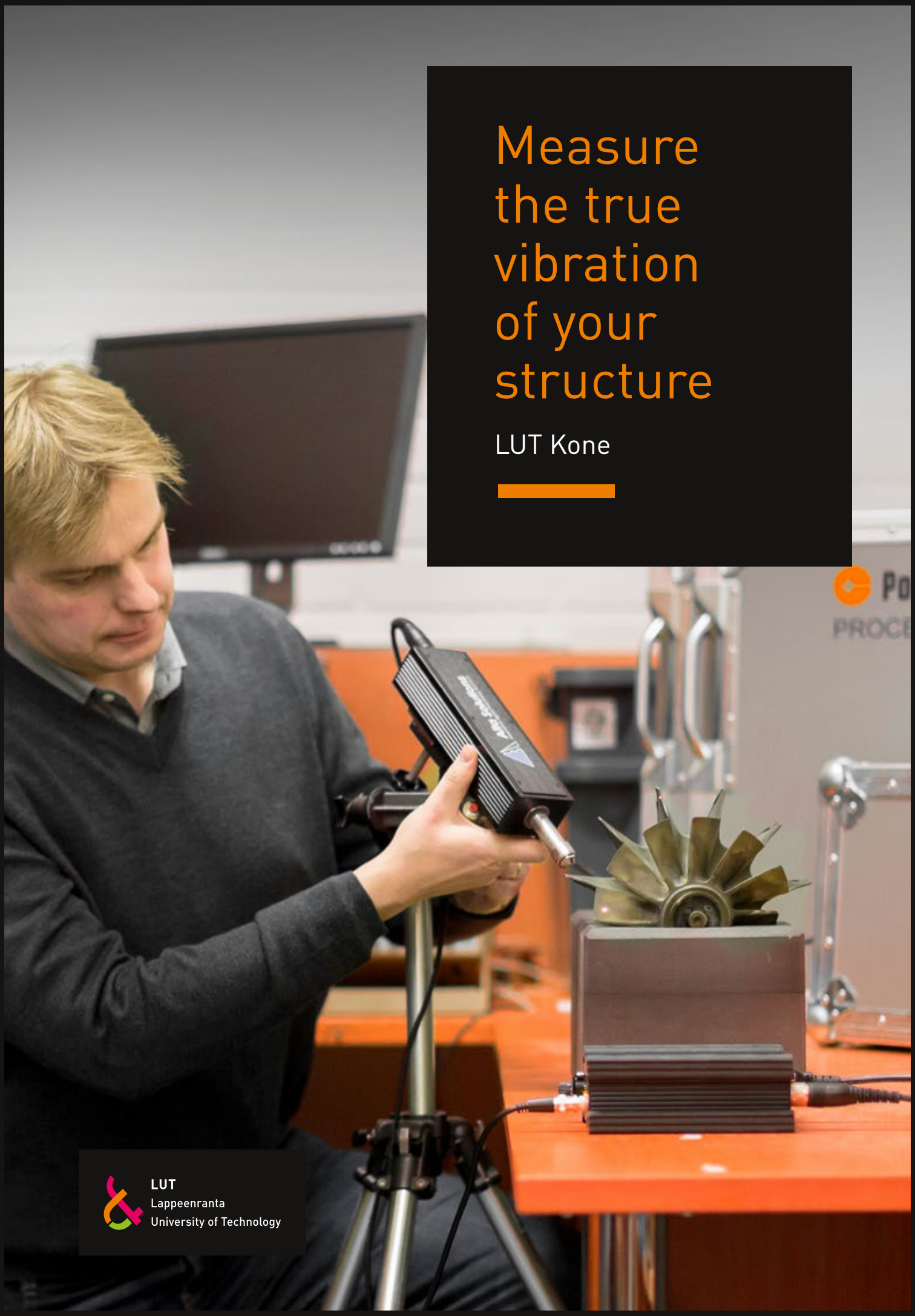

Measure the true vibration of your structure

LUT Kone

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Optical Non-Contact Vibration Measurement

Simulation models for structural vibration must be validated with reliable measured data. With optical vibrometry, surface movement measurements can be made using a single-point micron-range laser beam. Vibration mode shapes and operational deflection shapes can then be visualized in a high-resolution slow-motion animation.

Fast and cost-effective

Regardless of the industry, scanning vibrometry enables non-contact fast measurement of movement in areas where conventional accelerometers are impractical or cannot be mounted. Even hot structures can be scanned. Significant time is saved, because it is not necessary to install an array of sensors to achieve the required spatial density. The measured data can also be processed as the customer needs.

Equipment specifications

- Velocity range: 0.01µm/s to 10 m/s
- Frequency range: 0 Hz to 100 kHz
- 0.01 to 0.5 µm s–1 √Hz resolution
- 512 × 512 scan point density with 50° × 40° scan angle for higher spatial resolution
- Working distance: 125 mm to ~100 m vibrometer and 250 mm to 30 m geometry scan unit
- Integrated averaging and coherence optimizer for improved signal-to-noise ratio
- Data exports: UFF,STL,ASAM ODS, ME scope file, MATLAB

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