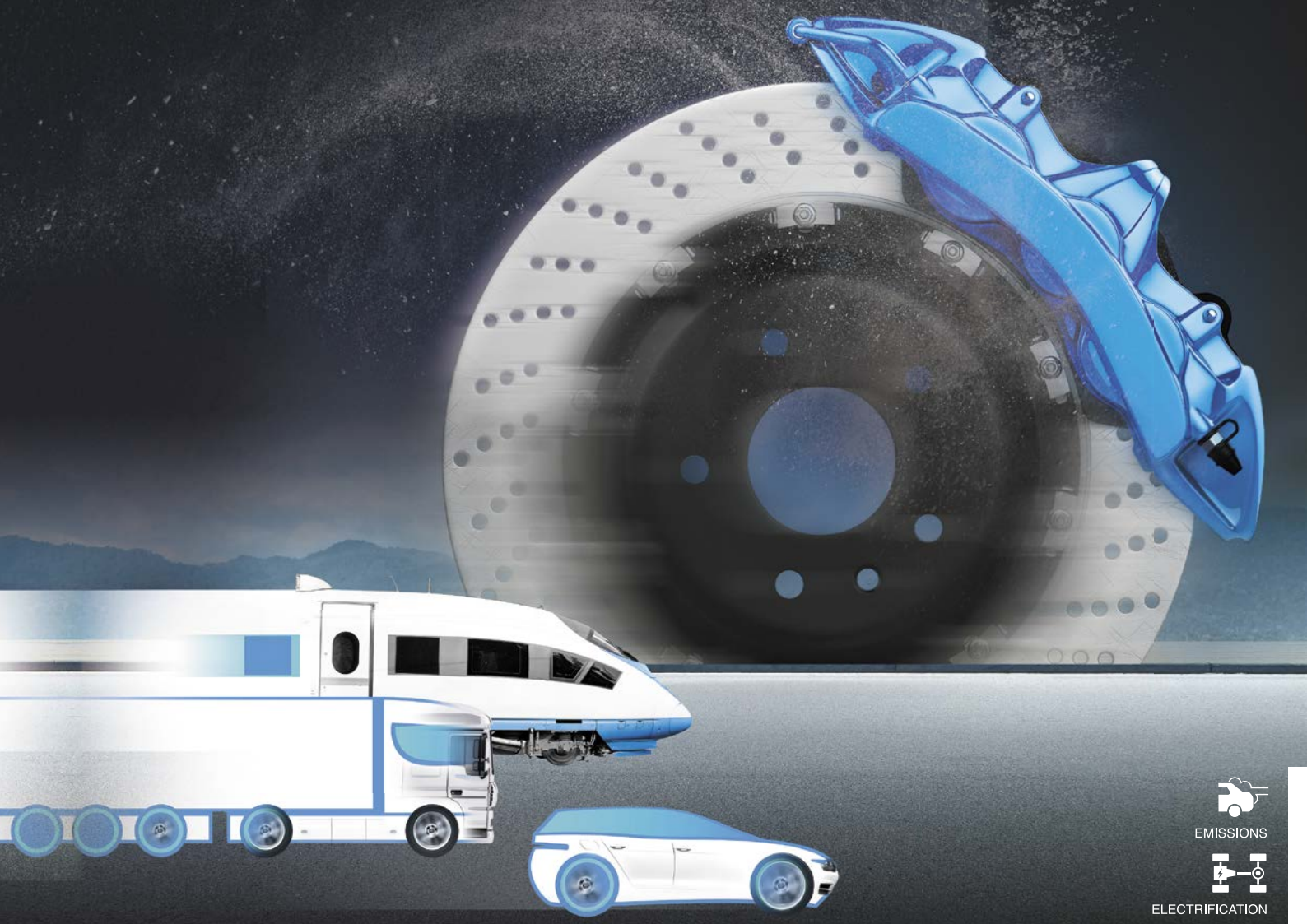


BRAKE DUST

Highly precise particle measurement

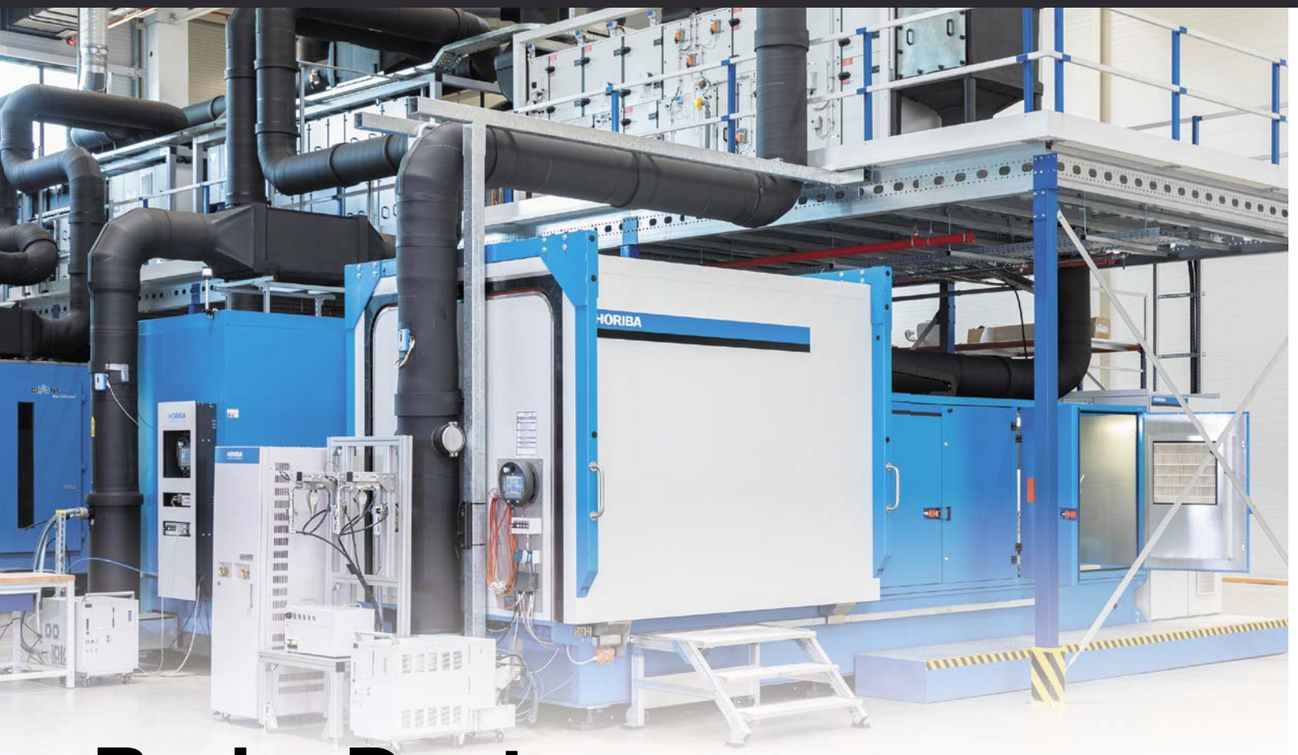
EMISSIONS

ELECTRIFICATION

CAV

DATA

HORIBA
Automotive



Brake Dust

Highly Precise Particle Measurement

Nanoparticles from vehicle brake wear are suspected to have negative health effects. To minimize these effects, legislative authorities from all over the world started the process to include non-exhaust emissions into existing regulations.

Based on the proven MEXA-2x10SPCS we developed a new brake dust measurement method for the highly precise particle counting (10 nm to 2.5 µm) in real-time with a measurement frequency of up to 10 Hz. In addition to the measurement of particle number (PN), other measurement instruments are available for the measurement of particulate matter (PM), particle size distribution and the elemental analysis of the particles. These devices can easily be integrated into existing brake test systems and the STARS Brake automation software.

FEATURES

- Specimen enclosure to prevent particle loss and improve measurement repeatability
- Proven reliability of test set-up and measurement process
- Measurement options available for PN, PM, particle size and elemental analysis
- Service offering for Brake Dust testing with extensive application and engineering know-how at Brake Test Center Floersheim a. M. (Germany)

Be Prepared for Upcoming EU Particle Emission Legislation

In Europe, the informal working group of the Particulate Measurement Program (PMP) received a mandate to investigate the topic of Brake Dust. Two task forces within the PMP group are now working on the development of a commonly agreed method for sampling and measuring brake wear particulates. The California Air Resource Board (CARB) also has an ongoing investigation into particulate standards.

HORIBA provides a complete solution to help OEM and brake system suppliers prepare for possible regulations, leveraging our emissions analysis and brake testing expertise.

