

### LAYER THICKNESS MEASUREMENT

The worldwide first patented and automatic system for continuous measurement of layer hickness.

# **CHALLENGES**IN ASPHALT THICKNESS

The optimal temperature of the paving material is a decisive factor in road construction, with a significant influence on the quality of the road. A comprehensive thermal visualisation of the paving process offers important insights regarding the quality of the material and introduces completely new optimisation potentials.



### **MEASURING**

Manual measuring of the asphalt layers is done irregularly and is often not that precise.



### **HIGHER COST**

The costs for paving material raises. With manual measuring you risk to have higher consumption, which increases your costs enormous.



### PAVING TEMPERATURE

During asphalt paving you can't measure the temperature without instruments. Paving the wrong asphalt temperature results in a bad track result.





## CONSTRUCTION SITE INTELLIGENCE PAYE-TM

The PAVE-TM is the world's first patented system for continuous layer thickness measurement in road construction. The effective, automatic monitoring minimizes the need for manual re-measurements. This saves you time and material.



#### Time saving

Continuous and automatic recording of the thickness of the paved asphalt layer.



### **Material optimization**

More precise adherence to tolerance limits reduces material costs.



#### **Quality assurance**

Significant improvement in efficiency and paving quality in road construction



### **Contactless measurement**

Ultrasonic sensors measure the distance between the sensor and the road surface to determine the layer thickness.



## THE FEATURES OF THE PAVE-TM SYSTEM

The profitability of a construction project often depends on the precise laying of asphalt layers without wasting material or compromising on quality. PAVE-TM enables optimum material utilization and quality improvement through precise, continuous layer thickness measurement.

Even a minimal reduction in layer thickness of 0.1 cm over 10 km at a width of 6 m can result in significant savings - over 8,000 EUR at a material price of 80 EUR per ton. This savings potential shows how PAVE-TM can significantly improve cost-effectiveness across several projects.

### SAMPLE CALCULATION

Installation width:

Specified layer thickness:

Material costs:

6m

4cm

80 €/t

Deviation: +/- 0,1 cm

Installation length:	Material deviation:	Cost:
10 km	108 t	8.640 €
50 km	540 t	43.200 €
200 km	2.160 t	172.800 €
500 km	5.400 t	432.000 €



### NEXT-GENERATION THICKNESS CONTROL PAYE-TC

The new PAVE-TC system takes precise asphalt paving to the next level. Building on the proven PAVE-TM, PAVE-TC not only measures layer thickness in real-time but also automatically adjusts the screed based on the measurements. This advancement simplifies operator tasks, improves construction quality, and provides OEM partners with a future-ready solution for road construction.



#### Precision

Ensures consistent layer thickness for optimal paving results.



#### Ease of use

Reduces manual adjustments, streamlining operator workflows.



### **Efficiency**

Minimizes material usage and rework, saving time and costs.



#### **Seamless Integration**

Compatible with existing paver systems via standardized interfaces.

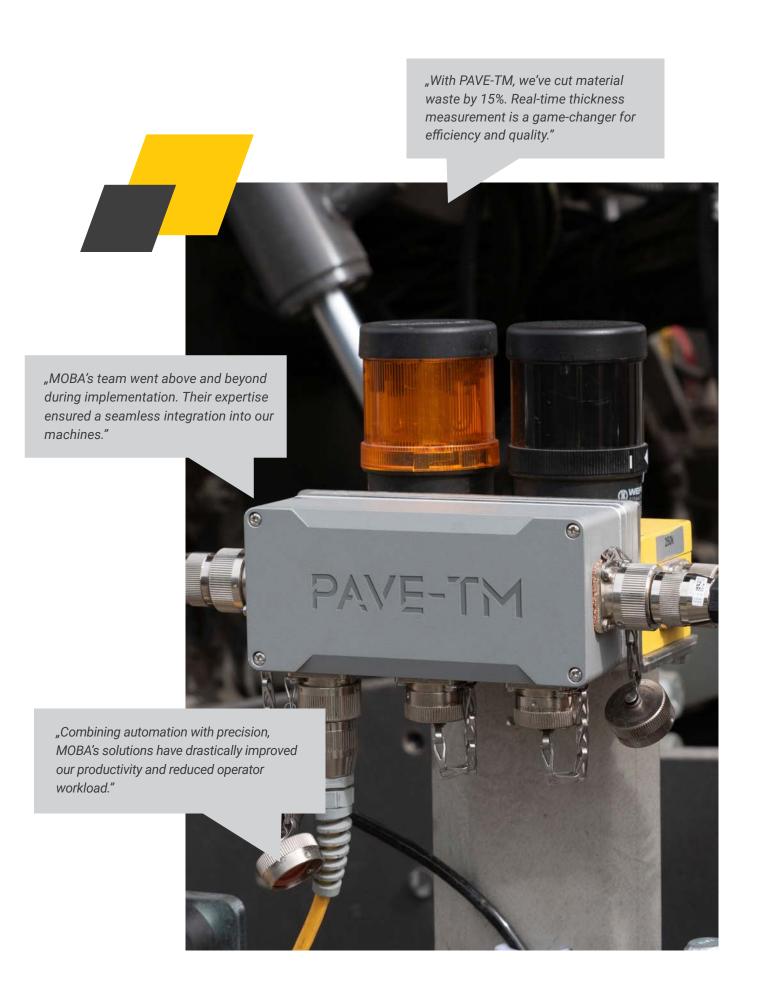
## THE FEATURES OF THE PAVE-TC SYSTEM

With PAVE-TC, MOBA delivers an advanced solution that eases the workload for operators and provides a clear competitive edge for machine manufacturers. Experience the next level in road construction – more precise, efficient, and smarter!

- Automatic screed control: Real-time measurement of asphalt layer thickness with precise screed adjustments based on sensor data.
- Next-generation ultrasonic sensors: High-frequency sensors (e.g., CSMT-300) for accurate and interference-free measurements.
- Communication via CAN-BUS: Fast data transmission between sensors, screed control, and machine systems.

- Data analysis and documentation: Recording of layer thickness measurements for quality assurance and analysis. Export options via USB or cloud-based solutions.
- Durability and reliability: IP67-rated housing and electronics for tough construction site environments.
- Easy operation: Intuitive user interface with clear display of measurement and control data. Customizable presets for various construction projects.





### **MOBA GROUP**

The MOBA Group has been an established name in mobile automation for more than 50 years. Our know-how and many years of experience in automation technology distinguish us as globally recognized experts. We develop and produce innovative machine control systems, identification and mobile weighing technologies as well as flexible software solutions. But MOBA components and systems are also used in other areas where robust and reliable sensors, controllers and operating units are required.

First Choice In Mobile Automation - that's what MOBA has stood for for more than 50 years!









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