

Custom Solutions

For high precision works

Machine Control - Agriculture - Mining - Solar - Marine

Our world demands technologies that are able to monitor and assure the correct workflow to get the job done quickly and correctly.

STONEX team has a deep knowledge in developing tailored solutions, in order to improve the jobsite productivity keeping in first place the operators' safety. With our Solutions the job site will be lived like a new comfort zone from all the actors: from the operators to the supervisors.

MACHINE CONTROL

EARTHMOVING

Stonex machine control solutions can be installed in most earthmoving machines quickly and easily.

The simple design of the solution allows you to be up and running in no time. Thanks to the Android software developed by Stonex, all the components can easily communicate with each other. As an option there is the possibility of having a bluetooth connection between the various components of the system.

The software allows you to manage all phases of excavation and machine movement. The system is scalable as needed. It is possible to install a 1D/2D solution and then easily transform it into 3Deasy.



SUITE
STX-MC

STONEX MACHINE CONTROL



HIGH QUALITY COMMUNICATION

The information is sent to the Android tablet installed in the cabin (also via bluetooth as an optional).



ACCURATE POSITIONING

High precision positioning thanks to GNSS Antennas and high quality sensors.



EASY TO USE

Our system is plug & play. Fast to install, easy to use.



HIGH PRECISION SENSORS

The system is equipped with precision sensor that provide accurate data.



ROI

Adopting Stonex solutions means reducing production costs. Less operators with high productivity.

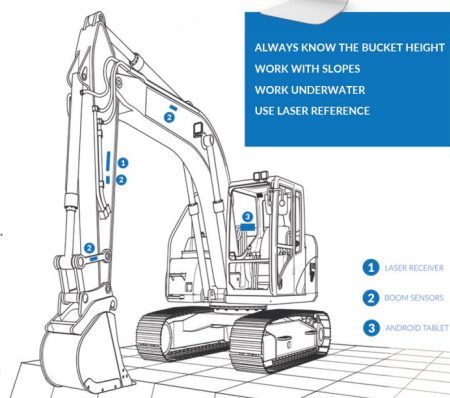


ANDROID SOFTWARE

Software developed by Stonex for Android system, optimized for machine control operations.



ALWAYS KNOW THE BUCKET HEIGHT
WORK WITH SLOPES
WORK UNDERWATER
USE LASER REFERENCE



Machine Control for the Construction world

STX-DIG

The control of an excavator is a very delicate operation in all phases of work. In order to operate quickly and effectively, it is necessary to monitor all the movements of the machine in a precise manner.

The system developed by Stonex is equipped with high-precision motion sensors that provide real-time information on the status of the machine.

The information is sent to the Android tablet installed in the cabin. The tablet is equipped with Stonex software developed specifically for the world of machine control.

The system is scalable as needed. It is possible to install a 1D solution and then easily transform it into 2D or 3Deasy.



SET DEPTH
SET TILT



SET SLOPE
SET PROFILES



HEIGHT ALERT

STX-GRADE



The dozers and graders are routinely used in the material distribution process and grading.

A precision control system allows you to avoid excessive digging and to keep the use of materials under control. The Stonex system for leveling control is equipped with an inclination sensor to measure the status of the blade and one or two laser receivers as needed.

The Android tablet mounted in the cabin, via the dedicated app, shows the inclination and elevation in real time and automatically sends the corrections to the machine system.

The system is available in different configurations, with laser/s or GNSS receivers.

