



Particle Image Velocimetry (PIV)

2D/3D – Flow visualization for various vehicle technical applications

Laser: Double pulsed laser Nd:YAG200
mJ/Puls at 532 nm, 15 Hz

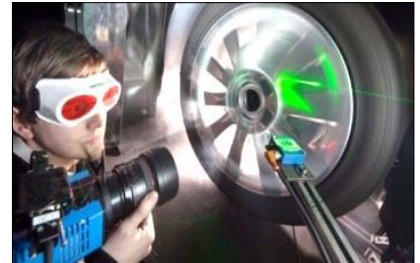
Camera: 2x 2048x2048 Pixel, 4 GB, 14 Bit,
15.56 fps, 400 ns Interframing-time

Optic: Movable mirror arm, divergent laser
optic,
35/50/85mm AF objectives

Equipment: Particle Generator, 1 μm
2x Tilt Adapter
X-Z traverse

Computer: Synchronisation unit, Workstation

Software: VidPIV + Tecplot 360



3D Laser Scanning Vibrometer

PSV 400 3D

Non-contact 3D vibration measurement technology,
Applicable also at the customer site

Specifications:

Frequency range: 0 – 1 MHz

Data collection: 4 canals

Distance: > 0,4 m

Object width: $\geq 1 \text{ mm}^2$

Velocity: 10 m/s (max.), 2,5 MHz (max.)
0,5 m/s (max.), 350 kHz (max.)

Signal generator 512 kHz (bandwidth)
0 – 10V, $\pm 5 \text{ mA}$

Measurement: 2x2 up to 512x512
measurement points

Resolution: 6400 FFT lines

