

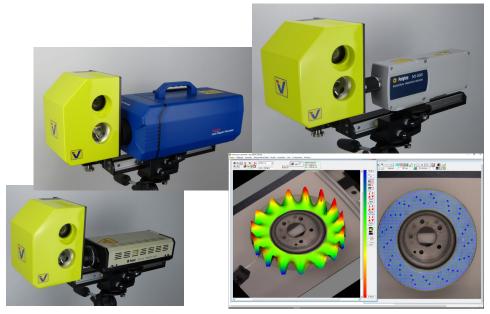
# ScanSet

- Upgrades Single-Point Laser
   Vibrometer to a full
   Scanning System
- HD CCD-Camera with optical Zoom
- Built-In Data Acquisition
- 4 Channel with 100 kHz Freq. range
- 2 Channel with2 MHz Freq. range
- AC, DC, IEPE
- Portable
- USB Interface
- Extensive Scanning Software
- ODS Animation
- Options:
  - Time Recording and

**Animation** 

- Modal analysis

# **Scanning-Laser-Doppler Vibrometer**



ScanSet + Single-Point Laser = Scanning Laser

(Manufacturer Independent)

### **Overview**

The laser beam of the Scanning Laser Vibrometer is positioned by two PC controlled mirrors. The built-in HD camera captures the live display of the test object. On this image the measurement points can be easily arranged with the integrated drawing tools. The defined points are scanned automatically by the **ScanSet** software.

The **ScanSet** provides all components of a Scanning Laser Vibrometer.

Simply fix the Laser Vibrometer with the quick release clamps to the **ScanSet** adapter, adjust the mirror unit by the linear slides and you are ready for the scanning measurements.

The **ScanSet** is shipped with a Data Acquisition with analogue input channels to measure the laser- and reference signals. The user-friendly measurement and analysis software quickly processes the vibrations data, graphical displays, images and animations of vibration shapes in frequency and time domain.

# Components and features

The **ScanSet** is a turnkey solution:

- Scan head with mirrors and camera
- ScanSet holder for Scan head and the Laser Vibrometer
- Controller with 4 or 2 channel data acquisition
- Single point Laser Doppler Vibrometer (optional)
- Notebook or Windows PC with Control and Analysis Software
- Easy to transport for mobile measurements

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#### ScanSet

The **ScanSet** holder is manufactured from aluminium to carry the Laser Vibrometer and the Scan head with camera and mirrors. To ensure that the laser beam of usual Laser Vibrometers hit the mirrors in centre position, the **ScanSet** offers linear slides that can be fixed by clamping lever to ensure a precise and reliable position. **Using a ScanSet for measuring the signal quality is only dependant on the specifications and quality of the used Laser Vibrometer.** The Scan head is connected to the controller by a single cable available in different length.

#### Controller

The controller includes the power supplies, the mirror controller and the data acquisition system. Signal can be provided by BNC connectors for the input channels and the generator output. Communication to the PC is established by a single USB connection



# ScanSet-100 kHz

Input Channels: 4 Input Channel with 24 Bit Resolution

Input ranges:  $\pm IV$  or  $\pm I0V$  selectable

Coupling: AC, DC, IEPE Supply (2...4mA)

Frequency ranges: 1Hz to 100 kHz selectable in 1,2,5,10 steps

Generator output: Sine, Chirp, Noise and Step-sine

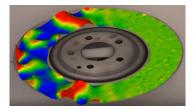
# ScanSet-2 MHz

Input Channels: 2 Input Channel with 16 Bit Resolution

Input ranges:  $\pm 2,5V$  Coupling: DC

Frequency ranges: I kHz to 2 MHz selectable in 1,2,5,10 steps

Frequency resolution: max. 25600 Frequency lines
Anti-Aliasing Filter: Adjusted to frequency range



# Measurement and Analysis - Software

The measurement and analysis software includes all necessary modules to do complete scanning tasks:

- CCD-Picture capture, Live Display
- Geometry- and Measurement Point Editor
- FFT Analyzer with extensive functionality
- Operation Deflection shapes (ODS) and Modal Option
- Animation (Mode and ODS, Time Data Animation of point records)
- AVI-, UFF-, ASCII- and MatLab- Export
- Free Offline-Version to use in office
- Operating system Windows 10

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