

# Leica iCON iXE3

## The future of excavating



leica-geosystems.com



- when it has to be **right**

**Leica**  
Geosystems

# Leica iCON iXE3 – For ultimate accuracy

The iXE3 machine control solution guides the operator using reference models and GNSS in 3D. Design information and real-time cut/fill indications are displayed in the cab on your control panel, allowing you to rapidly excavate to the reference design. The solution ensures more uptime and operator satisfaction while increasing safety and productivity.

Work with a wide range of industry-standard data formats including LandXML, DXF, GEO, KOF, L3D, LMD, LIN, MBS and TRM formats, which offers the customer a variety of applications and workflows. The operator can use the function **Create Model** to make simple and complex models directly on the panel without leaving the cab and without the assistance of a surveying engineer.



## One for all

Digitalise your construction site with one software and one hardware platform. Switch from one machine to another and build complex designs with simpler workflows and less downtime.



## Easy to use

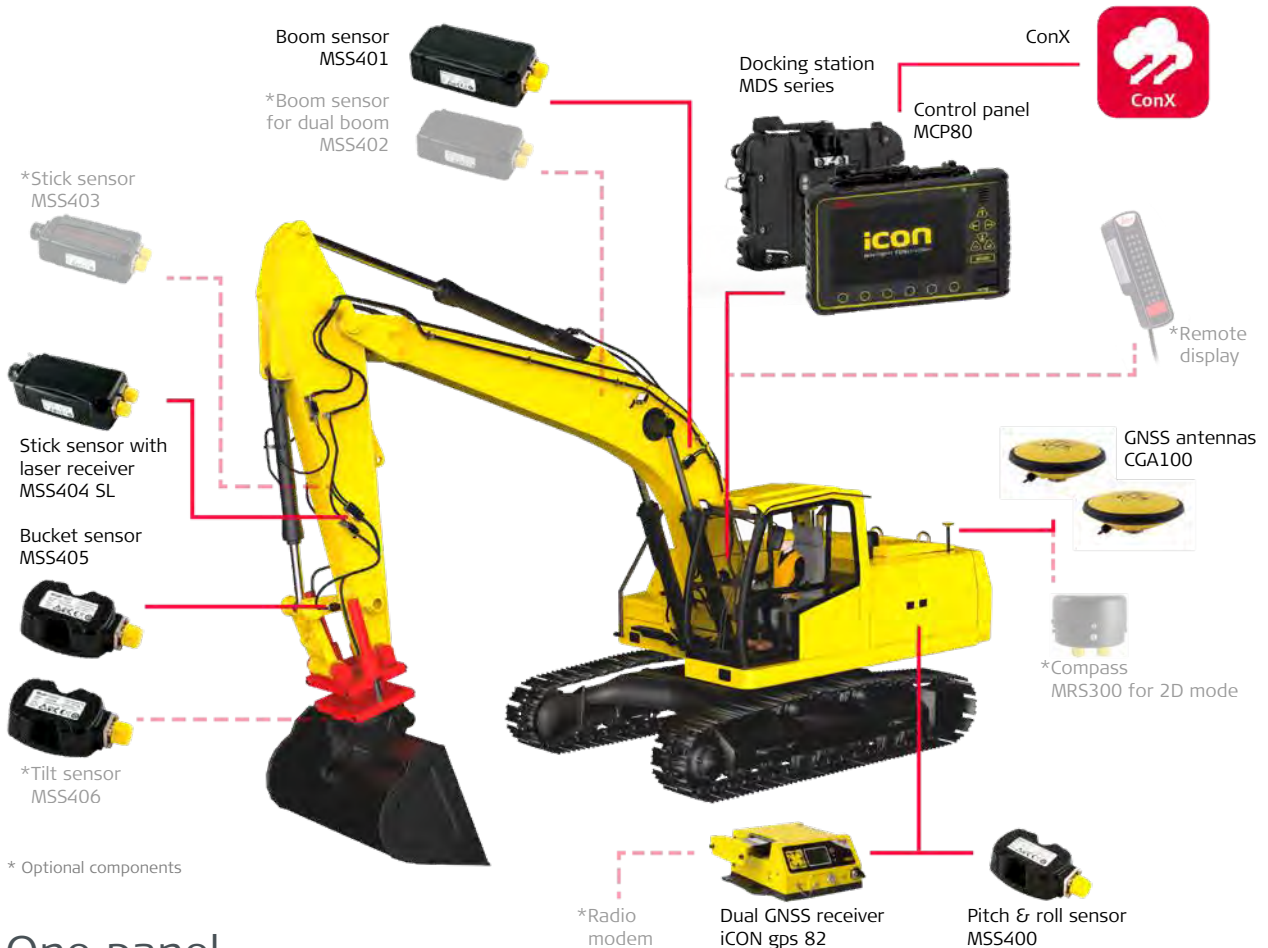
Simple, clean and intuitive user interface with interactive user design adapted to your needs. The assistive technology with wizards and help functions help you drive the excavator and get more work done with high quality and less rework.



