

MAHA INNOVATION CENTER

PIONEERING SOLUTIONS FOR THE MEASUREMENT
AND TESTING TECHNOLOGY OF TOMORROW.

CONCEPT
PHASE



OMNITREAD SCAN

ALL OF THE TYRE. NOT JUST THREE POINTS.

made by MAHA
made
in
Germany



THREE POINTS. NOT ENOUGH.

For workshops, periodic technical vehicle inspections and testing organisations alike, tyre checks are a standard part of inspection. The procedure that is used, however, is outdated. For more than 20 years, testers have simply stuck the probe in the tread groove at three to five points and read off the value.

For making a simple go or no-go decision, this is fine. But for robust documentation and identifying root causes, the procedure is insufficient: three points cannot indicate uneven wear, the tyre walls are not included and tyre data has to be entered into the records manually.

The procedure is sufficient for testing, but does not provide enough data for further processing, decisions regarding free repairs or future AI evaluation. This is where OmniTread Scan comes in.

WHAT THREE POINTS OVERLOOK:

- **Uneven tyre tread:** Misalignment or incorrect air pressure can cause one-sided wear on the tyre – which three measuring points cannot detect.
- **Tyre walls not included in test:** Cracks, dents and signs of deterioration are not detected by the measuring probe.
- **No data for evaluation:** A numerical value cannot be used for pattern recognition, predictions or automated damage assessment.



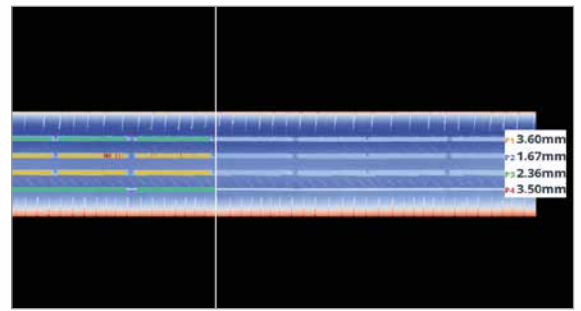
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FUNCTIONAL ELEMENT: OMNITREAD SCAN. ALL OF THE TYRE. NOT JUST THREE POINTS.



Full-surface scan.

One scan for the entire surface: every single point is measured, not just three.



Irregularities made visible.

Critical measurements are shown in colour – allowing you to quickly assess tyre condition.

COMPLETE TREAD SCAN.

The tyre tread is measured across its entire surface – for more detailed results than spot measurements can provide. Uneven wear is directly visible in the image.

TYRE WALL MEASUREMENT.

While scanning the tread depth, the system also scans the tyre walls – cracks, dents and signs of deterioration are added to the documentation.

STAND-ALONE OR INTEGRATED.

As a stand-alone device in the workshop or test lane – or optionally inside the brake tester, with the tyres measured as part of the brake test.



THE TECHNOLOGY AT A GLANCE.

FULL-SURFACE TREAD DEPTH MEASUREMENT.

The entire tyre tread covered in one scan – entire tread depth measured, rather than individual points.

TYRE WALL ANALYSIS.

The system documents cracks, dents and signs of deterioration across all of the tyre – not just the tread.

TYRE INFO DISPLAY.

The system automatically records DOT code, manufacturer, size and age – so they don't need to be entered into the test report manually.

TWO OPTIONS FOR USE.

Stand-alone for dedicated tyre testing – or integrated into the brake tester, in parallel with the brake function test.

DATA FOR ANALYSIS.

The scan data has a structured form – enabling documentation, pattern recognition and future AI evaluation.

APPLICATION AREA.

Workshops with high tyre volumes, test lanes and accredited testing organisations.

TIMING

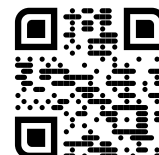
CURRENT STATUS:
CONCEPT PHASE

NEXT STEP:
TECHNICAL PROTOTYPE /
VALIDATION WITH PILOT PARTNERS

TARGET VISION
PREPARATION FOR
POTENTIAL MARKET LAUNCH



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