Leica iCON site
Custom-built solutions for Heavy Construction



Leica Geosystems – when it has to be right

With more than 200 years of history, Leica Geosystems, part of Hexagon, is the trusted supplier of premium sensors, software and services. Delivering value every day to professionals in surveying, construction, infrastructure, mining, mapping and other geospatial content-dependent industries, Leica Geosystems leads the industry with innovative solutions to empower our autonomous future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,500 employees in 50 countries and net sales of approximately 5.4bn EUR. Learn more at hexagon.com and follow us @HexagonAB

Swiss Technology
by Leica Geosystems

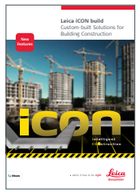
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Leica iCON site for foremen



Leica Geosystems Intelligent solutions



Leica iCON build

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- when it has to be **right**

Leica Geosystems

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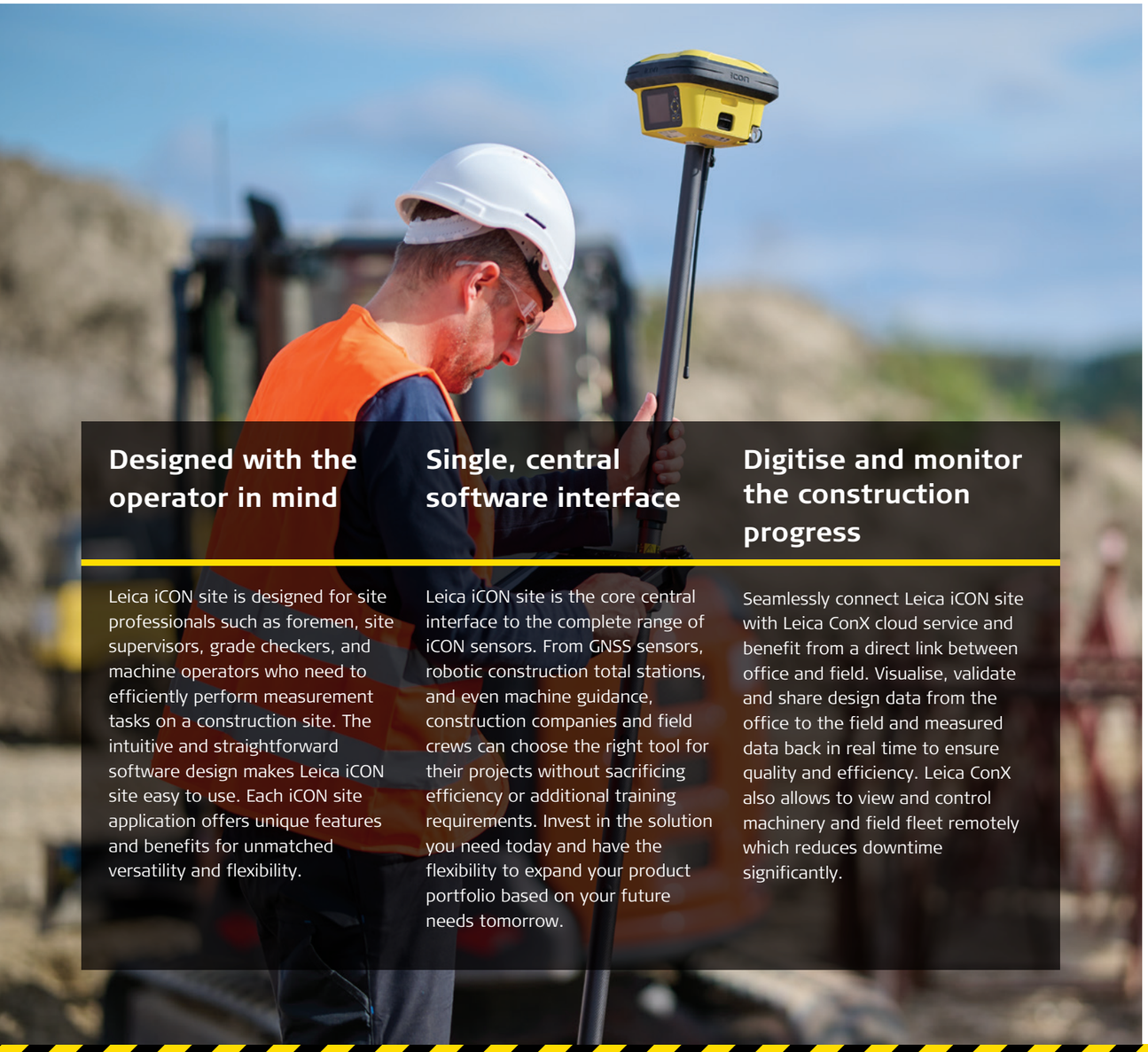
Leica Geosystems