## Robust design

With robust design the Leica MCP80 panel and the Leica MDS series docking station are prepared for the harshest environment and are truly resilient for the heavy construction industry.

# Excavator 3D solution – Full 3D and 2D control of your excavator



## One panel

The MCP80 panel can handle all 3D applications in the heavy construction industry. The easy-to-use industry-leading interface can be used across all 3D machine applications. The panel features a large touch-screen panel with backlit buttons - personalise it to your liking and take it with you from one machine to another. The MDS series docking station stores your latest calibration values and hydraulic parameters for easy swapping of the panel. The docking station makes the panel completely cable-free for easy removal.

## Other available options:



Prism & compass configuration

## One user interface

One software platform for all machines with a simple and intuitive user interface. The operator just turns the key and gets on with the work. The interactions support the workflow of the task at hand, and the clean interface makes it easy to find the functions you need using icons for fast navigation. The assistive technology with wizards and help functions help you drive the machine and get more work done with higher quality and fewer errors.



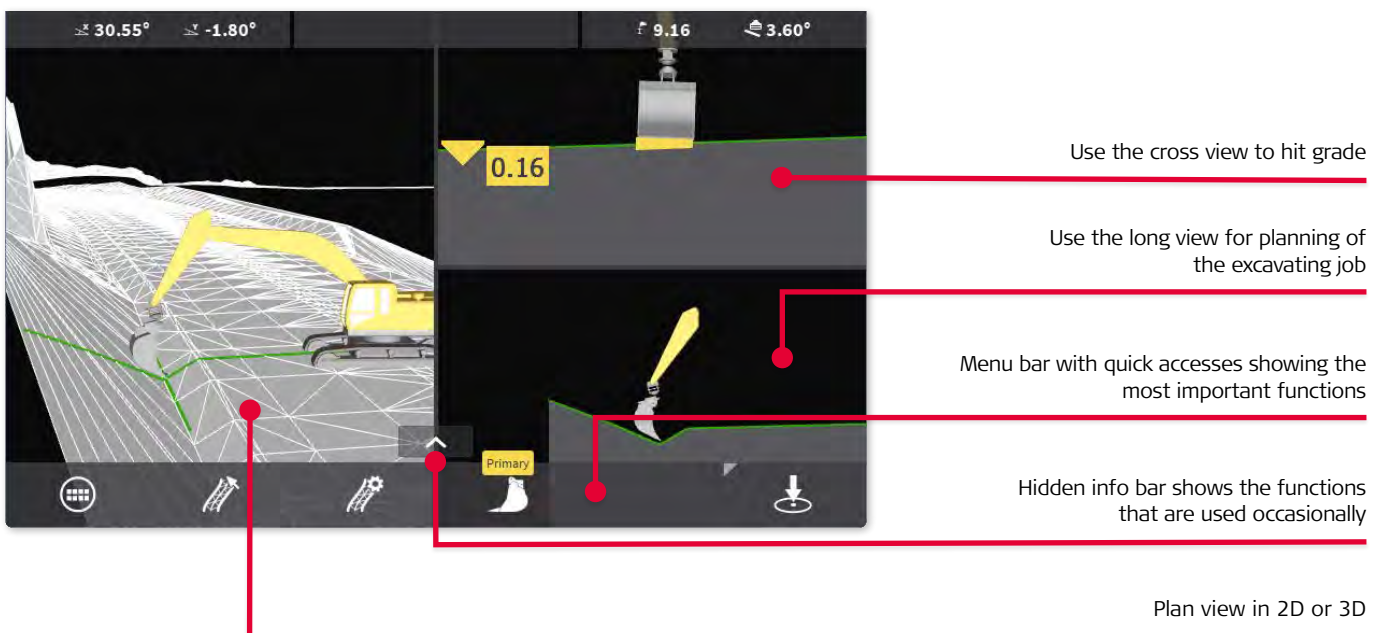
# Intelligent software – Increase your uptime

