

Leica iCON build

Custom-built solutions for building construction

New
Features



Leica Geosystems intelligent CONstruction.

Whether you construct buildings, roads, bridges or tunnels, you benefit from intelligent CONstruction. Leica iCON is more than a new product line or software package, it enables you to enhance your performance, and increase your profitability through perfecting your construction workflow.

Understanding construction demands outstanding solutions:

- Custom-built
- Complete
- Straightforward
- High performance

When it has to be right.

Swiss Technology
by Leica Geosystems

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Leica iCON site
Brochure



Leica Builder
Brochure



Leica Rugby 800
Brochure

For more information on Leica iCON products and services, please visit:
www.leica-geosystems.com/icon

Leica Geosystems AG
Heerbrugg, Switzerland
www.leica-geosystems.com

- when it has to be right



- when it has to be right



Leica Geosystems intelligent CONstruction

Enhancing your performance

Fully understanding construction carried us beyond the ordinary. Leica iCON is more than a new product line and a software package, it enables you to enhance your performance, and increase your profitability through perfecting your construction workflow.

iCONstruct

Tailor-made hardware and software solutions for positioning and measuring tasks on site.

- Custom-built
- Straightforward
- Extendable
- Interchangeable



iCONtrol

Provides you with a comprehensive portfolio of powerful machine control solutions that communicate seamlessly with your iCONstruct sensors on site and office software.

- Intelligent and flexible control system for construction machinery
- Reliable and seamless sensor communication
- Streamlined workflow & data handling



icon

intelligent CONstruction

iCONSult

An extensive support network, with clear guidance on intelligent CONstruction benefits to grow your business.

- Worldwide network
- Personal service
- Professional consultancy



iCONnect

Offers easy data transfer from office to site and machine, remote support for operators on the machine, and basic fleet management functionality.

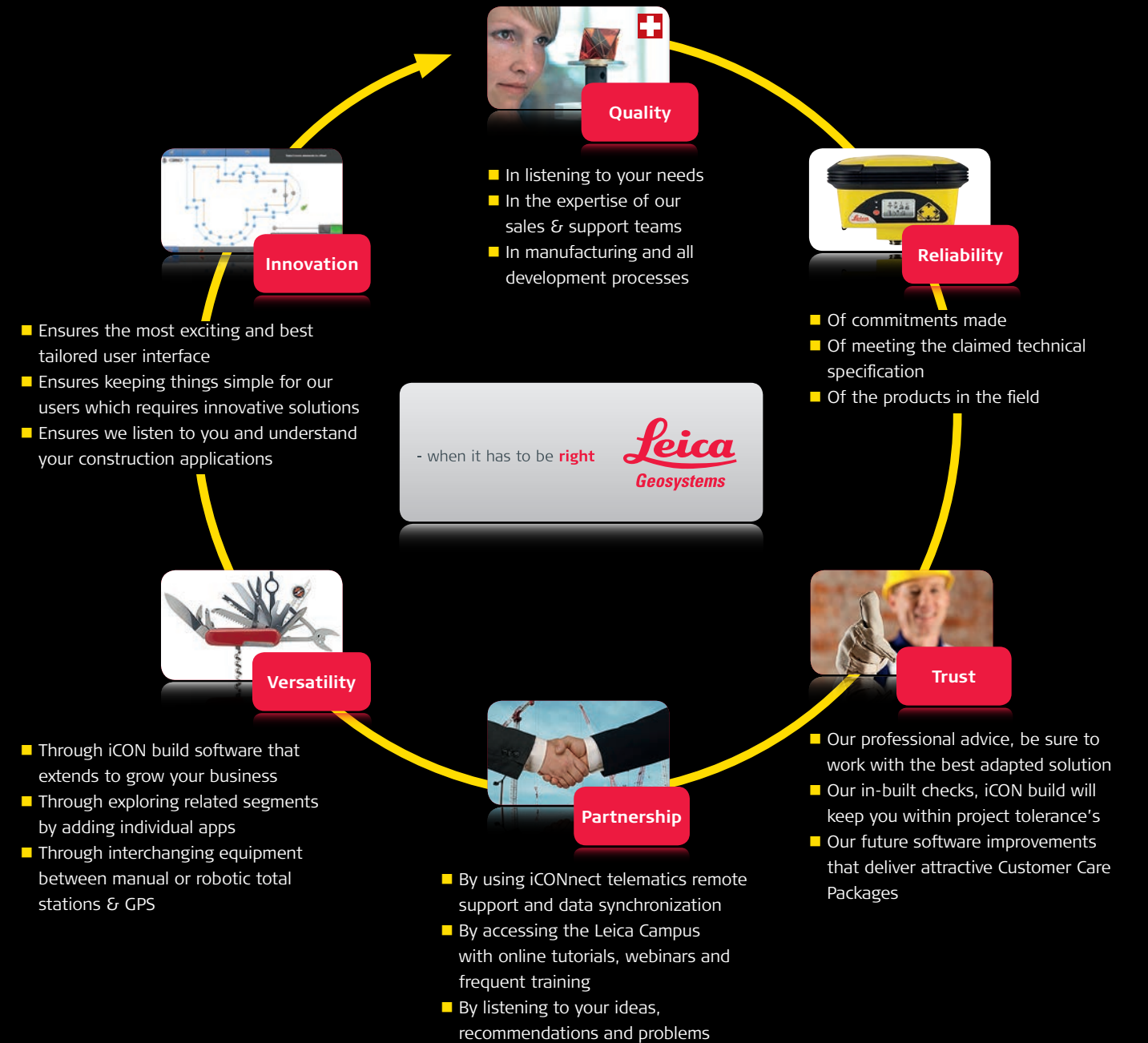
- Simplifies work processes, saving time and cost
- Instant guidance and checks
- Real-time data guarantees accurate jobs
- High productivity



