

# Leica iCON build

Custom-built Solutions for  
Building Construction



- when it has to be **right**

**Leica**  
Geosystems

# 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

Providing you with perfect communication between construction personnel on site and our comprehensive portfolio of machine control solutions.

- Suitable for small to large sites
- 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

Connect your system to a superior network. Wireless data transfer, easy, fast and secure.

- Instant guidance and checks
- Real-time data guarantees accurate jobs
- High productivity
- No delays





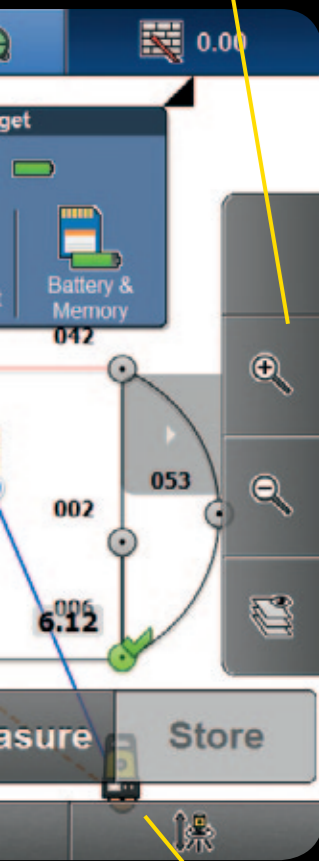
## Leica iCON build

### Profit from your investment

## Leica iCON build

### Straightforward software design

- **Map OPS**  
Intelligent map controls for data and zoom



- **MaxMap**  
Get the most of your screen with transparency

#### As-Built:

- Create as-built checks of structures for your records. Collect points, lines or arcs in one go with immediate graphical representation.
- The unique Start/Stop Line function automatically draws a line directly using your measurements
  - Improve data management by assigning codes to your points (each code is stored as one layer)
  - Make as-built checks using Shift function, even when points are not directly accessible



#### Volumes and Cut & Fill:

- Measure surfaces and calculate volumes or check elevation.
- Extend your business range by adding more functionality
  - Check grade and elevation of poured concrete or sub-grade to optimise material savings
  - Calculate accurate volumes of soil excavation – guessing truck loads is a thing of the past
  - Measure surfaces day-by-day and monitor progress



#### 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 customise applications according to your needs.



#### Advanced user interface with integrated hardware

iCON build is designed to increase your productivity and enable you to adapt to any given scenario on site. Whether you precisely layout formwork with total stations or roughly mark a building pit using GPS, iCON build is developed to seamlessly integrate with any of the iCONstruct sensors or controllers.

Using the same, interchangeable user interface means:

- You only need to learn its functionality once resulting in less training, increased motivation, keeping your investment to a minimum
- The ability to exchange hardware between various construction sites, projects and site personnel maximises your flexibility and reduces downtime

#### Exceptional Layout Functionality

The unique features and unmatched graphical support within iCON build allow you to carry out specific tasks on site in an easier, straightforward way. Laying out profile boards, control lines, branch arcs, bay windows, point patterns, offsets etc. becomes a simplified process.

- If you simply need some parallels or perpendiculars as a base for anchor bolts of steel columns, you don't need to call the site engineer, simply do it yourself in the field
- Quickly rebuild damaged curbstones of driveways or parking lots, there is no need to use pegs and string or level manually
- Obstacles on site, such as site machinery, are a thing of the past. Before you start working, simply mark a control line, choose the start, mid and end points of your lines to suit you



#### Superior One-Person Operation

With the Leica iCON robot 50 or iCON GPS 60, combined with the iCON build software, you can carry out the work yourself using the pole in one-person mode, allowing you to lay-out formwork, check position of steelwork etc. using the remote capability.

This means:

- You no longer need another worker to hold the rod to stake out, one-person operation allows your construction team to focus on their assigned tasks
- Working alone, you achieve more accurate results in less working time and trust the tasks you do will be correct



#### 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.



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



**Leica iCON robot 50**  
One-person operation, saving time and increasing productivity when carrying out layout tasks and as-built checks.



**Leica iCON CC60/61**  
Rugged, mobile tablet PC with enhanced connectivity and functionality.



**Leica iCON gps 60**  
Versatile Smart Antenna for multi-purpose positioning tasks.



**Leica iCON CC50**  
Lightweight, handy PDA for easy and efficient field work.



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

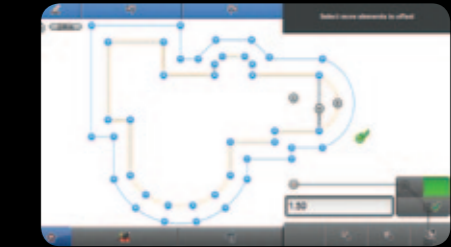


**Leica iCONstruct field software**  
Core central interface to all iCONstruct sensors and devices with unmatched simplicity but no compromises on functionality.

Improving your performance with intelligent software applications, workflow and an innovative user interface, iCON build's intuitive user interface provides you with highest accuracy and flexibility for your daily tasks.