The efficient menu structure is set up for easy management of the all project files. Increase your uptime due to a user interface that gives the operator quick access to select the functions that are needed for the workflow.



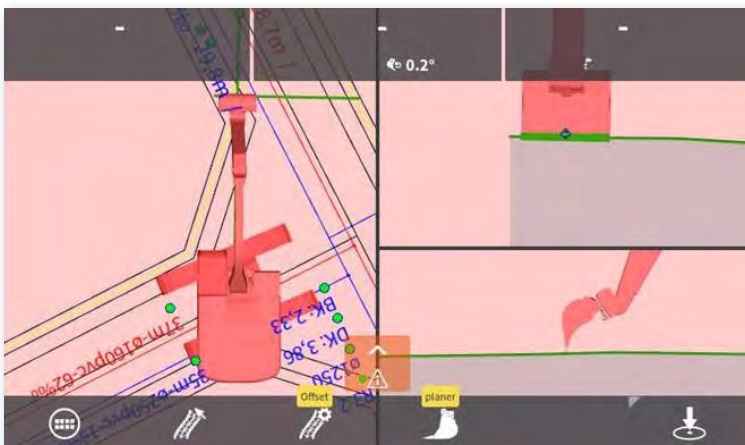
## TARGETED ATTENTION

The interface keeps the operator in the run screen and targets the operator's attention to the job at hand. Select full screen or split screen to guide you to the most efficient view that assists you through the task at hand.



# Share data – Seamlessly

The iXE3 solutions allows you to share log points between machines for project progress monitoring and follow-up. Create model data are also easily shared as well as seamless file sharing with iCON 3D software and iCON site projects.



## Programmable avoidance zones

Use avoidance zones to select trigger distances and create virtual barriers around utility pipes, cables or other areas that you need to protect when excavating.

The screen turns red, the height indicators disappear and an audible signal will sound when the machine operator is approaching a restricted area.

# iXE2/3 – Semi-automatic excavator

The new semi-automatic functionality for Leica iXE2/iXE3 excavator machine control solutions helps the operator to perform complex fine grading jobs faster and more accurately by automating the movements of the **boom, bucket, tilt bucket** and **tilt rotator** functions which simplifies the operator's work. The semi-automatic excavator is a flexible solution, and the operator can easily switch between manual and auto mode to ensure maximum safety.



## FEATURES

- The design slopes are followed automatically only by operating the stick
- Intelligent slope detection with closest cross slope
- Surface protection (no tool point digs into you surface)
- Rotation control cross-cut
- Stick enabling (no push and hold on the button)
- Easy to switch between manual and the auto function with manual control when required

## BENEFITS

- Less operator fatigue
- The job can be done faster because costly and time-consuming rework can be avoided
- Consistent quality of finished surface
- The semi-automatic functionality from Leica Geosystems is safe to use
- Flexible configurations to suit any use case and machine configuration



# Automating excavator functionalities



## iXE CoPilot

Using the Leica iXE CoPilot, the excavator operator only needs to concentrate on controlling the digging movement (boom, stick and bucket) while the tilt and rotation function of the tilt rotator is adjusted automatically based on the reference model surface under the bucket.

The operator maintains control of the bucket rotation allowing him to manage material in the bucket properly but eliminating the constant manual adjustment of the slope of the bucket. Enabling the CoPilot by simply pressing a button simplifies the use of tilt rotators regardless of training level reducing operator fatigue.

## Automatic Tool Recognition

Use tool recognition to automatically select the right tool for your excavator or wheel loader. Tool recognition modules are mounted on the excavator buckets and tilt rotators. The hub in the cabin registers and sends signals to the machine control solution when the bucket is taken off, a new bucket is selected and sends warnings if a bucket that is not calibrated is selected. The operator no longer needs to manually change settings when changing work tools.