FLEXIBLE

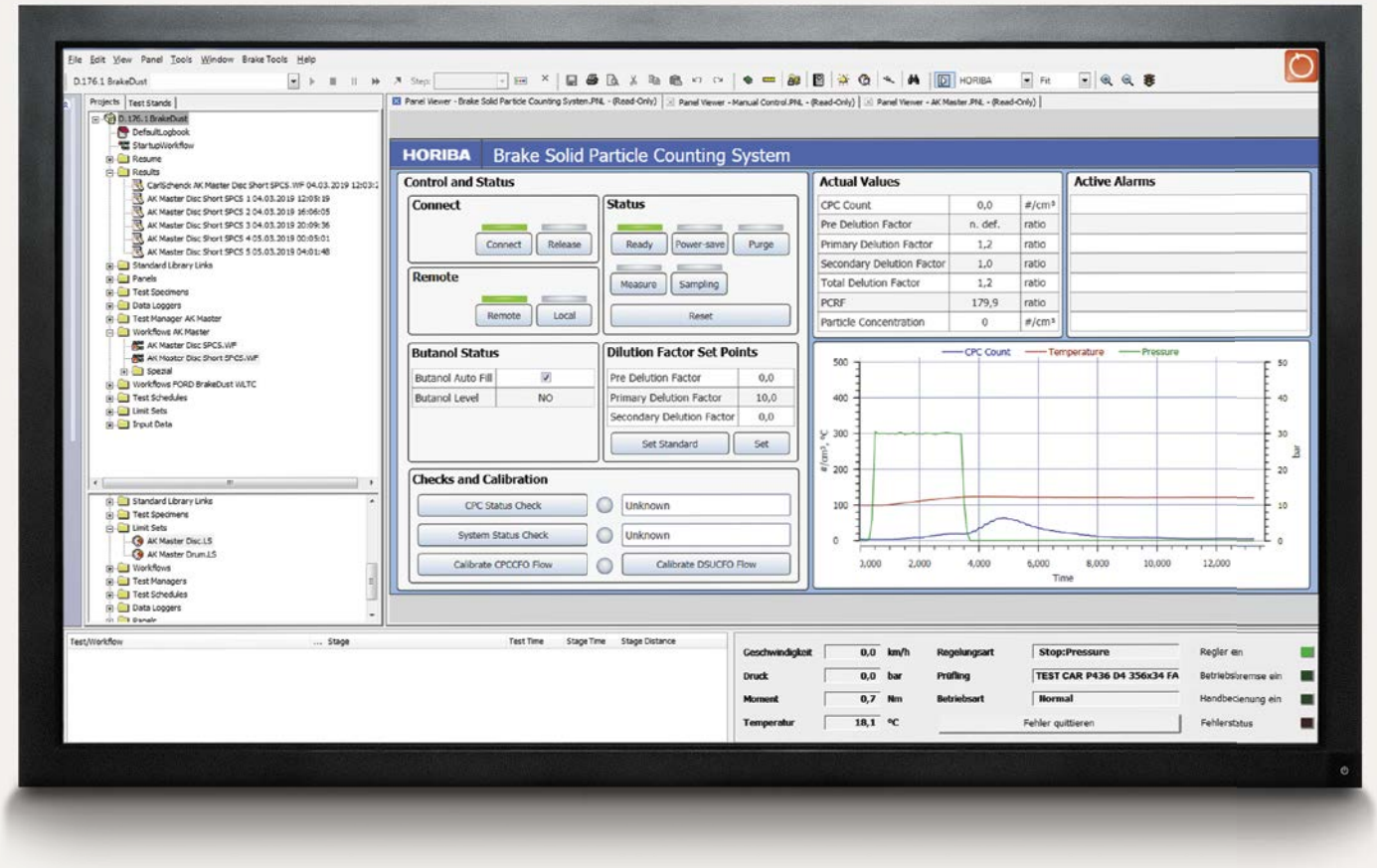
- Easy upgrade of existing brake test systems
- Flexible use on various test stands
- Can be used as a stand-alone system or integrated into STARS Brake automation
- Brake Dust measurements integrated into conventional brake tests

EFFICIENT

- Based on proven emission measurement system
- High repeatability due to separate specimen enclosure
- Correlated data processing of brake test cycle and Brake Dust measurements
- Comprehensive approach with excellent expertise in both emission measurement and brake testing

FULLY AUTOMATED TESTS WITH STARS BRAKE

STARS Brake is an integrated automation, data acquisition and control system platform that provides a comprehensive application functionality in a single, powerful environment. All necessary Brake Dust measurements and the reporting can be carried out with this flexible and user-friendly test automation system.



HORIBA Automotive, a business segment within the HORIBA Group, provides advanced mobility leadership and comprehensive engineering and measurement expertise to support the gradual shift from traditional propulsion, to fully electrified solutions.

horiba.com/automotive

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