Leica Geosystems

Your trusted partner

A site only works if all parties involved can expect professionalism in the execution of the individuals' tasks - resulting in strong partnerships. To ensure that Leica Geosystems fulfils highest expectations and is chosen as your partner, we continually focus on six areas.



Understanding construction.

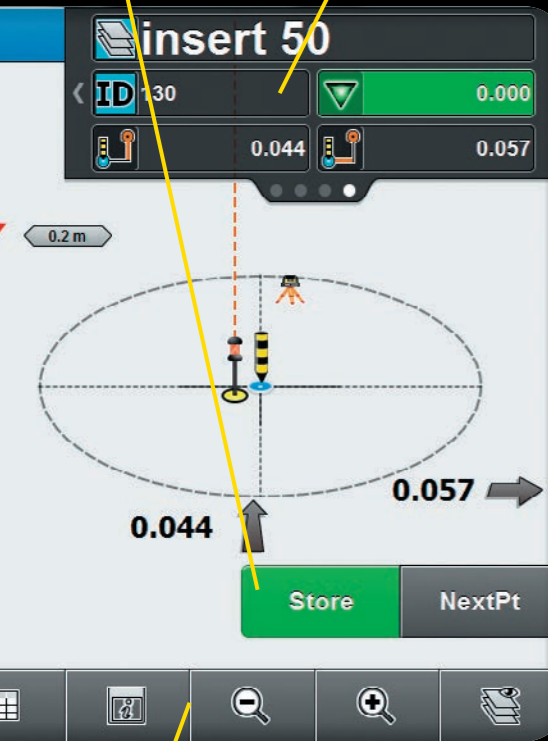
Leica iCON build

Profit from your investment

Leica iCON build

Straightforward software design

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



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

Tie in with the iCON world

iCONnect

Learn how to increase effectiveness: "be quick" plus "be safe"

iCON telematics connects the office to iCON build on site.