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Leica Geosystems intelligent CONstruction
Enhancing your performance

With Leica iCON site, Leica Geosystems introduced the most tailored software solution for any segment in the heavy construction industry. A straightforward user interface and custom-built apps are designed specifically for construction professionals such as site workers, grade checkers or foremen.

Leica iCON site supports the complete range of iCON sensors allowing to carry out all positioning tasks on site. Connect Leica iCON site with Leica ConX, a cloud service that allows users to seamlessly share data and information from the office with the field crews and machines on the project and monitor the construction progress to meet deadlines and budget.



Designed with the operator in mind

Leica iCON site is designed for site professionals such as foremen, site supervisors, grade checkers, and machine operators who need to efficiently perform measurement tasks on a construction site. The intuitive and straightforward software design makes Leica iCON site easy to use. Each iCON site application offers unique features and benefits for unmatched versatility and flexibility.

Single, central software interface

Leica iCON site is the core central interface to the complete range of iCON sensors. From GNSS sensors, robotic construction total stations, and even machine guidance, construction companies and field crews can choose the right tool for their projects without sacrificing efficiency or additional training requirements. Invest in the solution you need today and have the flexibility to expand your product portfolio based on your future needs tomorrow.

Digitise and monitor the construction progress

Seamlessly connect Leica iCON site with Leica ConX cloud service and benefit from a direct link between office and field. Visualise, validate and share design data from the office to the field and measured data back in real time to ensure quality and efficiency. Leica ConX also allows to view and control machinery and field fleet remotely which reduces downtime significantly.

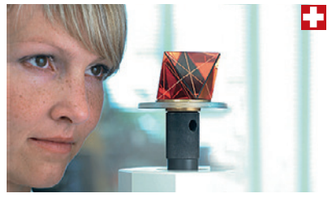
Leica Geosystems
Your trusted partner

Leica iCON is the result of a vision, based on our commitment to provide you with high standard product and service solutions. With our standards being strongly interlinked, we believe they establish a solid foundation for shared growth and success.



Innovation

- Ensures the most exciting and best user interface tailored to your needs
- Ensures keeping things simple for our users which require innovative solutions
- Ensures we listen to you and understand your construction applications



Quality

- In listening to your needs
- In the expertise of our sales & support teams
- In manufacturing and all development processes



Reliability

- Of commitments made
- In meeting technical specification of our products
- In our products in the field



Versatility

- Through iCON site software that extends to grow your business
- Through exploring related segments by adding individual apps
- Through interchanging equipment between GPS & robotic total stations



Partnership

- By using Leica ConX remote support and data synchronisation
- By accessing the Leica Geosystems Machine Control Academy
- By listening to your ideas, recommendations and problems



Trust

- Our professional advice, be sure to work with the best adapted solution
- Our built-in checks, iCON site will keep you within project tolerances
- Our future software improvements that deliver attractive Customer Care Packages (CCPs)

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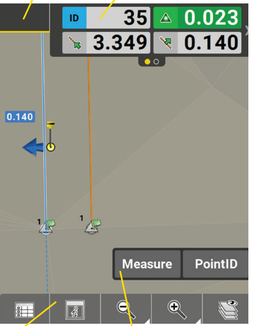
Leica iCON site excavator

The best way to get started with machine control

Construction workflows contain different disciplines which have to work closely together. Only by cooperating smoothly, construction sites become productive and efficient. The Leica iCON portfolio is designed to efficiently connect the different tasks on construction sites. Integration and connectivity from the office, machine and field increases site productivity and ensures high uptime on site.