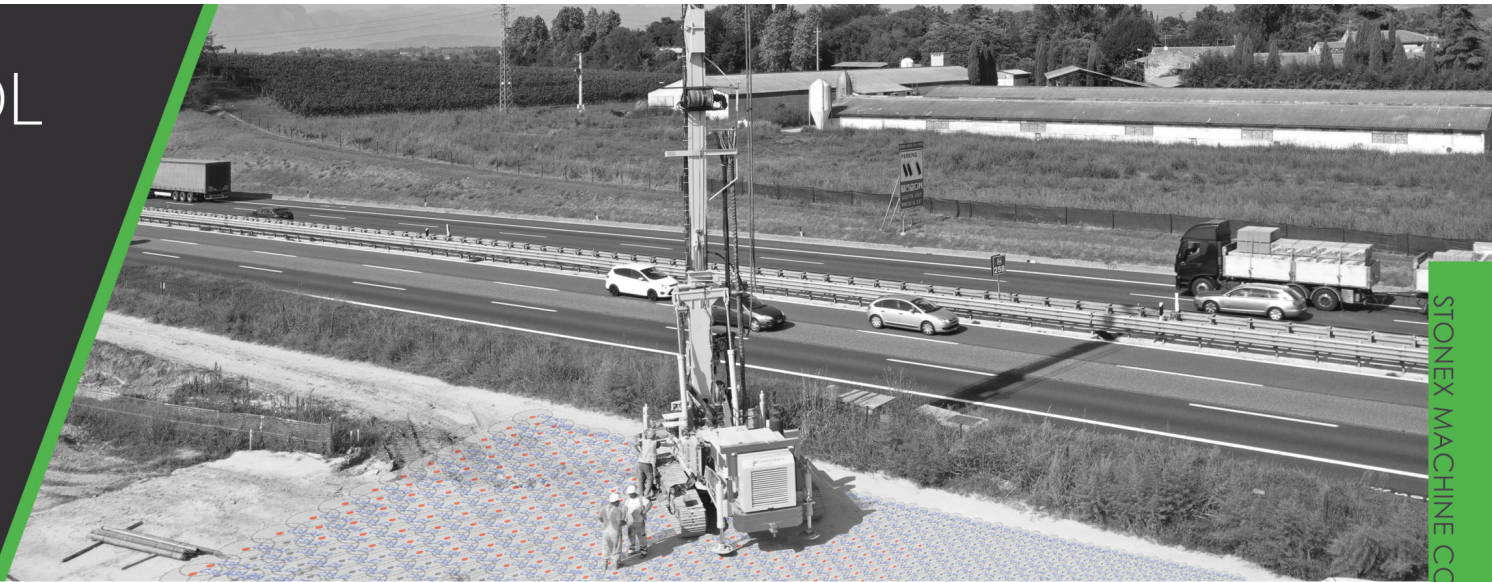
MACHINE CONTROL

DRILLING & MINING

Stonex has developed simple and intuitive solutions for the correct positioning of the machines on site. In addition to the components installed directly on the machines, our software also handles the traditional staking part if needed.

To facilitate the exchange of information between operators, the solutions consist of a part dedicated to the office and a part dedicated to field work.

Office and field can communicate thanks to the use of a Cloud platform where they can easily share data, projects and information.



PROJECT AND DESIGN

The Project can be generated, importing the local coordinates from different formats (DXF, TXT). A TARGET POINT file will be produced for the GPS navigation purpose. The Project coordinates include the depth and the tilt information.



MONITORING ACTIVITY

Thanks to a remote connection it is possible to monitor the progress of the work and update the projects in real-time.



MACHINE GUIDANCE

Manual positioning of the probe on the post is no longer required, the operator is guided directly to the designated drilling spot in a precise, easy and faulty-free way.



VISUALIZATION AND STORAGE

Thanks to our solutions it is possible to assess and store the position of the drilling point.



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ANDROID SOFTWARE

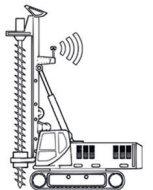
Software solutions that work with Android system.



Satellite technology for High Precision Mining Operations

Stonex machine control division has designed three solutions for the mining world:

- A GPS guidance system for jet grouting capable to determine the correct planimetric position of the columns, the verticality of the drilling tower and the deviations from the designed coordinates.
- A system for guiding and positioning digwheel machines for the construction of quarries or tunnels.
- A system for guiding and positioning drills for the construction of quarries or tunnels with the support of a robotic total station.



MACHINE CONTROL

PILING

Stonex positioning technology provides excellent performance in piling operations, supplying a solid solution to operators.

The main solution (GPS + tablet + software) is able to process large surveys and create projects quickly; the quality of the work is ensured by the correct interaction between the sensors and the software.

Our solutions offer different degrees of automation for the pile driving process, to meet the customer's needs and reducing working time.



PROJECT AND DESIGN

The Project can be generated, importing the local coordinates from different formats (DXF, TXT). A TARGET POINT file will be produced for the GPS navigation purpose.



SURVEY STAKE-OUT

Quick and smart stakeout GPS solution made for any kind of operator. A clear guidance layout aids the operator to find the post position with centimetres accuracy.