This minimises the risk of using the wrong bucket and the subsequent over or under digging and costly rework. Besides supporting the attached tools, the tool recognition system also supports standard tilt buckets and detachable tilt rotators.







# Submersible configuration – Underwater excavating

As part of the MSS400 series, the MSS420 sensors for underwater dredging jobs are built on the well-established MSS400 Series Sensor technology. Ensuring speed, performance, precision and productivity (SP), the MSS400 Series Sensors incorporate SP Technology that allows faster digging without loss of precision at higher speeds, dramatically increasing machine utilisation and productivity

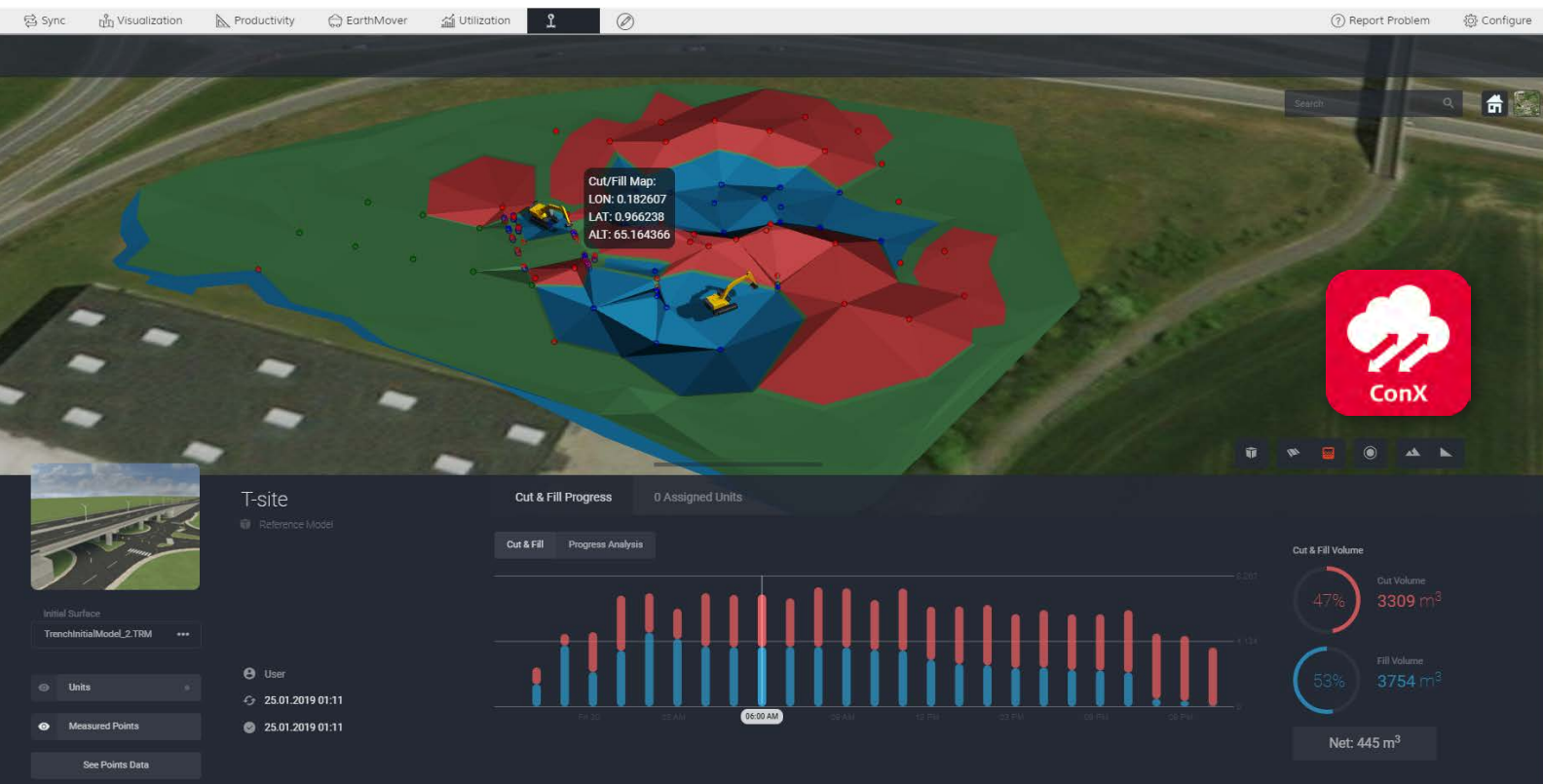


## Reinforced cabling, sensor housing and bracket

Designed to be used down to 40 m at 5 bar pressure, the MSS420 sensors are equipped with reinforced components such as pressure tight connectors, a robust sensor housing, rugged cabling and stainless-steel brackets making it the most reliable equipment for underwater applications. The Leica MSS420 dredging sensors can be programmed to boom 1, boom 2, stick, bucket and even tilt sensors.



# Leica ConX – Cloud solution for managing and visualising the digital construction site



Personnel and machines on the jobsite need to share the same data and stay in sync so work can be carried out effectively, on time and on budget. Leica ConX is a web-based suite of tools that harmonises and simplifies the data handling for your machine control operations, significantly improving productivity and reducing your downtime.

## Increase site productivity and transparency

This cloud-based collaboration tool allows you to efficiently manage all your connected construction projects and easily share job-related measured data with all stakeholders. ConX provides you the fast and easy-to-use web based suite of tools you need to get the job done quicker, more efficiently and to specification.

The assign and sync feature is all that you need to ensure that machine operators have up-to-date design data. Measured as-built data is then easily transferred to the cloud so that you can focus on digging dirt and leave it to Leica ConX to dig through the data.

## KEY BENEFITS

- Assign design models to machines, groups of machines and field controllers to ensure that operators and field crews always have the design information that they need when they need it
- Respond to changes quickly with automatically synchronised project updates that save costly rework and reduce downtime and rework costs
- Easily share measured points to and from the field to provide an automated, aggregated real-time view of the cut and fill situation for progress monitoring
- Analyse measured points, create surfaces and seamlessly share across all field and office applications connected to the Leica ConX platform