- Quick:**
- Send design changes to the field to make immediate progress
 - Record as-built data and report back to office or inform pre-fabricating sub-trades
 - No physical transport of digital data, all in real-time

Safe:

- Always work with the most up-to-date plan data
- Remotely & online support your field crews
- Avoid site re-visits: let office verify captured data before leaving site

iCONtrol

Learn how to extend your business



- iCON built extendable to civil engineering applications: no need to learn extra software
- iCON robots ready for machine control: no need to invest in additional equipment
- Hot swap features to change between one-person and machine control mode
- Simple upgrade mechanisms



Mike Prascsak, Frazier of Lancaster, California USA

Project: Construction sub-tractors
Application: Standard layout tasks



Jonas Nielsen, owner of JN Gravning, Denmark

Project: Preparing the terrain for a large house-building project
Application: Stake out



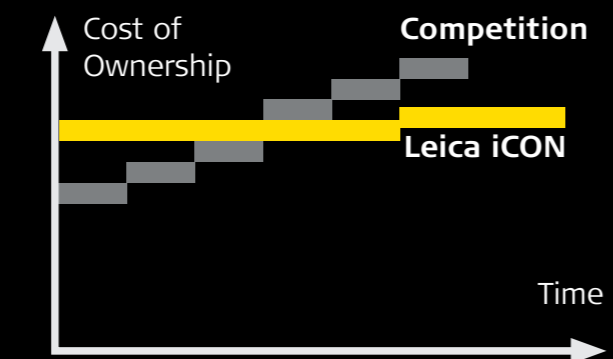
Craig Poortinga of Walrite LLC Colorado Foundation Contractors, USA

Project: Construction concrete footings
Application: Layout

"On one recent project, a 30,000 square-foot building, we had a total of 1027 points to set. That includes footing edges, pier locations, bolt locations, and one man working with the robot," says Prascsak. "Previously, that would have taken three days with a two-man crew."

"Where technologically based measuring equipment is concerned, in just a couple of years I have moved from absolutely nothing to a two-man manual Leica Builder R200M solution and recently to the most advanced equipment in the segment; the motorized Leica iCON robot 50 total station," says Nielsen.

"It's a daily saving for me," Poortinga says. "I'm not only saving on those parts of the job they don't need to do anymore, but I can have them focus on other parts of the job that make it better. Instead of having three guys together to do a layout, one guy can do that while the other guys focus on the other details of the job, such as putting foundations together and making sure we aren't missing the drops."



High quality, lowest cost of ownership
Leica iCON with its high quality manufacturing and a range of Customer Care Products, ensures significantly reduced downtime. Periodic preventative maintenance will maximize productivity through training and innovative software improvements. Leica iCON offers the lowest cost of ownership and highest residual value.



Learn how iCON build pays off

The iCONstruct 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.

iCON builder 60
High-end manual total station, running iCON on color touch screen.

Leica iCON robot 50
Mid-range robotic total station with one-button operation.

iCON robot 60
High-end robotic total station with superior technology and iCON onboard.

Leica Builder Series
Intuitive, powerful and scalable series of total stations for routine construction tasks on site.

Leica iCON CC65/66
Rugged, mobile tablet PC with enhanced connectivity and functionality.

Leica iCONstruct field software
Core central interface to all iCON-struct sensors and devices with unmatched simplicity but no compromises on functionality.

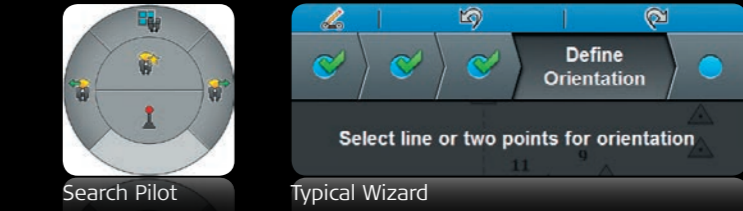
Leica iCON CC55
Lightweight, handy PDA for easy and efficient field work.

Leica iCON gps 60
Versatile smart antenna for multi-purpose positioning tasks.

