

# Leica iCON site

## Custom-built solutions for Site Construction

### Leica Geosystems – when it has to be right

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems, part of Hexagon, creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, 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.

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at [hexagon.com](https://hexagon.com) and follow us @HexagonAB



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Leica iCON site for foremen



Leica Geosystems Intelligent solutions



Leica iCON build



**Leica Geosystems AG**  
Heinrich-Wild-Strasse  
9435 Heerbrugg, Switzerland  
+41 71 727 31 31

- when it has to be **right**



[leica-geosystems.com](https://leica-geosystems.com)



- when it has to be **right**





# 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.

# 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.



### 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.



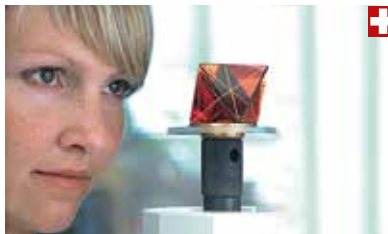
### Innovation

- 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



### 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



### Quality

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



### 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



### Reliability

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



### Trust

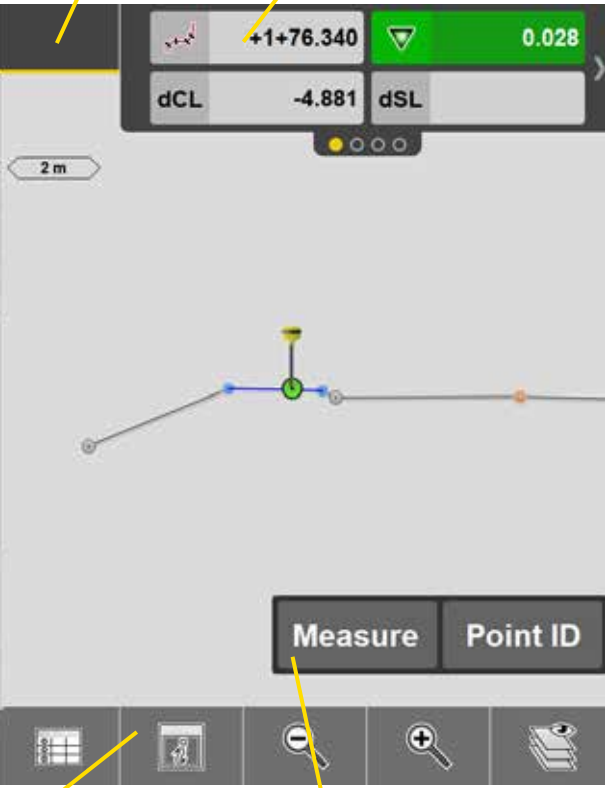
- Our professional advice, be sure to work with the best adapted solution
- Our built-in checks, iCON site will keep you within project tolerances
- Our future software improvements that deliver attractive Customer Care Packages (CCPs)



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.



**Mikael Bertilsson, Owner and Foreman at Gotene Grävtjänst, Sweden**

**Project:** Water and sewer project, 110 km.  
**Application:** Stake-out and documentation.  
“As a company, we have become more flexible and can provide a complete solution when we do stake-out, regular checks and calculate volumes. It's very easy to get started with the equipment and it provides us with flexibility as a company. I can be on location when needed and always feel a step ahead on projects”.



**Hick Group, New Zealand: ICG60 as rover and entry-level machine guidance solution**

**Project:** Road Construction in New Zealand  
**Application:** Leica iCON site foremen solution  
“The ability for us to use systems on-machine as well as in the field and the diversity that we can incorporate allows us to, instead of switching machines section to section, take that tablet system out of one machine and transfer it to another. The operators can take it out of the machine and use it as field rover to get an understanding of what they are doing outside the current alignment.”