#### Sketching:

- Build your digital copy of the blueprint within seconds. Extend and modify existing data to the reality on site.
- Point Pilot and trace functions for direct graphical data entry – there's nothing faster
  - Powerful pattern functions for anchor bolt and bay windows
  - Add lines & arcs to easily complete the blueprint
  - Apply offsets of the entire plan to define excavation lines in one go
  - Use Projections ideally for backing up the building corners

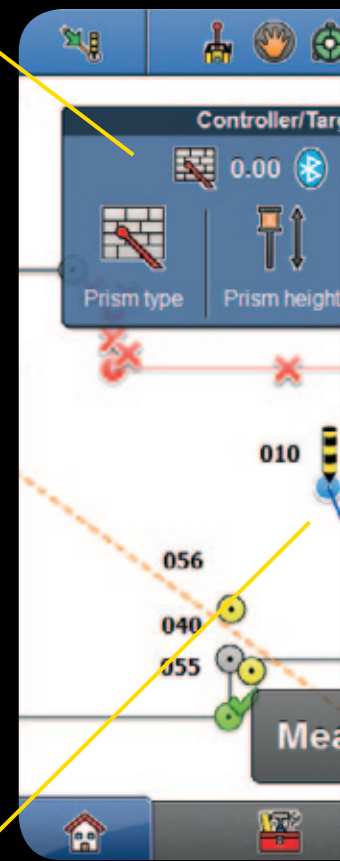


#### Layout:

- Simply pick points, lines or arcs for your layout from the map screen.
- Define any line or arc as a reference for your layout guidance information
  - Quickly add missing points, lines or arcs
  - Offset lines & arcs parallel, perpendicular or vertical
  - In-built tolerance checks are graphically displayed via green or yellow point icons
  - Use 2-tapes function in case no sensor is available
  - Clear navigation guidance ensures accurate and fast layout



- **Status Bar +**  
Clear status information PLUS shortcuts to most frequent tools



- **IntuiNav**  
Intuitive icons, color codes and wizards for safe navigation

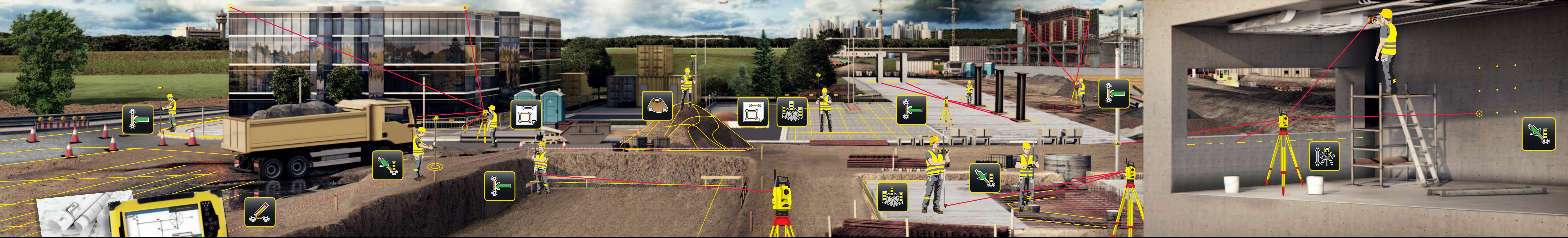
Understanding construction.

Understanding construction.



# 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.



### 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



### As-Built

#### Applications

- Measure 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



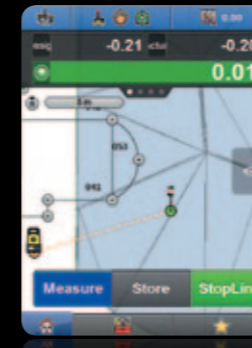
### Cut & Fill

#### Applications

- Check actual surface against design elevation
- Verify flatness and slopes of plots and footages
- Quick color coded cut & fill verification

#### Benefits

- Optimise material savings (e.g. asphalt) by checking sub-ground elevation and tolerances
- Immediate control of poured concrete in one-person operation
- Avoid drainage issues
- Control of driveway slopes



### Layout Lines

#### Applications

- Layout control lines, parallels, perpendiculars or arcs and align structures in relation to them
- Apply horizontal and vertical offsets
- Set-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 optimised material and machine usage
- Monitor ongoing progress of earthworks



### Layout Points

#### Applications

- Simply select sketched or imported points directly from the map
- Select any line as reference for line/offset display
- Colour code clearly indicates quality of layout points

#### Benefits

- Choose points directly from the map, no need to enter point numbers or scroll through lists
- Using reference lines contributes to better orientation on site
- Integrated tolerance checks increase accuracy and reduce errors



### Height Transfer

#### Applications

- Transfer height to any location on site
- Define finished floor level
- Place datum lines/meter marks

#### Benefits

- Mark and check elevations within one application
- Place datum lines/meter marks
- Easy and highly accurate transfer of elevation when faced with big height differences
- Error free height transfer, straightforward application guidance



# 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.



### iCONsult

Partnership is our commitment to you, around the globe, anytime, anywhere.

### iCONnect

Connect to a superior network, easy and fast.



#### Customer Support

Worldwide support network with hotline, web-based support, seminars, customised trainings and consulting service.



#### Product information at your fingertips

24/7 access through myWorld platform providing information and keeping you and your product portfolio up-to-date.



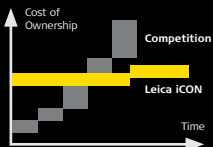
#### Customer Care Packages (CCPs)

Tailored service packages allow you to maximise the benefits from your investment.



#### SmartNet

Integrated 24/7 GNSS Network RTK and DGNSS service. Easy access to precise correction data. Network RTK users experience the best availability, reliability and traceability.



#### High quality, lowest cost of ownership

Proven quality of Leica Geosystems solutions reduces your cost of ownership significantly.



#### Worldwide Service Network

Extensive support network and broad service offerings include certification services, repairs and product upgrades.

Understanding construction.



### 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.



**Total Quality Management – Our commitment to total customer satisfaction.**

Ask your local Leica Geosystems dealer for more information about our TQM program.

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