GS-506
MACHINE
CONTROL SYSTEM
Pioneering spirit with foresight! More than 45 years of experience in the development and manufacture of automation solutions for construction machinery give MOBA Mobile Automation the decisive technological edge in the industry.
Whether for crawler, grader, kilver or levelling blade, the 2D levelling system gives your machine a technology upgrade to eclipse all others. The system for height and inclination control regulates the coulter of your machine fully automatically so that the laid material is distributed evenly at all times. This is how the end result convinces with perfect flatness.

With globally unique functions such as the side-shift function, you can achieve the optimum planum even when cornering and when the machine performs evasive manoeuvres. The coulter is always aligned using a reference point, such as a string-line or kerb stone, and readjusted in real time. Save time and maximise your ROI!

Thanks to the exceptionally large selection of high-end sensors, the system can be expanded modularly – up to 3D application! The GS-506 is perfectly equipped for every levelling application in earthmoving, and thanks to our in-house hydraulic know-how, it is individually adapted to every machine.

**SYSTEM PROPERTIES**

- CAN technology
- Ergonomic display
- Robust hardware
- Multilingual language menu
- Assistance system for the operator

**SYSTEM ADVANTAGES**

- High-quality planum
- Time saving thanks to fully automatic coulter adjustment
- Precise levelling along curves
- Compatibility with any machine and any application
The specially developed display is a unique ergonomic specimen and impresses with user-friendly features such as the easily comprehensible symbols, which are supported by additional LEDs. All connected sensors are available at a glance on the self-explanatory display. This makes the system intuitive right from the start. Even when changing sensors, the operation remains exactly the same and thus minimises familiarisation times.

At the same time, the operator benefits from the robust construction of the panel and its adaptation to the tough conditions of everyday construction. The background lighting proves successful in all types of sunlight and the IP54 protection class provides reliable protection against wind and weather at all times.
CONTROLLER

» CAN interface
» Precise adjustment of target and actual values
» Controls the valves of the hydraulic unit

DISTRIBUTION BOX WITH INTEGRATED LONGITUDINAL INCLINATION SENSOR

» CAN interface
» Central hub for all sensors in the system to reduce cable runs
» Detects the inclination of the machine in the longitudinal axis

ROTARY COMPENSATOR

» Optimum compensation of transverse inclination
» CAN interface
» Detects the angle range of the coulter

SLOPE SENSOR

» Dynamic detection of the coulter inclination, longitudinal machine inclination and coulter rotation
» CAN interface
» Operates with a dynamic liquid sensor
» Ensures that the desired cross slope is maintained
» X-axis ±60°

PROPORTIONAL HYDRAULIC UNIT

» Controls cylinder movements according to the signals of the controller
» Can be used independently of machines

LS-3000

» 360° reception angle
» reception range of 280mm
» CAN interface
Thanks to its modular design, the system is compatible with any type of machine and can therefore be flexibly adapted to the requirements of the construction site. Every earthmoving machine can level with high precision thanks to sensors that have been perfected over many years, such as Sonic Ski, longitudinal inclination sensor, transverse inclination sensor and rotary leveller – in the shortest possible time.

**PROFIT MAXIMISATION IN EARTH MOVEMENT**

1. **Control panel** in ergonomic and robust design
2. **Sonic Ski** proven ultrasonic technology for precise ground sensing
3. **Controller** computing centre and intelligence centre of the system
4. **Distribution box/longitudinal inclination sensor** 2-in-1 inclination measurement and transmission
5. **Rotary compensator** compensates for transverse inclination
6. **Slope sensor** dynamic detection of the transverse slope
7. **Proportional hydraulic unit** developed for universal use on any machine
8. **LS-3000** laser receiver for optimum height regulation of the coulter
With the Sonic Ski PLUS sensor, this variant is perfectly optimised for levelling via a reference point. Whether via gutter, rope or floor, the ultrasonic sensor for non-contact and thus wear-free sensing, can be adapted to the respective reference point in just a few simple steps. The longevity as well as the user-friendly handling of the high-end sensor is the main focus in its constant further development. This allows the operator to undertake presetting with ease, using the integrated buttons on the sensor without having to leave the machine afterwards. The unique side-shift function takes over the fully automatic control of the coulter. The simple operation from the driver’s cab not only minimises potential sources of error, but also significantly saves time in implementing the planum.

This variant is perfectly suited for working in open terrain. With the aid of a linear laser receiver as an optical reference point, optimum flatness is achieved. The ergonomic design allows easy operation from the operator’s platform. The operating point is comfortably adjustable from the cabin within the unusually large reception area of 30 cm and 360° and can therefore be flexibly adapted to the work step. The automatic laser search simplifies and accelerates the correct setting and thus reduces the amount of work to a minimum. In addition to considerable time savings, you also benefit from an important safety aspect: the driver is never in the hazardous area of the construction site during levelling.

Always bearing maximum user comfort in mind, the GS-506 is designed to quickly replace components depending on the application. This allows the system to be upgraded from 2D to 3D in the shortest possible time and in a particularly cost-efficient manner. With the prism as an additional height reference, you can automatically construct any surface as defined in the design file. Nothing changes in the operation. The driver can start immediately and without time delays. Thus, even complex building projects can be implemented in a time-efficient manner. Invest in the modular system, keep all functionalities open and increase your ROI! Your customers will remember you for the rapid implementation of projects and your consistently high-quality service.
THE WORLD’S MOST FLEXIBLE LEVELLING SYSTEM FOR EARTHMOVING APPLICATIONS
THE EXPERT NETWORK - INSPIRING MOBILE AUTOMATION

Would you like to know how the system is already being used successfully by our customers? In the online expert blog MOBA Community you will find everything from job stories to feature releases, discussion forums and field reports to inform yourself extensively about our technologies.

In addition to blog contributions on the automation solutions of MOBA Mobile Automation AG, the community offers numerous forums, discussions, event announcements and expert contributions on a wide variety of automation topics for construction machinery. As an interactive, international platform for the exchange of industry news, the MOBA Community is the point of contact for all those who wish to actively participate in the development of this industry.

Contribute your own expertise and perspective in interesting dialogues, ask important questions about the (r)evolution of the industry and exchange opinions and experiences with other experts.

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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.