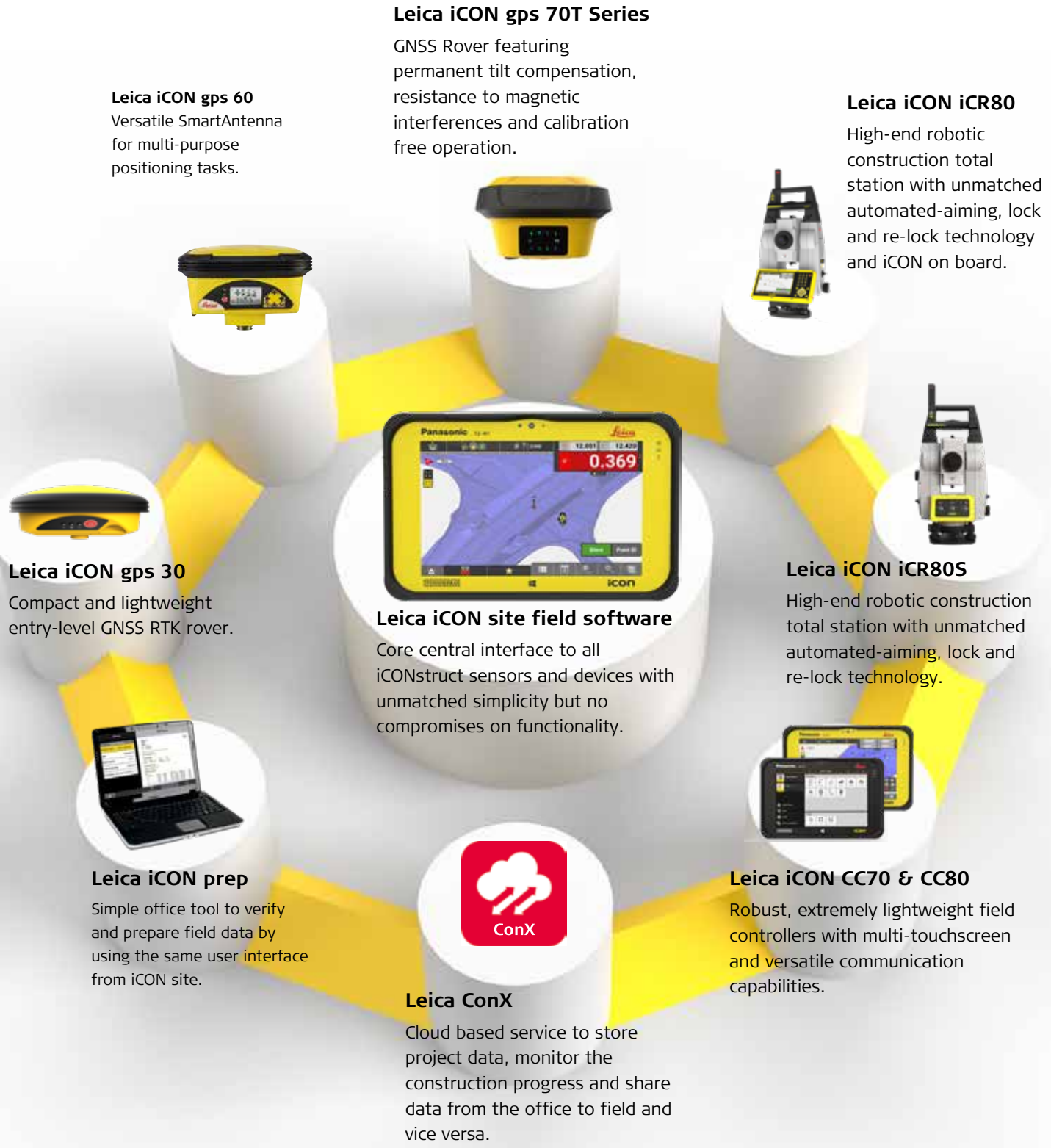
The ability to look at the split screen, 3-dimensional images of the job is invaluable”.



**Warren Holmes, Survey and Machine Control Specialist at Construction Laser Inc.**

**Project:** Road Construction in USA  
**Application:** Leica iCON site with iCON gps 70T  
“iCON site makes life easy. Whether just doing design layout or adjusting your field activities and layout based on changing conditions.  
In this particular instance, I like to use the “auto logging” function. It stores a point every time the 70T tilt rover pole tip is static for 0.5 seconds.  
So...you just walk, and pretty much gently set the pole tip down like a hiking stick. No plumbing up, no waiting...just walking. Done.  
Measure the existing curbs using iCON gps 70T rover, create the surface model and load it on the Dozer knowing that the finished surface will match the curbs perfectly”.

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.