Status Bar +
Clear status information plus shortcuts to frequently used tools

Info Panel
Clear & immediate data and measure results including user guidance



MapOPS
Intelligent map controls including Smart Zoom & Auto-Pan. Manage data & graphical contents of map with Point List, File & Layer controls and clever viewing options

Measure Bar +
Selectable measure functions, visual and audio feedback, linked to controller hard key to trigger measurement, auto-switches to app specific task bar



Leica iCON site – entry-level machine guidance

Take your on-site workflow to the next level with the Leica iCON site machine control solution. Create design data in the field and use the iCON site solution on machine to perform fast and accurate earthmoving works. The intuitive and straightforward software design makes Leica iCON site the perfect add-on for machine operation. Save costs by using the same solution for On- and Off-machine use cases.

Leica ConX

Digitise your construction process with Leica ConX, a cloud-based suite of tools that harmonises and simplifies the data handling and workflow throughout the phases of the construction process.

Significantly improve productivity and reduce rework and delays caused by inefficiencies or errors in 3D construction data. With ConX, users will be able to visualise and validate reference models, project localisations, positioning, survey and constructed as-built data in real-time and without extensive training.





The iCON site product portfolio enables you to select your individual solution. Invest in the solution you need today and have the flexibility to expand your product portfolio based on your future needs tomorrow.



Leica iCON gps 160

Versatile Smart Antenna for multi-purpose positioning tasks.

Leica iCON gps 70T Series

GNSS Rover featuring permanent tilt compensation, resistance to magnetic interferences and calibration free operation.

Leica iCON iCR80

High-end robotic construction total station with unmatched automated-aiming, lock and re-lock technology and iCON on board.

Leica iCON gps 30

Compact and lightweight entry-level GNSS RTK rover.

Leica iCON site field software

Core central interface to all iCONstruct sensors and devices with unmatched simplicity but no compromises on functionality.

Leica iCON iCR80S

High-end robotic construction total station with unmatched automated-aiming, lock and re-lock technology.

Leica iCON prep

Simple office tool to verify and prepare field data by using the same user interface from iCON site.

Leica iCON CC200, CC180, CC170

Reliable and robust field controllers with a multi-touch screen, increased performance, and long operating time.

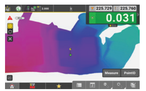
Cloud solutions

Leica ConX provides reference model visualisation and validation, cut and fill analyses, construction progress monitoring, and assigns data to the individual contributors on site. **HxGN GeoCloud Drive** is a cloud-based collaboration solution, enabling streamlined data transfer and storage across all project phases.

Leica iCON site

Straightforward software design

Gain productivity from iCON site.





Designed for site professionals such as foremen, site supervisors, grade checkers, and machine operators who need to efficiently perform measurement tasks on site.

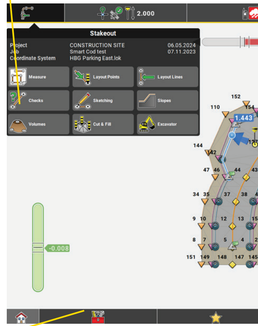
- Benefit from automated measurement tasks done in real-time.
- Eliminate the guesswork of your project for quicker and more accurate invoicing.
- Increase uptime of the machines by keeping them up-to-date and productive.
- Reduce to the main functionality for straightforward and result driven workflows.
- Familiarise with the product faster thanks to an intuitive interface with an innovative design that simplifies your workflows.
- Stay advised with a traffic light warning system for each stake-out point.
- Connect to Leica Geosystems' trusted and accurate positioning sensors.





IntuiNav +

Intuitive icons, traffic light colour codes and wizards for secure decision making. Straightened map via Split Screen and 3D graphics for clear data representation and easier application switch.