MACHINE GUIDANCE

Our solutions fit on any kind of piling machines and drive the operator on the target point (post coordinates) in manual and automatic mode.



AUTO LEVELLING

A slope sensor with a hydraulic interface can be installed on any machine in order to assure always the best levelling accuracy of the mast along two axes.



ROI

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ANDROID SOFTWARE

Software solutions that work with Android system.



GPS satellite technology for Pile drivers

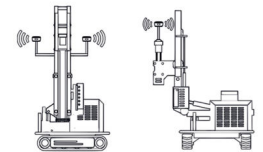
Stonex machine control division has designed different solutions for pile drivers machines.

SOLAR FIELDS - ROADS - AGRICULTURE

Our solutions can be used to create photovoltaic fields, to set up the rows of a vineyard or to facilitate the construction of guard rails.

Thanks to GNSS technology and precision sensors, every operation is easy and fast.

We also provide a solution for testing the strength of the posts with a push and pull validation test.



AGRICULTURE

PRECISION FARMING

Stonex offers numerous solutions to meet the needs of the agricultural world.

Our solutions for smart farming provide the ability to easily plan, schedule and manage jobs. Our receivers reach high levels of precision, becoming largely usable for jobs related to precision agriculture.

The solutions consist of hardware and software; moreover, they adapt to different types of machines becoming easily adaptable to the client's needs.

The goal is to improve the quality of work and reduce the stress of workers, supporting them in all those activities that require great precision.



STONEX AGRICULTURE SYSTEMS



PROJECT AND DESIGN ON THE FIELD

Design the plant layout directly in the field thanks to the powerful software.



SURVEY STAKE-OUT

Adapt the plant layout to the elevation profile of the field. Smart stake-out with auto-lock.



MACHINE GUIDANCE

Easy driving of the tractor on the designated spots following the direction given by the display.



HIGH ACCURACY

High accuracy positioning of the plant shoot.



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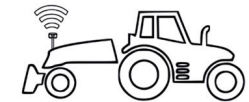


ANDROID SOFTWARE

Software solutions that work with Android system.



GPS technology for Smart Farming



Stonex Agriculture division has designed several solutions for smart farming:

GUIDANCE SOLUTION

The Stonex kit allows you to use the precision positioning given by the GNSS antennas to efficiently guide agricultural machinery in the field. You can set straight, curved, concentric lines and much more.

PILING SOLUTION FOR FIELDS AND VINEYARD

A solution for the design and driving of poles in a field /vineyard that allows to reduce time and work stress, as well as to increase the accuracy.

PLANTING SOLUTION

Our solution allows you to plant the cuttings in a precise point thanks to precision positioning, following a project defined in the management software.



MARINE SYSTEMS

NAVIGATION & DREDGING

Stonex offers flexible, high-performance positioning systems to meet the unique needs of marine world on both simple and complex projects.

Our solutions include both hardware and software, and can be easily integrated into third-party systems. Improve productivity and efficiency in underwater applications thanks to our systems.

Our solutions are suitable for dredging operations, canal/port development, reclamation, breakwaters, navigation systems and hydrographic surveys.



STONEX MARINE SYSTEMS



REAL TIME VISUALIZATION

You can keep an eye on each stage of operations in real time and correct/modify what you need based on the job you are doing.



ACCURATE PROJECTS

Thanks to our software you can create the project you need quickly and easily.



HIGHLY CONFIGURABLE

Highly configurable to suit endless vessels and dredges. Wide room for different applications including navigation, excavation, dredging, piling and mapping.



Precision positioning for Marine operations



NAVIGATION

Stonex has developed a precision navigation system that uses RTK GNSS receivers, GNSS antennas and dedicated software to facilitate complex operations such as navigation in difficult zones.

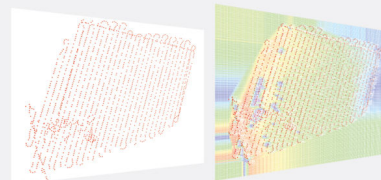
MAPPING

For those who need to map the seabed, Stonex is able to provide the appropriate equipment for the purpose.

PORTABLE ECHOSOUNDER



- Android App
- Bluetooth connection
- 200kHz frequency
- - 0.2 to -120m Range



DREDGING

For all operations regarding dredging and dredger control, Stonex has developed a specific system that facilitates operations. The system adapts to various types of dredgers even of different sizes.