- Volumetric changes presented in an easy to read dashboard for reporting project productivity
- Share information from machine to machine for site wide visibility of progress
- Minimise operator downtime with remote support for troubleshooting and setup without travel costs and delays

# Customer Care Packages – maintenance contracts

Leica Geosystems Customer Care Packages (CCP) ensure you achieve maximum value from your investment. When you buy a CCP from Leica Geosystems, you immediately start to benefit from instant access to our network of professional support and service team while you work. With a range of three different Customer Care Packages, you will be sure to obtain the package that best suits your particular requirements and budget. From Basic to Silver, Leica Geosystems has the right Customer Care package for your business.



The CCPs are Leica Geosystems' maintenance contracts customised for you

1, 2, 3 or 5 years duration



	BASIC CCP	BLUE CCP	BRONZE CCP	SILVER CCP
Customer Support	✓	✓	✓	✓
Software Maintenance	✓	✓	✓	✓
Field Service		✓		✓
Extended Warranty			✓	✓



## CUSTOMER SUPPORT

Direct telephone and online access to our machine control professionals. They will work with you to solve any problems that may arise, whether they are operational questions, solution configuration issues or general advice.



## SOFTWARE MAINTENANCE

Benefit from the latest software improvements and new features keep you and your solution up-to-date to maximise productivity. Update your software from myWorld or by talking to your local Leica Geosystems representative about the opportunities.



## FIELD SERVICE

Annual preventative inspection of the solution carried out by experienced technicians minimises repairs, downtime and ensures reliable machines. The annual Field Service inspection includes a visual and a system check, and check of the calibration measurements. This gives higher up-time and more reliable machines.



## EXTENDED WARRANTY

Leica Geosystems machine control products come with a standard one-year warranty. The coverage may be extended to a maximum of five years, covering labour and spare parts. An extended warranty provides the additional security of knowing that unplanned costs in the future can be avoided.

## Leica Geosystems – when it has to be right

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems is the industry leader in measurement and information technologies. We create complete solutions for professionals across the planet. Known for innovative product and solution development, professionals in a diverse mix of industries, such as surveying and engineering, building and heavy construction, safety and security, and power and plant trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

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Intelligent Solutions Brochure



Leica ConX flyer



Customer Care Packages flyer