

EXCAVATOR CONTROL SYSTEMS



MOBA EXCAVATOR CONTROL SYSTEMS

Construction sites and processes become more and more complex. The challenges for construction site organisations are rising, tasks of machine operators increase, and time and cost pressure is immense.

MOBA excavator control systems are for construction machines what driver assistance systems are for the car: They support and relieve the operator, optimise the work process and increase productivity. Besides this, they increase safety on the construction site.

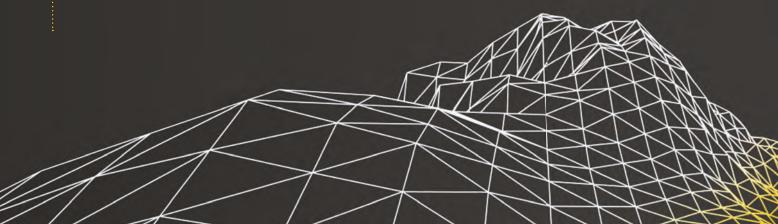
The MOBA excavator control systems optimise efficiency on the construction site and save time. Construction-accompanying surveying can be omitted almost completely.

QUALITY SINCE 1972

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

From its founding as an engineering firm in 1972 to date, the owner-managed family company has developed into the MOBA Group with worldwide representation and four branches in Germany and nine subsidiaries in Europe, Asia and America.

Globally we currently have about 500 employees, half of whom are at the Head Office in Limburg. The MOBA Group has an annual turnover of about 54 million Euro. Whether it is levelling systems for asphalt pavers, identification technologies and weighing systems for waste disposal management or safety-related technologies for excavation work platforms — we offer powerful, reliable machine control systems for diverse machines and fields of mobile automation.







EARTH FIRST!

THE PERFECT SOLUTION FOR EFFICIENT EXCAVATION





Manual control of surveying is not necessary

90%

90% of the surveying effort can be reduced



The safety on your construction site is increased

MOBA excavator control systems enable a smooth and efficient workflow on the construction site. Your staff is no longer required to be present on the construction site and can be planned for other tasks. Safety on the construction site is improved, particularly in areas with poor visibility.

With MOBA excavator control systems, up to 90% of the surveying effort on site can be reduced because manual surveying and thereby possible error sources are completely omitted. Thanks to the efficient deployment of your machine, a successful completion of the project is guaranteed.

You can optimally plan and record excavation work; at the same time you can save up to 20% of the fuel consumption of your machine. MOBA excavator control systems thereby not only increase productivity, but also the profitability of your company.

MOBA excavator control systems are

tailored to your requirements. Whether for simple or complex tasks - the system accurately supports you in performing your work, both in 2D and in 3D. We have a suitable solution for every field of application. Thanks to the powerful hardware and software, MOBA excavator control systems operate as efficiently as you, and thereby save you time and money.

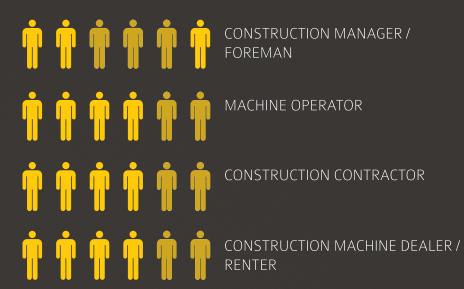
Thanks to the powerful hardware and software, MOBA excavator control systems operate as efficiently as you, and thereby save you time and money.

- » Simple and quick installation of the system for a minimum of downtime
- » Simple commissioning and calibration
- » Intuitive, clear presentation of information on our full colour 8.4" display and control unit with touch function, readable even in bright sunlight
- » Clear, continuous control of the work progress from the driver's cabin

II

The experience of a competent machine operator and the precision of the MOBA excavator control system ensure maximum performance of the machine!

For whom are the MOBA excavation systems of interest?



MACHINE OPERATOR

The **machine operator** is ideally supported by the MOBA excavator control system, in daylight or in darkness. All important information is clearly displayed to him in real-time on his operating unit. This allows fast and extremely accurate work, without having to constantly perform manual re-measurement. The operator does not have to leave the driver cabin.

CONSTRUCTION MACHINE DEALER / RENTER

Construction machine dealers and renters with MOBA components installed on their machines have a significant advantage over their competition: Excavators with MOBA excavator control systems have significant added value. This does not only apply to construction machine dealers and renters, but also for system integrators! Upgrading a machine with MOBA components is done absolutely non-destructive, i.e. they can be dismantled without leaving a trace. In addition MOBA offers comprehensive service and support.

CONSTRUCTION CONTRACTOR

Increased productivity combined with lower material and transport costs at the same time are a major advantage for construction contractors. In this way, the efficiency of the machine is increased and simultaneously the time for completion of a construction site is reduced to a minimum. The efficiency of machine deployment can be increased significantly.