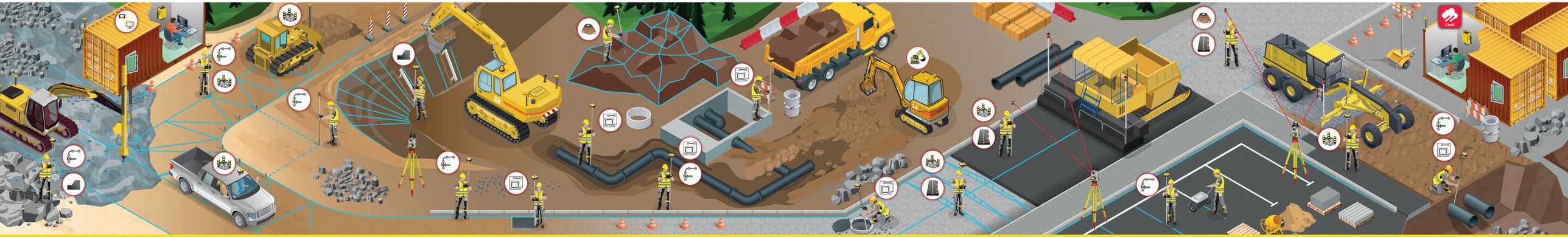
Tool Bar

Contains most relevant tools and functions tuned per application

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Leica iCON site

The complete solution for all positioning and measuring tasks on site



intelligent construction

Leica iCON. Understanding construction.

Leica iCON site provides unmatched versatility and flexibility.

It enables you to carry out all positioning related tasks with just one solution. In addition, each iCON site application offers unique features and benefits, performance and accuracy.

Customize and extend your iCON field toolbox.



iCON site is part of the unique iCON field toolbox, providing you with one solution for all your construction tasks across the entire job site. iCON field offers you the possibility to extend and customize applications according to your needs.

www.leica-geosystems.com/icon

Site Infrastructure



Applications

- Remote data transfer from office to field and vice-versa via Leica ConX.
- 24/7 GNSS reference station on site container.
- Transmit GNSS corrections via RTK Network.

Benefits

- Fast reaction on design changes.
- Distribute coordinate system to all machines without machine visit.
- RTK corrections for all GNSS rovers and machines on site.
- No radio interference causing range limitations on site.

Measure



Applications

- Measure points, lines or arcs in one step with immediate graphical representation.
- Apply codes and attributes per point. Capture images for points of interest.
- Advanced automatic logging by distance or time.

Benefits

- Create 3D maps on the field as a basis for road construction work planning.
- Store and share all necessary point information including images.
- Improve speed of topographic surveys.

Stakeout



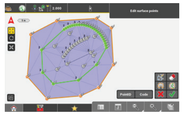
Applications

- Select reference points, centre lines, parallels or arcs directly from the map.
- Apply horizontal and/or vertical offsets, including stationing.
- Stake out points with use of a reference line.
- Clear colour-coded results shown for the applied tolerances checks.

Benefits

- Intuitive and simple element selection from the map for staking out.
- Rebuild and extend incomplete structures.
- Better orientation on site using reference to a line.
- Increase accuracy and reduce human errors.

Volumes & Surfaces



Applications

- Advanced automatic logging to densify the surface.
- Add breaklines to the surface for natural modulation.
- Calculate volume of a stockpile or pit.
- Volume comparison between surfaces or to an elevation.
- Apply compaction factor in relation to your material.
- Read out balanced site elevation.

Benefits

- Quick surface creation with a quad bike or a 4 wheel drive vehicle.
- Accurate and flexible volume calculation, independent of size, shape or material.
- Balance out Cut & Fill for optimised material and machine usage.
- Monitor the ongoing progress of your earthworks.

Cut & Fill



Applications

- Check actual surface against design surface or elevation.
- Cross and long section view for foreman application.
- Surface coverage with colour-coded Grid Logging.
- Indicated machine guidance for Dozer and Scraper machines.

Benefits

- Optimise material savings by checking sub-ground elevation.
- Better orientation using Cross and Long section views.
- Easy identification of areas for adding or removing material.
- Save costs by using the same positioning solution for On and Off machine use cases.

Roading



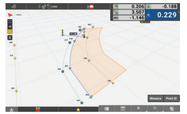
Applications

- Accurate stakeout of road design including points, road lines, cross sections and cross slopes.
- Cross section view for better visibility and orientation.
- Quickly adapt on design changes with hold of cross slope or applying horizontal and/or vertical offsets.
- Create cross sections for road profile checks.
- Road model creation from reference data.

Benefits

- Ensure high quality of constructed road.
- Efficiently stake out road design.
- Create accurate road models and share them with the machines.

Slopes



Applications

- Cross section view for better checks on a defined slope.
- Mark the design slope by installing a board onto two pegs.
- Find the daylight line where the slope intersects with the existing terrain.
- Find the daylight point where the line intersects with the existing terrain for pile ramming or drilling.

Benefits

- Easily find and mark the slope area for the excavation works.
- Guide a Drilling or a Piling machine to the daylight point.

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