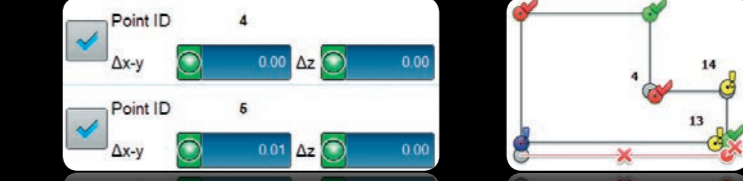
Leica iCONstruct office software
Data preparation and verification of simple and complex project plans.

Learn how to gain productivity with iCON build

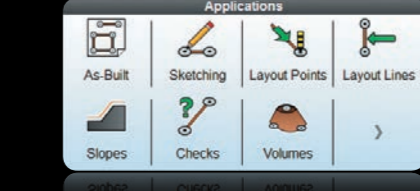
- One software solution: covers all your measurement tasks
- Learn only once: iCON build user interface works with all the iCONstruct equipment, both GPS and total stations
- Speed up: get familiar with simple and intuitive software in minutes
- Focus on the job: let built-in intelligence guide you to results



- Do it right: color coded warning system forces to keep tolerances

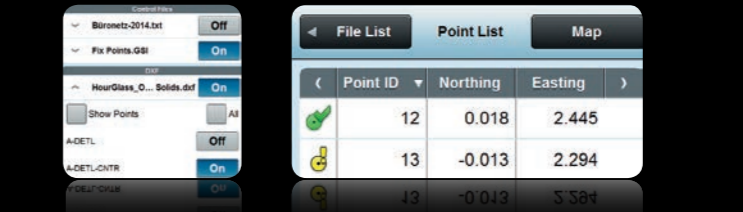


- More performance: add individual apps any time



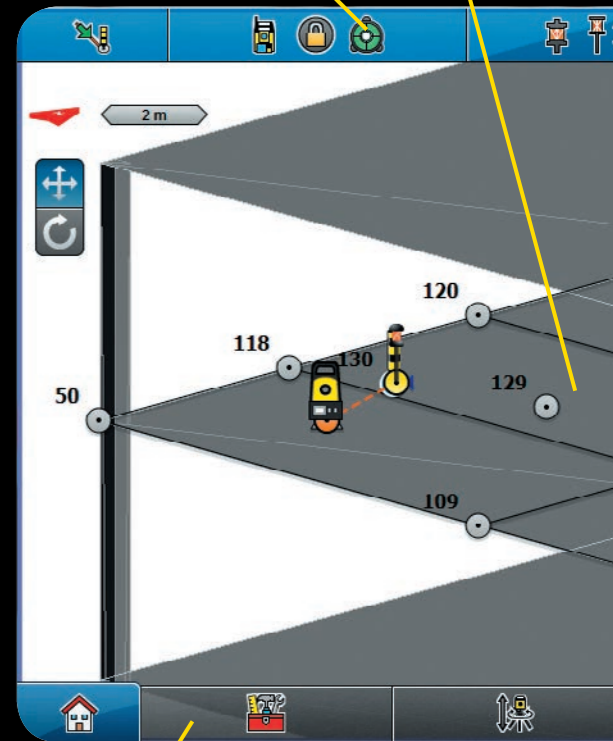
Learn how to manage your data flow

- DXF direct: import DXF files with no need for prior conversion in the office
- DXF "clean-to-field": eliminates unused data
- Point List: structures points per work step
- MapOPS: treat layers and files the same way



