

## APT-WSA - WHEEL SURFACE ANALYSER



### APT-WSA

#### APPLICATION

- Wheel roughness quantification
- Wheel diameter
- Out-of-roundness
- Noise measurements and predictions

#### FEATURES

- Measures wheel surface perpendicular variation as function of distance along circumference
- Complies with EN 15610:2009

#### Contact

APT

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### SPECIFICATIONS

#### ***Measurement transducers***

- Dynamic range:  $\pm 5000 \mu\text{m}$
- Transducer type: displacement (LVDT)
- Number of transducers: 3 (independently positioned over the rail head)
- Measurement noise floor:  $0.1 \mu\text{m}$
- Encoder for position determination 128 pulses per rotation

#### ***Data processing***

- Flexible software allowing data output in various forms
- Roughness spectra in: 1/3 octave bands  
narrow band  
PSD
- Colour maps
- RMS level versus angle, ...

#### ***Data acquisition***

- Recording device: 4 channel simultaneous sampling – 16 bit A/D converter
- Resampling in post-processing at 1000 samples per meter
- Data storage: 1 Gigabyte memory
- 6 hours of measurements
- Download of data to laptop: USB-1