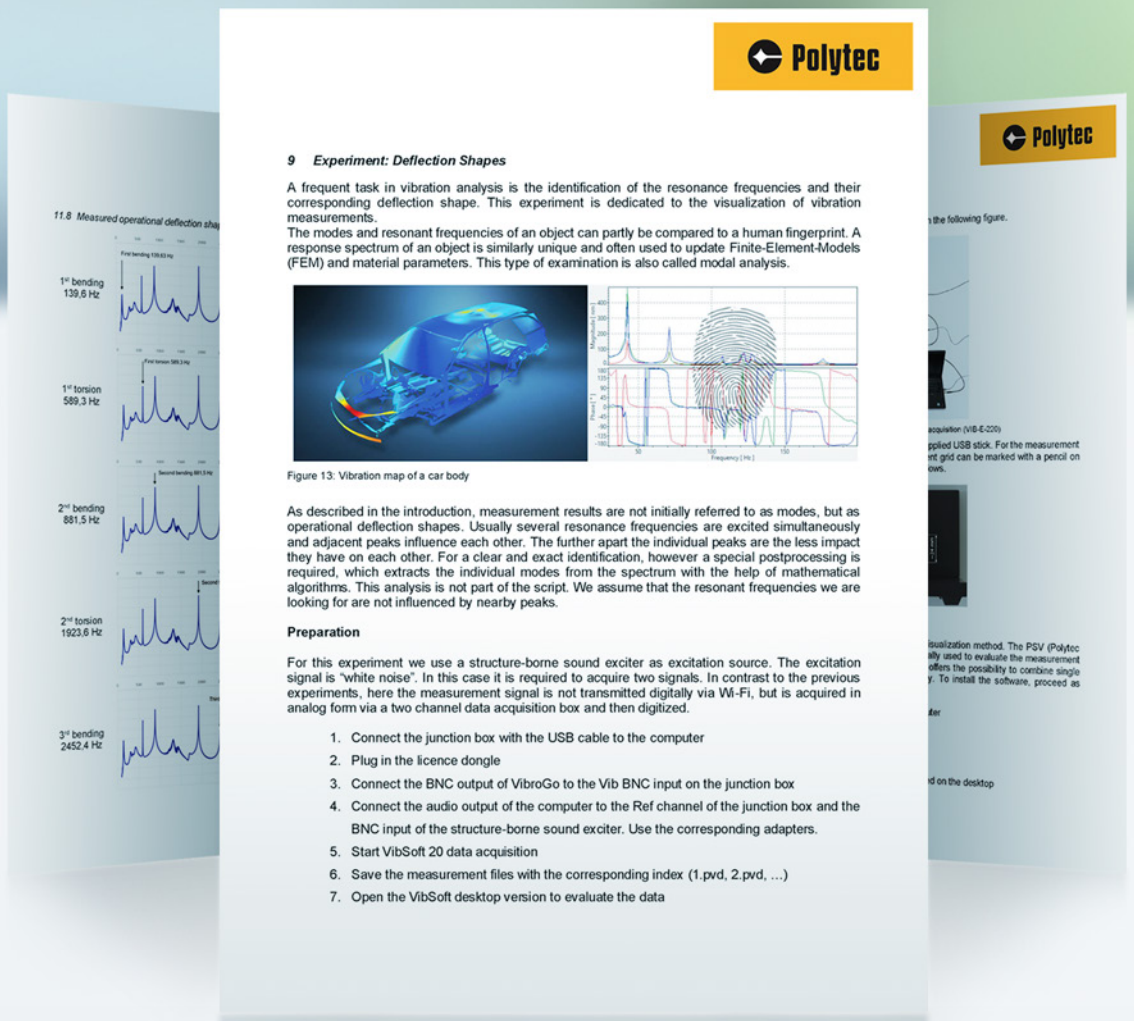


Exciting experiments:

- Cantilever beams
- Time and frequency vibration analysis
- Visualization of deflection shapes
- Optical microphone

Theoretical background:

- Basics of laser Doppler vibrometry
- Time and frequency domain analysis
- Free damped vibrations
- Dynamics of bending beams
- Various techniques
- ...and a lot more!



