

MOBA-MATIC™

GRADE & SLOPE CONTROLS FOR PAVERS AND MILLING MACHINES.



MOBA®
MOBILE AUTOMATION

THE MOBA-MATIC™ GRADE & SLOPE CONTROL SYSTEM

The MOBA-matic™ Grade & Slope Control System is the most versatile asphalt paver or milling machine grade control system available. It's ruggedness, wide variety of sensors, and ease of use make it the choice for the road building professional. Let our more than 30 years in the grade control design and manufacturing business be a benefit to your next job.

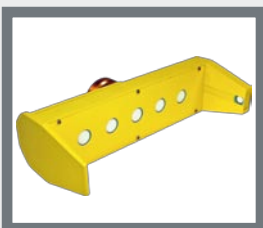
SYSTEM FEATURES

- Most versatile range of grade sensors to meet all job-site conditions
- Sonic-Ski™ grade sensor
- Dual Sonic™
- Digi-Rotor™ sensor
- Wire rope (yo-yo) elevation sensor
- Proportional laser elevation sensor
- Slope sensor
- Big-Ski™ (multiple sensor averaging) patented by MOBA™
- 3D capable
- Simple configurations, just plug and pave
- Common sensor cables
- CAN communications



CONTROLLER

- Simple 4-button keypad
- Easy 2-button operator set up
- Digital readout
- Understandable sensitivity adjustment
- Hand-held operation
- Easy to move from one machine to another
- Waterproof
- Rugged



SONIC-SKI™

Basic Features:

- Accuracy of ± 0.04 inch
- No grid arms to balance
- No grid arms or wands to break off
- No wire temperature bails to bend break or lose
- More accurate than a single sonic
- Better temperature compensation than a single sonic because it is closer to the reference
- Ultra-reliable ceramic sensor elements

Joint Matching Features:

- Works as a joint match shoe without dragging or hanging up
- Not as affected by small debris in its path
- Has a better picture of the reference, producing better results than single sonics
- Averages the three best values of the five measurements

String Line Following Features:

- Eliminates string line deflection
- Signals the screed operator when it is about to move off string line
- Allows for ± 5 inches of steering deviation without grade errors



SLOPE SENSOR

- The Digi Slope is extremely accurate, very easy to operate and very stable under high frequency conditions
- With a sensor range of $\pm 10\%$ it can handle super elevations without a problem
- When you need accuracy on main line or bumping through supers the Digi Slope has zero point stability of 0.1% and in the linearity range of 0-10%, its accuracy is $\pm 0.1\%$
- This sensor also has an IP 67 rating for dust and moisture



WIRE ROPE SENSOR

- Very accurate milling machine grade sensor that attaches to the rotor drum end gate
- CAN Interface
- Measuring range of 50 cm (19.68 inches)
- (Yo-Yo) Elevation Sensor



ROTARY SENSOR

- Works in all weather conditions
- CAN Interface
- Most favorable for reference sensing
- Measuring accuracy of greater than 0.01 inches



DUAL SONIC™

- Joint match or Big-Ski™ ultrasonic grade sensor
- Ultra-reliable ceramic transducers
- Constant temperature compensation
- Built in temperature bail
- Works with the Sonic-Ski™, Digi-Rotor™, wire rope, or other dual sonics in the Big-Ski™ application
- Very competitive pricing



LASER RECEIVER LS-3000

- Works with all common rotating lasers for those flat jobs
- Linear receiving reduces the need for motorised mast for grade changes
- CAN and PWM Interface
- 11" Capture height
- 360° Receiving range
- Selection of working point with one key touch

CONTRACTOR TESTIMONIALS

Bob Dahnke, Superintendent – Milestone Contractors

"... the MOBA system is by far the best grade and slope electronic paving system we've used."
 "... Milestone received full bonus for smoothness!"

John L. Pace, President – Tarheel Paving & Asphalt Co.

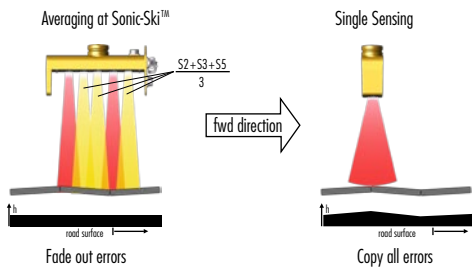
"... Mr. Chris Guffey, Resident Engineer for NCDOT stated that he had never felt a smoother ride than the one our MOBA system provided." "... our employees are thrilled at the ease of set up and not having to make constant adjustments throughout the way."

Shawn Wood, Superintendent – Banks Construction

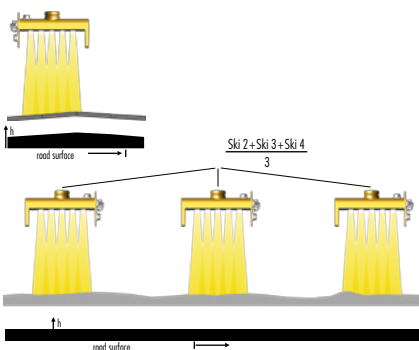
"Smooth operating system. Cross slope tolerances are very tight and the MOBA Big-Ski™ met and exceeded SCDOT specs that other systems couldn't achieve."

Ben Bass, Asphalt Manager – REA Contracting,

2 time Sheldon Hayes Award winner: "I was a bit skeptical about changing from the existing solution because of operator comfort level, but since REA Contracting purchased the MOBA Big-Ski™ system it was the right decision. It is by far the most accurate and dependable grade control system I have ever used. I am convinced that this is the right decision for automatic grade controls. 100% believer!"

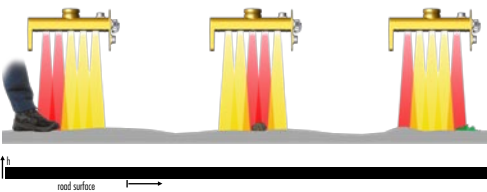


Five separate ultrasonic measurements are made 11 times per second. The three best measurements are averaged by the sensor to calculate an average elevation. By averaging and filtering, small irregularities are taken out of the resulting measurement.



The Big-Ski™ averages irregularities over longer distances, for example road waves. This is not possible using a single grade sensor unless a large mechanical drag ski is used. Small irregularities are filtered and large irregularities are averaged with 15 individual sensor measurements. The paver produces a smooth mat even when the reference is less than perfect. The Big-Ski™ will improve mat smoothness. The Big-Ski™ is more flexible, saves time and money, and yields top smoothness performance.

The Big-Ski™ non-contact averaging system produces the smoothest road surface and improves mat quality.



Big-Ski™ Benefits

- Smooth Mat
- Smooth Transitions
- Simple System Setup
- Improved Paver Maneuverability
- Non-Contacting Grade Sensing
- Sensors have built in temperature compensation
- Multiple sensor types can be used
- Maximizes smoothness bonus opportunity



MOBA Corporation

Kenwood Business Park
 180 Walter Way, Suite 102
 Fayetteville, GA 30214
 USA
 Phone: (678) 817-9646
 Fax: (678) 817-0996
 E-mail: mobacorp@moba.de
 www.moba.de

MOBA®
 MOBILE AUTOMATION