



Xsite
EXCAVATOR
CONTROL
SYSTEMS

MOBA[®]
MOBILE AUTOMATION

MOBA EXCAVATOR CONTROL SYSTEMS

Construction sites and their operations are becoming more complex. Requirements for the site organization rise, duties of machine operators grow, time and cost pressures are immense.

MOBA excavator control systems are for construction machines like driver assistance systems for the car: they support and relieve the excavator driver, optimize the workflow and increase productivity as well as the safety on the site.

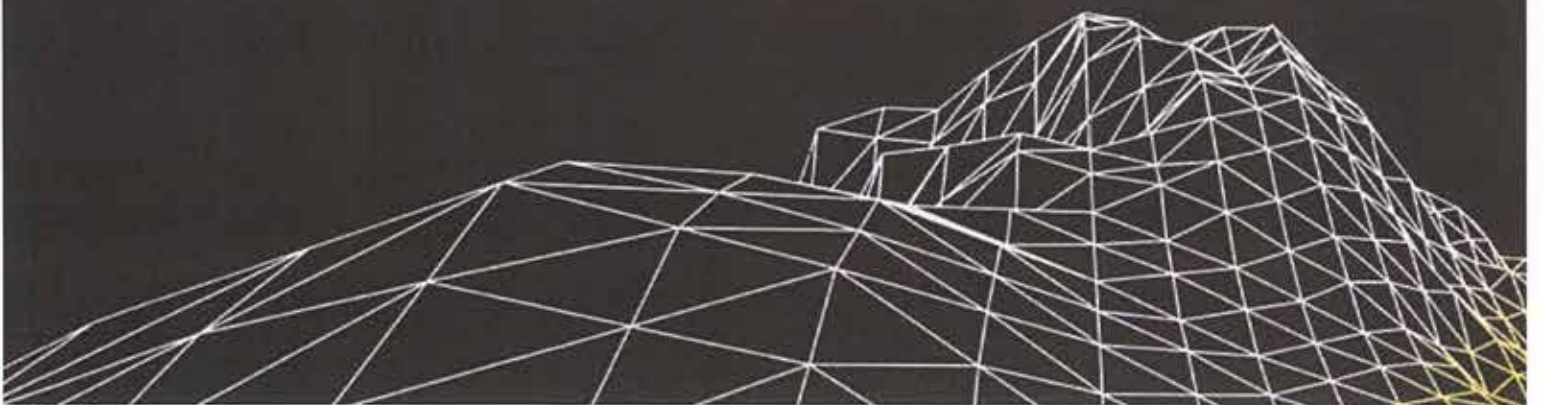
MOBA excavator control systems optimize the efficiency on the construction site and save time. Surveying is almost entirely omitted.

QUALITY SINCE 1972

MOBA Mobile Automation AG has been an established name in mobile automation for more than 40 years. Our know-how and years of experience in automation technology distinguish us globally as recognized by experts in the development and production of machine control systems, identification, mobile weighing technology, and flexible software solutions

Since the founding as an engineering company in 1972, the family-owned and run business has grown into the globally-represented MOBA Group. MOBA has three sites in Germany and nine subsidiaries in Europe, Asia and America. Currently, we employ a staff of nearly 500 worldwide, with more than 300 based at the headquarters in Limburg.

As MOBA group, we achieve an annual turnover of around 54 million euros. Whether leveling for asphalt pavers, identification technologies and weighing systems for waste management or security-related technologies for platforms - we offer powerful, reliable machine control systems for various machines and sectors for mobile automation.



Xsite FAMILY



EARTH FIRST!

THE PERFECT SOLUTION FOR EFFICIENT EXCAVATION



Manual control measurement is entirely omitted

90%

of surveying can be reduced



Security on your construction site increases

MOBA excavator control systems allow a smooth and efficient construction process. Your staff no longer has to reside in the construction zone and can be assigned to other tasks. This significantly increases safety on the construction site, particularly in poorly visible spots.