Reading sample from tutorial

Interested? Talk to one of our experts about your specific needs. We are looking forward to supporting you in educating the engineers and scientists of tomorrow.

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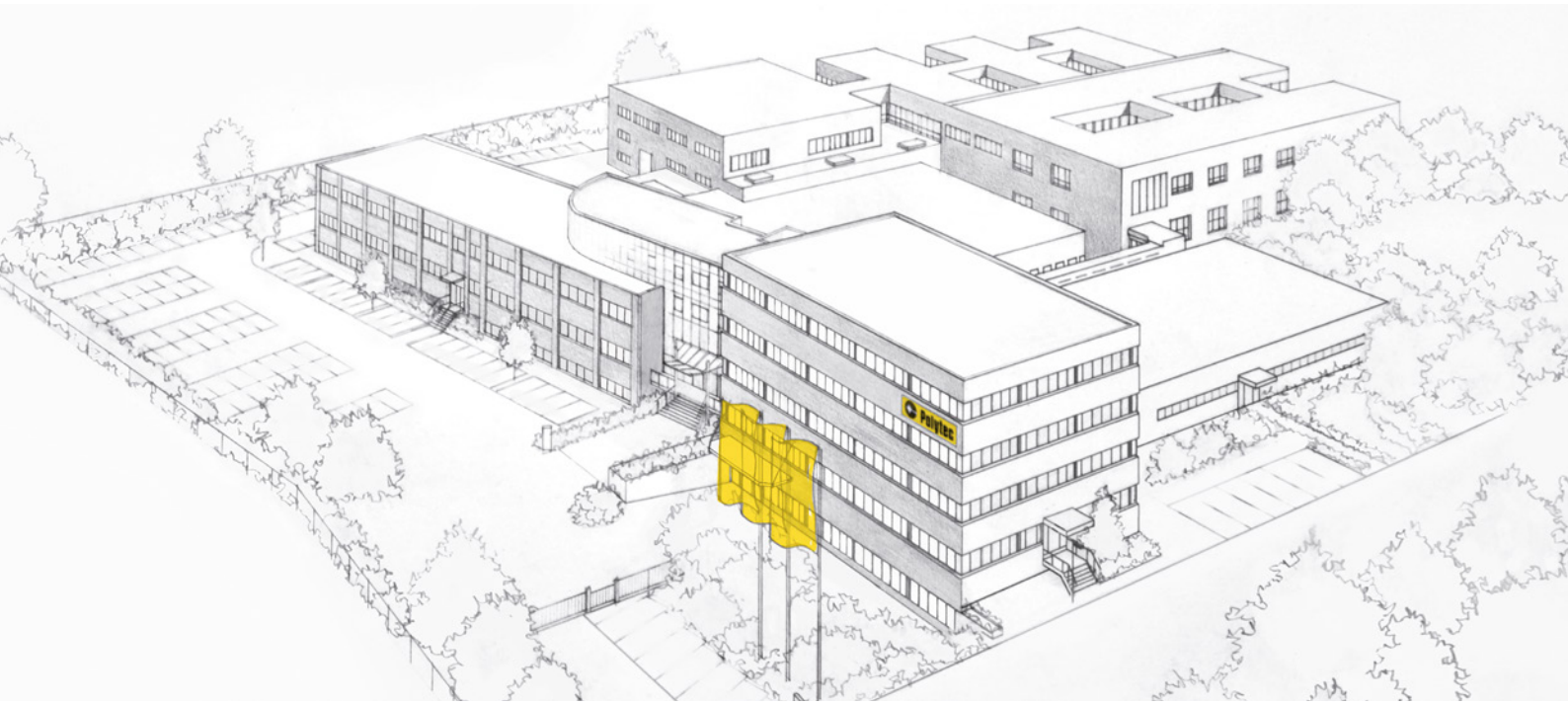

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