Leica iCON site

The complete solution for all positioning and measuring tasks on site





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.



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
- RTK corrections for all GNSS rovers and machines on site. No radio interference causing range limitations on site.

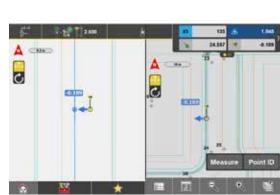
Measure



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.

- 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.



Applications

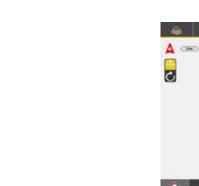
- Select reference points, centre lines, parallels or arcs directly from the map.
- Apply horizontal and/or vertical offsets,
- including stationing.
- Stake out points with use of a reference line. Clear color-coded results shown for the applied

tolerances checks.

Leica iCON gps 30

Compact and lightweight

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



Applications

Advanced automatic logging to densify the surface.

Volumes & Surfaces

- 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

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.



Applications

- Accurate stakeout of road design including points, road
- lines, cross sections and cross slopes.
- Cross section view for better visibility and orientation.

Ensure high quality of constructed road.

Create accurate road models and share them

Efficiently stake out road design.

with the machines.

- Quickly adapt on design changes with hold of cross slope Find the daylight line where the slope intersects or applying horizontal and/or vertical offsets.
- with the existing terrain. Create cross sections for road profile checks. Find the daylight point where the line intersects Road model creation from reference data.

with the existing terrain for pile ramming or drilling.

Cross section view for better checks on a defined slope.

Mark the design slope by installing a board onto

Applications

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

www.leica-geosystems.com/icon



Leica iCON CC70 & CC80 Robust, extremely lightweight field controllers with multitouchscreen and versatile communication capabilities.



Leica iCON gps 70 T GNSS Rover featuring permanent tilt compensation, resistance to magnetic interferences and calibration free operation.



Versatile SmartAntenna for multi-purpose positioning tasks.



Leica iCON iCR80 High-end robotic construction total entry-level GNSS RTK rover. station with unmatched automated-aiming, lock and re-lock

technology and iCON on board.



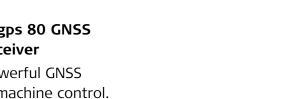
Leica iCON iCR80S

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



Leica iCON gps 80 GNSS

machine receiver Versatile, powerful GNSS receiver for machine control.



- when it has to be **right**