MOBA excavator control systems reduce construction surveying to up to 90% because manual control measurements, and thereby a potential source of error, completely disappear. Thanks to the efficient use of your machine a successful completion of the project thus is guaranteed.

Excavation work can be optimally planned and monitored, which saves you up to 20% of the fuel consumption of your machine. MOBA excavator control systems not only increase the productivity but also the profitability of your business.

MOBA excavator control systems perfectly gratify your needs. Whether simple or complex works, the system precisely supports your work, both in 2D and 3D. We have the right solution for every application.

Thanks to the powerful hardware and software MOBA excavator control systems operate as efficiently as you, thus saving you time and money.

- Simple and fast installation of the system for minimal downtimes
- Simple commissioning and calibration
- Intuitive, clear presentation of information through our even in sunlight easy-readable, full-color 8.4" display and control unit with touch function
- Clear, continuous control of the working progress from the driver's cab



The experience of a **good machinist** along with the **precision of the MOBA excavator control system** get the maximum performance out of your machine!

For whom are MOBA EXCAVATOR CONTROL SYSTEMS interesting?



SITE MANAGER / FOREMAN



MACHINIST



CONTRACTOR



CONSTRUCTION MACHINE DEALER /
OWNER

MACHINIST

The **machinist** is ideally supported by the MOBA excavator control system, whether in daylight or darkness. He or she gets all important information displayed on the operating unit – in real time. This permits fast, but also extremely precise work without having to constantly perform manual resurveys. The driver does not need to leave the driver's cab.

CONSTRUCTION MACHINE DEALER / OWNER

With installed MOBA components, **construction machine dealers and hirers** considerably distinguish themselves from competitors: excavator control systems of MOBA significantly add value to your machines. This also applies to system integrators! The upgrade of the machine with MOBA components is non-destructive, which allows a clean dismantling at any time. In addition, MOBA offers a comprehensive service as well as support.

CONTRACTOR

Increased productivity combined with low material and shipping costs is a big advantage for **contractors**. Thus, the efficiency of the engine increases while the time required to complete a job site decreases to a minimum. The effectiveness of the machine use can be increased to up to 400% - our service team gladly calculates this percentage for your individual construction project.

SITE MANAGER / FOREMAN

The **site manager / foreman** also benefits from MOBA excavator control systems. They allow a smooth and efficient construction process and you can schedule your staff more effectively. In addition, they increase safety on the site. Work activities are easily recorded by the system in order to provide a meaningful feedback about the progress of the construction site.



Xsite FAMILY

ARE YOU X-SITED?

With our robust XSite family you are ideally equipped for the everyday construction site. Harsh weather conditions, rough terrain or poor visibility do not present a challenge for you anymore. Our robust technology withstands the harshest conditions without any problem. We are the only supplier in the industry, which provides heated 3-axis 360° tilt sensors that can universally be used on all systems. High accuracy and speed are thus guaranteed at all times. Another unique selling point is our laser receiver with an incredible reception area of 15 centimeters,

which guarantees a constant connection between laser transmitter and laser receiver in any terrain, thereby facilitating time efficient and uncomplicated excavation work. The intuitive software guarantees a fast height reference, a manual confirmation is not necessary. The robust GNSS antenna ensures a very accurate satellite-controlled position detection of the excavator, independent of environmental and weather conditions. Whether for creating driveways, laying pipes or building a house or a road, our excavator control systems are the best choice for all types of earthmoving.

SERVICE

You deserve a special service that will meet your needs. MOBA is a competent partner - anytime.

Our service technicians and application engineers guarantee best quality, years of experience and constant mobility. If requested, we provide you with a premium service on-site.

90% of all support cases can be solved with a remote connection. This saves considerable time and costs.

- » Worldwide service
- » Competent telephone hotline for questions
- » Service on the spot
- » Prompt delivery of spare parts
- » Express service for premium customers



MOBA
MOBILE AUTOMATION

Xsite PRO

0.06 m

Surface

13:42



XSITE® EASY IDEALLY IMPLEMENTING SIMPLE EARTHWORKS

The 2D system Xsite EASY measures depth, height and angle of the bucket and graphically plots the bucket position on the display. The upper carriage sensor guarantees the correct measurements in any position, whether in motion or standing on the slope. An optional LED display also shows at a glance whether the target height has been reached or whether further excavation is necessary. This always keeps you on track of the exact work progress and ensures a precise implementation of specifications.

