THE PROBLEM: THERMAL SEGREGATION
Temperature differentials in asphalt paving, otherwise known as thermal segregation, refers to the differential cooling of asphalt mix during placement. This results in an asphalt mat with uneven temperatures, and can lead to localized failures and a shortened service life for the roadway. On a typical asphalt pavement, thermal segregation can reduce the service life by up to 40%, taking a serious toll on costs over the long term.

MOBA PAVE-IR provides companies and public authorities with the possibility to detect thermal segregation during the paving process, allowing modifications to address the issue. Once action has been taken, continued monitoring can confirm success or dictate further mitigation.

The system generates complete temperature profiles or individual, targeted temperature measurements throughout the entire paving operation. The current temperatures are displayed and also recorded on the panel. Further post processing of saved data is easy thanks to specially developed software. With MOBA PAVE-IR, companies can prove that, while paving with asphalt, no significant temperature differences occurred and that the material temperatures complied with the specifications throughout the entire paving project. This serves as evidence of quality assurance for agencies and authorities. Minimizing thermal segregation is obtained through best practices in the paving process from the plant through laydown and best practices means a more refined and efficient operation for contractors.

POSSIBLE PROBLEMS - BECAUSE OF THERMAL SEGREGATION
» Thermal segregation can be the result of material segregation
» Inhomogeneous compaction or non-uniform densities
» Additional machine wear
» Premature road failures
» Cold chunks of asphalt
» Bad surface structure
» Burned bitumen
» Uneven surface
» Cold / Hot spots
PAVE-IR SYSTEM -
THE SOLUTION TO DETECT THERMAL SEGREGATION

ON-BOARD COMPUTER
THE “HEART” OF THE SYSTEM

IR-SCANNER
ASPHALT QUALITY CONTROL
“For the Missouri Department of Transportation and the Contractor, the Infrared Scanner produced by MOBA provides an excellent Quality Control Technology. Real-time data allows the contractor to monitor the operation from the back of the paver and at the plant location, allowing the plant manager to update operations such as speed of paver and scheduling the arrival and number of trucks delivering asphalt. These improvements in operations and adjustments to asphalt temperatures through the use of this technology will reduce asphalt segregation and ultimately result in better quality long-term pavements for the public.”

[Bill Stone, Research Administrator, Missouri DOT]
PAVE PROJECT MANAGER - THE SOLUTION TO DETECT THERMAL SEGREGATION

OVERVIEW OF MODULES

» Time diagram, e.g. for paver stops
» Quality factor diagram
» Speed diagram

» Map view
» Report generation
» Export functionality
» Future functionalities can be added easily for your needs

QUALITY FACTOR DIAGRAM

SPEED AND TIME DELAY DIAGRAMS

THERMAL IMAGE
DATA EXPORT TO OTHER APPLICATIONS

OPEN INTERFACE FOR THIRD PARTIES

FLEXIBLE MODULES FOR EVERY TASK
MOBA GROUP

The MOBA GROUP is a leading global player in the world of mobile automation. Close collaborations between the headquarter in Limburg an der Lahn and subsidiaries all over Europe, Asia, North and South America create new perspectives for recent and future developments.

Superior technical know-how and more than 40 years of experience combined with an international dealer network guarantee a premium support – worldwide. INSPIRING MOBILE AUTOMATION – this is what the MOBA GROUP stands for since more than 40 years.

MOBA GERMANY
65555 Limburg / Germany
Phone: + 49 6431 9577-0
E-mail: sales@mobade

MOBA USA
Fayetteville GA 30214 / USA
Phone: +1 678 879646
E-mail: mobuscorp@mobade

MOBA CHINA
116600 Dalian / China
Phone: +86 411 39269311
E-mail: ycow@mobade

MOBA ITALY
37069 Villedanza di Verona / Italy
Phone: +39 045 630-0761
E-mail: salesitaly@mobade

MOBA FRANCE
77164 Ferrières en Brie / France
Phone: +33 (0) 1 64 26 61 90
E-mail: info@mobafrance.com

MOBA BRASIL
Beio Horizonte - MG / Brazil
Phone: +55 31 753-4959
E-mail: mobabrasil@mobade

NOVATRON FINLAND
33960 Piekiste / Finland
Phone: +358 (0) 3 357 26 00
E-mail: sales@novatron.fi

MOBA SWEDEN
861 36 Timrå / Sweden
Phone: +46 (0) 73-3750097
E-mail: pwallgren@mobade

MOBA UK
NP1781J Huddersfield / UK
Phone: +44 184 429 3220
E-mail: llewis@mobade.de

MOBA INDIA
Gujarat - 382044 / India
Phone: +91 989 855 6608
E-mail: sales@mobade.de

MOBA SPAIN
08211 Barcelona / Spain
Phone: +34 93 715 87 93
E-mail: moba-isa@mobade.de

MOBA TECHNOMER
05700 Barcelona / Spain
Phone: +34 93 864 24 85
E-mail: moba-technomar@mobade.de