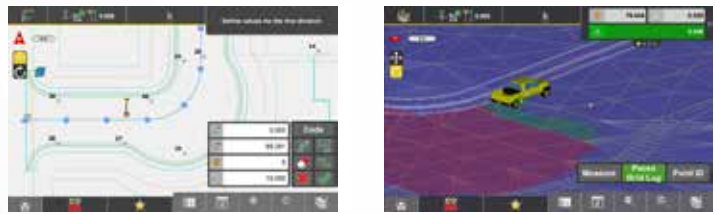
## Leica iCON site Straightforward software design

Gain productivity from iCON site.

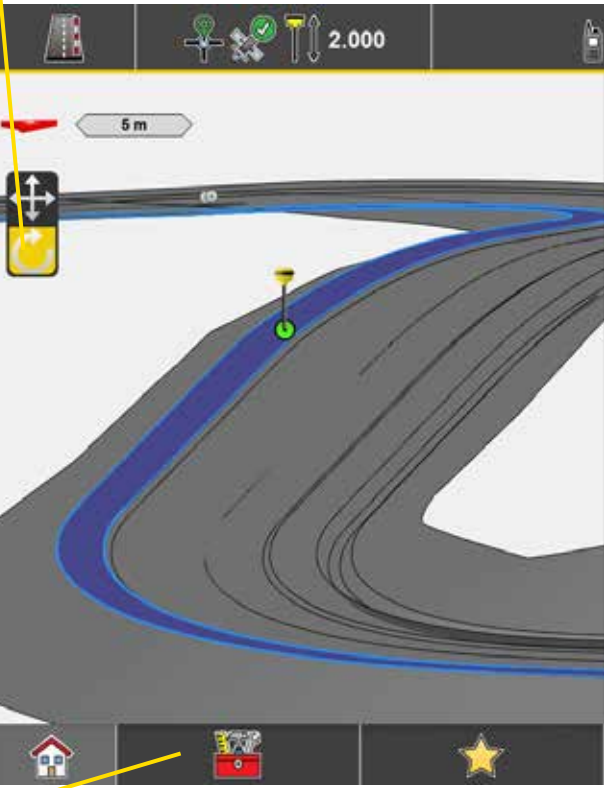


**Designed for site professionals such as foremen, site supervisors, grade checkers, and machine operators who need to efficiently perform measurement tasks on site.**

- 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

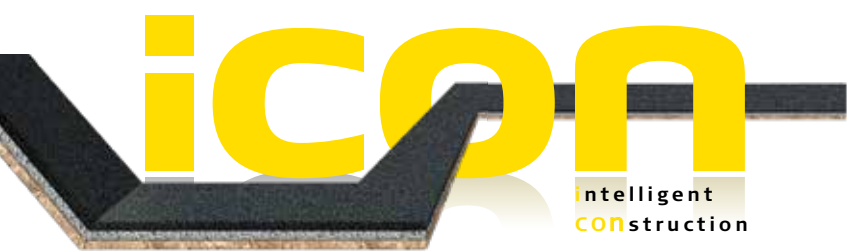
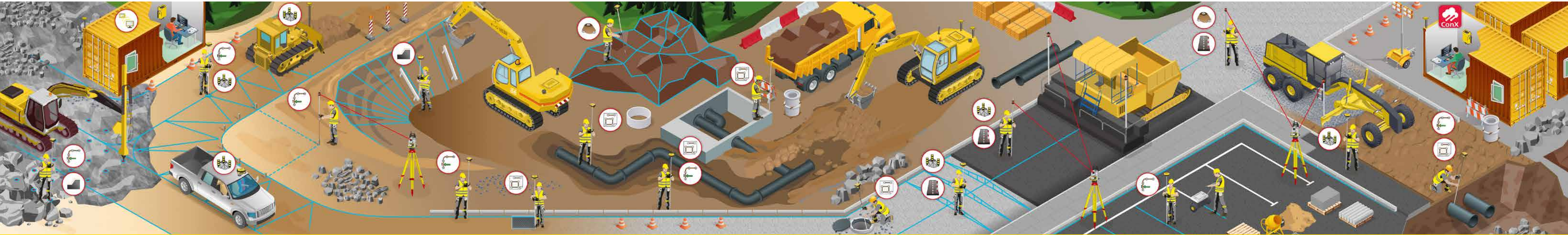


**Tool Bar**  
Contains most relevant tools and functions tuned per application



# 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.

[www.leica-geosystems.com/icon](http://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.