Thanks to the opportunity to use a rotating laser combined with the bucket as a height reference, the driver comfortably controls the height from the driver's cab. This saves time and increases security. Even under difficult visibility conditions, such as when working in the dark or under water, you always keep everything under control with the Xsite EASY. The system is ideally suited for use in foundation, trench or embankment construction, for leveling or underwater excavation.



XSITE® PRO EFFICIENT WORK IN 2D OR 3D

With the XSite PRO you can benefit from additional features, such as up to two GNSS antennas that even more precisely detect the position of the excavator via satellite. Thanks to the fast processor your measurements are processed in real time and immediately displayed on the comfortable 8.4" graphic touch screen. Having the option to define multiple profiles for different works and to have access to them anytime saves you time, fuel and material while increasing the efficiency of your machine. Thanks to the support of tilt rotators also grapples are ideally equipped with our systems.

Always remain flexible for challenging work ahead with our modular software. Cost-efficient upgrades can always be carried out and provide additional functionality. After an introduction into the 2D world you can always upgrade the software to a 3D system that lets you easily import digital terrain models with multiple levels and inclinations when needed. By this means you work accurately and fulfill planning specifications without correction work. If necessary, the wireless data transfer allows the remote access to the data, whether for documentation, further development or support purposes.

Xsite® Excavator Control Systems

Overview of Functionalities



	Xsite EASY® Basis 2D	Xsite® PRO Profi 2D	Xsite® PRO 3D Single GNSS	Xsite® PRO 3D Dual GNSS	Xsite® PRO ADVANCED 3D Dual GNSS
*****	2.2	2.2	2.2	2.2	13.5
2D Height via Bucket	●	●	●	●	●
2D Height via Laser	●	●	●	●	●
3D Position and Height via GNSS	—	—	●	●	●
3D Position and Height in Self-created Model	—	—	●	●	●
3D Position and Height in Imported Model	—	—	—	—	●
Reference to Defined Lines	—	—	●	●	●
Reference to Self-created Lines	—	—	●	●	—
Create own Longitudinal Profile – Reference to Excavator Position	—	●	●	●	—
Create own 3D Profile	—	—	●	●	●
Work with Imported 2D Plans	—	—	●	●	—
Save Construction Data	—	—	●	●	●
Height Alarm	●	—	—	—	●
Wireless Data Transfer	—	—	—	—	●
Remote Support	—	●	●	●	●
2D, GNSS Compass	—	●	●	●	—
3D, Machine Orientation Available	—	—	—	●	●
Different Views possible	—	●	●	●	●
Split Screen Function	—	—	—	—	●

