Leica Geosystems iCONtrol

The complete solution for all machine control tasks on site

With Leica iCON, you have the accuracy and performance you need for all your construction tasks. iCON combines best-in-class positioning instruments and machine control systems with powerful application software tailored for construction and the latest communications technology. They work together to ensure you handle on-site tasks more efficiently than ever before and get the high-quality results you need.

Successful on site measurement, whether checking, setting-out or using machine control systems depends upon the preparation and integrity of the design data. The software application used to prepare design data must maintain this integrity whether it comes in the form of a paper plan or a complete 3D digital model. Leica iCON office, a complete data preparation, editing and reporting software package can fulfil this requirement and much more.

iCONstruct
iCONstruct is the perfect support for the on-site machine control solution. The same design data is used for machine operations and for the iCONstruct field solution. This means preparing data only once by using Leica iCON office. iCONstruct field enables measurement functionality in an easy-to-use and intuitive way to site personnel.
- Bring the designed model to the field by setting-out Points or Lines
- Check an actual surface against the design with the Cut & Fill app
- Calculate the volume of a stockpile or pit to know the amount of truck loadings
- Compare constructed vs. designed model by using the As-built app

SP Technology
Contractors can now boost their productivity and performance even more while benefiting from new ways to use existing equipment. The innovative SP Technology opens new opportunities for dozers:
- Combining ease-of-use and unrivalled flexibility
- Highest precision at the fastest speed
- Faster results without losing accuracy
- Work at higher speeds

By using inertial guidance with the most responsive hydraulic control on the market, GPS performance is significantly enhanced. Machines equipped with SP Technology have reduced need for rework and increased uptime during poor GPS/GLONASS coverage or temporary interrupted availabilities of correction signals.

Bulk Earthworks
In the process of shaping a landscape and preparing it for a road project, the efficiency in using heavy equipment like bulldozers, excavators and material is of key importance. The flexibility of the iCONtrol solution provides a high return on investment in typical applications such as:
- Site development
- Construction of embankments
- Land recontouring
- Cut & Fill operations

Leica iCON grade 32/42 offer guided as well as automated solutions and Leica iCON excavate 31/41 offer guided solutions.

Filling & Road Preparation
For the applications of cutting to subgrade and the building (filling) process through different sublayers of material on a road construction process, the iCON grade solution offers significant time and cost savings. SP Technology speeds up grading with a dozer, helping you spread material for sub formation layers faster and more precise. For the preparation of layers, a grading solution with customisable views and flexibility offers end users high efficiency and use of their machinery.

Benefits with iCON grade 32 & 42
- Flexibility to work with 2D or 3D
- Support for multiple data formats
- Consistent user interface between dozers and graders

Trenching & Residential
Trenching – a standard application
- Any application where there is a buried utility or a need for controlled water flow (water and sewage, electricity, gas, communications)

Basement – a standard application
- Applications where depth and slope can be controlled from a laser or a reference point
- Setting up a housing project without having to depend on traditional set-out processes
- Doing the difficult blind cut applications with full control of your bucket tip

Leica iCON excavate 31 & iCON grade 32 offer flexible configurable solutions for these typical applications.

Finishing layers
Fine grading work for roads, parking lots, places, airport runways etc. is usually done with a grader. The Leica iCON grade 42 3D grading solution provides highest precision and flexibility for fast, high quality results.
- Smooth, highly accurate grading to 3D project design
- Easy operation with full 3D graphical guidance in the cab

For paving applications with high precision and productivity use Leica PaveSmart 3D.
- No stringlines or stakes needed – significant time and money savings
- Greatly simplified jobsite logistics
- Precise 3D machine control saves material and improves your paving results

Leica iCON telematics
The perfect tool for office to field communication. You can manage your fleet remotely via the iCON telematics web portal. Having the latest design data in the field is essential for site performance.
Applications:
- View: Provides remote support functionality. View and operate the machine screen remotely from the office.
- Sync: Create projects on the web portal and assign various machines from your fleet. Upload the latest design data to all machines used in your individual project.
- Track: Keep track on your fleet. Generate individual or periodic reports.

www.leica-geosystems.com/icon

Leica iCON excavate 31
2D Excavating solution
Full 2D functionality presented on multicolour panel. Simple and intuitive user interface which provides ease-of-use.

Leica iCON excavate 41
3D Excavating solution
Full visual guidance of the bucket – see the job as you want. Menu keys give the operator an easy overview of functions.

Leica iCON grade 32
2D Grading solution
Easy monitoring of the blade position. Main function keys for easy operation.

Leica iCON grade 42
3D Grading solution
Fully customisable 3D views of your machine and job site. Auto/manual information is presented on the screen.

- when it has to be **right**

Leica Geosystems

799490en - IX.12 - gallecka