CONSTRUCTION MANAGER / FOREMAN

The construction manager / foreman also benefits from MOBA excavator control systems. In the broader sense they allow a smooth and efficient workflow on the construction site and you can plan your staff better. In addition, increased safety is ensured on the construction site. Performed work can easily be documented by the system and thereby provides informative proof of the progress on the construction site.



ARE YOU X-SITED?

Our robust **X**site family ideally equips you for the daily construction routine. Harsh weather conditions, rough terrain or poor visibility do not pose a challenge any more. Our robust technology withstands the harshest conditions. We are the only provider in the sector offering heated 3-axis 360 degree inclination sensors, universally applicably on all systems. This guarantees highest accuracy and speed at all times. Our unique laser receiver with a reception range of 15 centimetres

is a unique feature, which guarantees reception to the laser transmitter in all terrains at all times, thereby allowing time-efficient and uncomplicated work. The intuitive software optimally supports you in your daily work.

The robust GNSS antennas allow accurate position determination of the excavator, irrespective of visibility and weather conditions. Whether it is for the construction of courtyard entrances, the laying of cables, the construction of a building or a street — our excavator control systems are the best choice for all types of earth moving.

SERVICE

You deserve a special service, which will live up to your requirements. MOBA supports you as a competent partner – at all times.

Our service technicians and application engineers guarantee top quality, many years of experience and constant mobility.

- » Worldwide Service
- » Quick supply of spare parts
- » Remote service



Xsite EASY

IDEAL IMPLEMENTATION OF SIMPLE EARTHMOVING WORK

The 2D system **X**site EASY measures depth, elevation and inclination of the scoop and shows the scoop position graphically and numerically on the display. The upper carriage sensor thereby guarantees correct measurements for every excavator position, whether on a slope or on level ground. An optional LED display additionally shows at a glance whether the target level has already been achieved, or whether further excavation is required. Thereby you always maintain an overview of the exact work progress and you can accurately implement specifications.

Thanks to the option of using a rotational laser in combination with the scoop as a level reference, the operator can easily perform level control from the driver cabin. This saves time and increases safety. Even for aggravated visual conditions, like working in the dark or under water, Xsite EASY allows you to maintain the correct perspective. The system is ideally suited for foundation construction, excavation or embankment construction, or for levelling or under water excavation.





Xsite PRO / Xsite PRO ADVANCED EFFICIENT WORK IN 2D OR 3D

With **X**site PRO you can also benefit from additional features, like up to two GNSS antennas, which determine the position of the excavator via satellite. Thanks to the fast processor, the measured values are processed in real-time and are displayed on the 8.4" graphic display immediately. The option of defining multiple profiles for different work assignments and having them ready at any time saves time, fuel and material and at the same time increases the efficiency of your machine.

Always be flexible for challenging work with our modular software. Cost-efficient upgrades can be obtained at any time, offering new functionalities. After starting off with a 2D system you can always upgrade to a 3D system, which allows you to easily input digital terrain models with multiple levels, if required. Thereby you can work accurately and implement the specifications without corrective re-work. If required, the wireless data transfer also allows processing of the data from the office, be it for purposes of further development, documentation or support. Thanks to the support of tilt rotators, you can utilise the excavator optimally







	Xsite EASY	Xsite PRO	XsitePRO ADVANCED
Simple 2D models	×	×	×
Importing and creating 3D models	-	×	×
Importing complex 3D models	-	-	×

For detailed product functions, please refer to the data sheet

Xsite PRO / ADVANCED SOFTWARE OPTIONS 0 - 2D

MODULE 0 - 2D	-	×	×
MODULE 1 - AS BUILT	-	×	×
MODULE 2 - MODEL TOOL	-	×	×
MODULE 3 - SURFACES	-	×	×
MODULE 4 - ROADS	-	-	×

Xsite FAMILY FEATURES



LEVEL ALARM



INCLINATION



INCLINATION OF THE SCOOP



LASER AS LEVEL REFERENCE



REMOTE SUPPORT



PROFILES



GNSS POSITION



IMPORT 3D TERRAIN MODELS



GUARANTEED MODULARITY MAXIMUM FLEXIBILITY

With the \mathbf{X} site EASY or \mathbf{X} site PRO system you are always equipped optimally for all requirements of a construction site. Whether it is easy work assignments or complex construction projects, MOBA excavator control systems guarantee a pinpoint, efficient result through perfect interaction of all components.

Thanks to the modular structure of the 3D software, \mathbf{X} site PRO can be upgraded at any time. Stay flexible for every construction project with the easy and non-destructive installation of additional functionalities and the compatibility with all base stations.

- 1. Xsite PRO efficient work in 2D or 3D
- 2. GNSS antenne antenna receives position and level data
- 3. GNSS compass determines the orientation of the machine
- 4. Controller processes all received position data
- 5. **X**site EASY graphical and numerical display of all work steps
- 6 Laser receiver FL-2 automatic level adjustment
- 7. Inclination sensor 360° measuring range in 3 axes
- 8. GNSS mast receives position and level data
- 9. LED display additional display of work progress





















ONE GROUP - ONE RESPONSIBILITY



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.

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