● Function possible — Function not possible

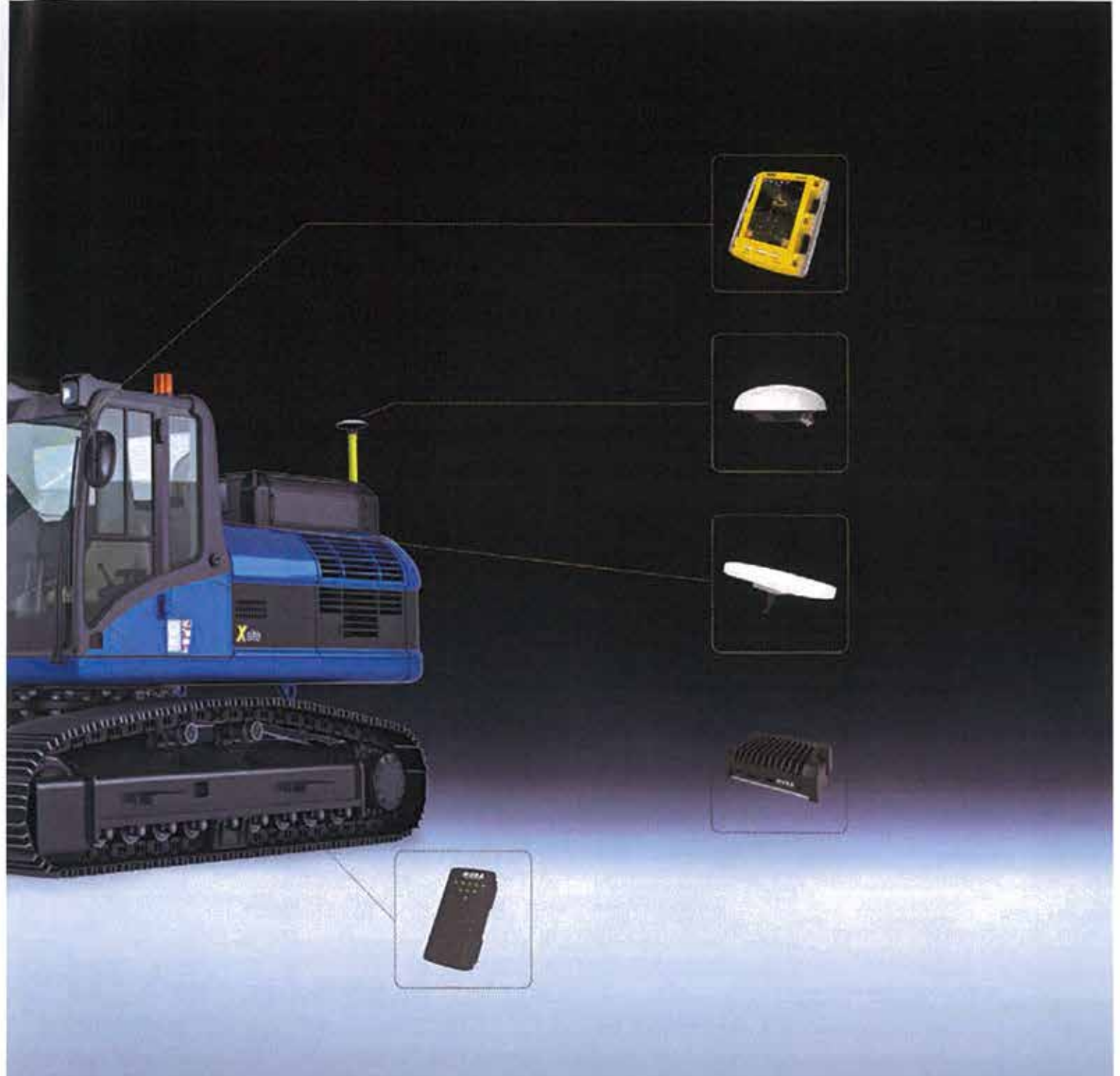


MODULARITY GUARANTEES ALL-TIME FLEXIBILITY

With the systems **XSite EASY** or **XSite PRO** you are always optimally equipped for all requirements of the construction site. Whether simple tasks or complex building projects, MOBA excavator control systems guarantee pinpoint accuracy and efficient results through a perfect interaction of all components.

Thanks to the modular concept of the 3D software, the Xsite PRO is upgradeable anytime. Stay flexible for all construction projects with the trouble-free and non-destructive installation of additional functionalities and the compatibility with all base stations.

1. **Xsite**® PRO: Efficient work in 2D and 3D
2. GNSS antenna receives position and height data
3. GNSS compass determines the alignment of the machine
4. Controller processes all incoming position data
5. **Xsite**® EASY graphic and numeric illustration of all work steps
6. Laser receiver EL-2 automatic bench set
7. Slope sensor measurement range of 360° on 3 axes
8. GNSS mast receives position and height data
9. LED display additional display of the working process



1



2



3



4



5



6



7



8



9

ONE GROUP - ONE RESPONSIBILITY



● HEADQUARTERS ● SUBSIDIARIES ● DEALERS

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 knowhow 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.

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