Status Bar +
Clear status information PLUS shortcuts to most frequent tool

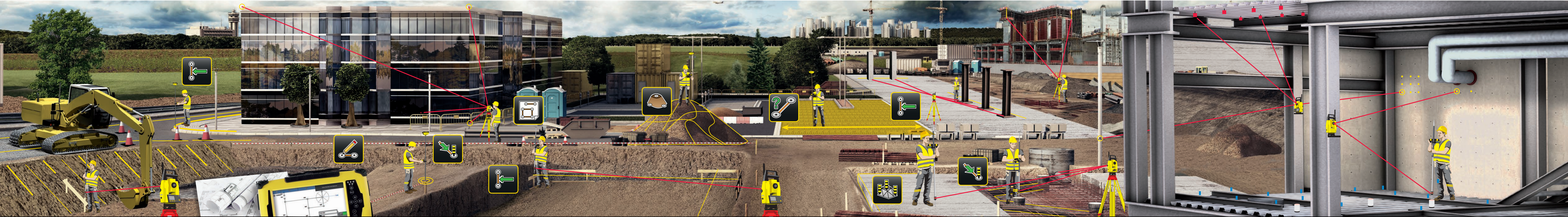
IntuiNav +
Intuitive icons, traffic light color codes and wizards for secure decision making. Straightened map via Split Screen and 3D graphics for clear data representation



Tool Bar
Contains most relevant tools and functions tuned per application

Leica iCON build

The complete solution for all positioning and measuring tasks on site



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

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



Sketching
Applications

- Point Pilot for fast and intuitive input of plan dimensions
- Create points, arcs, lines, anchor bolts, patterns etc. within seconds

Benefits

- Easily replicate digital blueprints
- Fix incomplete data in the field by adding missing structures
- Immediate response to changes on site
- Update plans to reflect true situations



Layout Lines
Applications

- Lay out control lines, parallels, perpendiculars or arcs and align structures in relation to them
- Apply horizontal and vertical offsets
- Stake out strings to mark elevation for curb reference

Benefits

- Aligning columns and anchor bolt patterns easy and fast
- Simply rebuild and extend incomplete structures
- Monitor offset value to speed up form work erection
- Repeatable positioning of profile boards and precise transfer of alignments eliminating risk of board damage



Volumes
Applications

- Calculate volume of a stockpile or pit, comparison between surfaces or to the elevation
- Apply compaction factor in relation to your material
- Read out balanced site elevation

Benefits

- Accurate and flexible volume calculations, independent of size or shape
- Calculation of truck loading considering compaction factors
- Balance out Cut & Fill for optimized material and machine usage
- Monitor ongoing progress of earthworks



Slopes
Applications

- Mark the daylight line on original surface
- Define grades for excavations
- Install batter boards as slope indicators on embankments
- Indicate inclination for foundation piling

Benefits

- Simple definition of slopes in %, degree or ratio in the field
- Graphical representation in top and cross-section view
- Secure navigation to correct elevation and position in sloped terrain

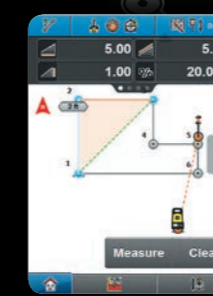


Checks
Applications

- Check distances (horizontal, vertical, sloped)
- Check grades and angles
- Check area and perimeter in 2D and 3D
- Info panel shows all results at a glance supported with graphics in map

Benefits

- Verify on site correct placement of walls, formwork, columns, pipes, etc.
- Decide in the field based on facts rather estimates
- Precise input for pre-fabrication of manholes, ventilation systems, windows or orders of sand, pavement, etc.

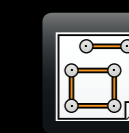


Points & MEP Layout
Applications

- Simply lay out sketched or imported points directly from the map
- Intuitively navigate to selected hanger, slit, insert, conduit, outlet, etc.
- Auto-select next point from list or the nearest from current location

Benefits

- Optimized in/out, left/right display via split screen and viewing options
- Color code clearly indicates quality of laid out points
- Integrated tolerance checks increase precision and reduce errors
- Important point info available as code in info panel, e.g. "3/4" insert"



As-Built
Applications

- Capture points, lines or arcs in one step with immediate graphical representation
- Apply codes per point and store measurements automatically
- Unique Start/Stop line feature accelerates line creation

Benefits

- Reduce site visits by visually verifying the measurements in the field
- Assign as-built data to individual layers while collecting points
- Back-up your control lines
- Store accurate 3D data as base for any CAD/BIM office operation or architectural planning

