

Leica iCON grade

Intelligent grading solutions



leica-geosystems.com



- when it has to be **right**

Leica
Geosystems

Leica iCON grade – For ultimate flexibility

The Leica iCON grade solutions can revolutionise your construction process. They not only boost your productivity and performance, they also offer a level of flexibility and upgradeability not available in other systems on the market today.

Leica iCON grade can dramatically increase machine utilisation, productivity and optimise material usage on any earthmoving and fine-grading project.

Leica iCON grade is modular and scalable to fit any customer need, from simple cross slope control to advanced total station or GNSS guidance. With the new MC1 software for 3D grade solutions, all relevant information such as stationing, height and slope indicators, logging etc. are placed in the run screen for easy navigation and operation.



One for all

Digitalise your construction site with one 3D software, MC1, and one hardware platform. Switch from one machine to another and build complex designs with simpler workflows and less downtime.



Easy to use

Simple, clean and intuitive user interface with interactive user design adapted to your needs. The assistive technology with wizards and help functions help you drive the dozer or grader and get more work done with high quality and less rework.



Robust design

With robust design, the Leica MCP80 panel and the Leica MDS series docking station are prepared for the harshest environment and are truly resilient for the heavy construction industry. Interchangeable between several heavy construction machines.

Leica iCON grade – CoPilot

1D **automatic** dozer blade control



- Reduce complexity
- Eliminate washboard surfaces
- Get accurate results

An easy-to-use solution that allows operators to set a desired slope/grade reference, and automatically hold that slope/grade without the need for lasers, masts or GNSS. By automatically adjusting the blade position, CoPilot enables operators at any experience level to easily achieve and maintain a smooth surface, slope or grade without the need for additional passes and re-work, reducing fuel and labour costs.

Leica iCON grade iGD2

2D **automatic** control of slope and height



- Dedicated grade and slope adjustment keys
- Auto/Manual control mode selection with optional lever-mounted controls available

The Leica iGD2 solution provides automatic control of both slope and elevation. When using two masts and laser sensors you can work independently of slope direction.

Leica iCON grade iGD3

iGD3 **single** GNSS/TPS



The iGD3 3D dozer system opens new dimensions in earthmoving and fine grading. Work independently and accurately, anywhere on the project design guided by GNSS or total station.

Leica iCON grade iGD3

iGD3 **dual** GNSS



The dual GNSS antenna solution for dozers offers you maximum speed, precision and flexibility. Exact calculation of the blade tilt and angle allows you to move dirt from pass to pass precisely, minimising rework.

Leica iCON grade iGG2

iGG2 **automatic** control of slope and elevation



- Agile and easy set-up with single or dual laser receiver
- Automatic side shift with new trisonic sensor

The iGG2 system is easy to upgrade. Start with a height control solution using laser receivers or an ultrasonic tracer and upgrade your 2D solution to a complete 3D solution with a robotic total station by just adding the MCP80 panel, MC1 software and the iCON robotic station.

Leica iCON grade iGG3

iGG3 **single/dual** GNSS or **single** TPS



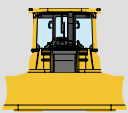
- Accurate and fast grading
- Auto/manual information directly on the screen
- All relevant information in the run screen

The 3D solution for motor graders lets operators utilise the true potential of their machines for a wider range of applications, by moving materials anyway they want. The dual antenna configuration ensures correct calculation of blade position regardless of machine position.

Leica iCON grade – customised configurations

Modular, upgradable and scalable

2D Configurations



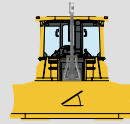
iGD CoPilot



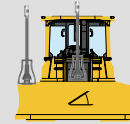
Laser & Slope Control



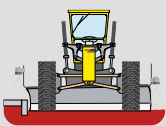
Dual Laser Control



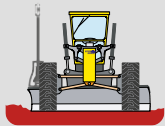
PowerMast Laser & Slope Control



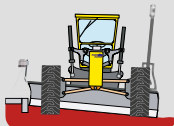
Dual Power Mast Control



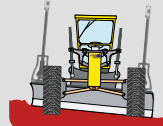
Sonic Tracer System



Laser & Slope Control

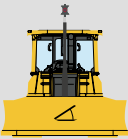


Sonic Tracer & Laser Control

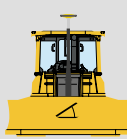


Dual Laser Control

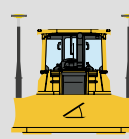
3D Configurations



Total Station Control



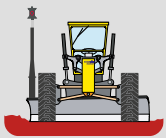
Single GNSS & Slope Control



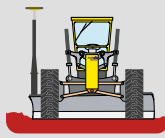
Dual GNSS & Slope Control



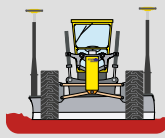
On-Cab Configuration



Total Station Control



GNSS Solution



Dual GNSS & Slope Control

2D Sensors



Slope Sensor / SP14 Sensor



MLS720 Laser Receiver



MLS820 Laser Receiver



TriSonic Tracer



UltraSonic Single Head Sensor

3D Sensors



CGA60 GNSS Antenna



iCON gps 80 GNSS Machine Receiver



iCON iCR 80



High Accuracy Prism

Providing new levels of flexibility and user convenience

- System is up and running in no time
- Rapid interchange of control panels between machines, giving you extra flexibility on site
- Easy removal of core components for overnight security
- Contact and cable-free connection to control panel
- Easy to re-configure from on-blade to on-cab configuration
- Easy upgrade from 2D to 3D GNSS or TPS configurations

Leica ConX – digitise your construction process in **real time**



Leica ConX – open, simple and user-friendly

Use Leica ConX to share project data with all relevant stakeholders. All manually or automatically measured points from machines or field surveyors can be collected to create 3D cut/fill maps that allow you to visualise project progress in real time.

Earthmoving productivity tool

Volumetric changes are presented in an easy-to-read dashboard for reporting of project productivity in the new earthmoving productivity tool. Volumetric changes are presented in an easy-to-read dashboard for reporting project productivity.

Seamless data sharing

Leica ConX supports Leica iCON site, Leica Infinity, Leica Captivate, Leica iCON office and Leica MC1 to ensure seamless workflows and full transparency about your construction project in real time.

Agtek integration

Full integration with Agtek for 3D model creation as well as advanced pre and post processing of data.

Key benefits

- **Transparency.** Visualise and validate data used and generated on site in 2D and 3D localised on interactive maps to collaborate and communicate with everyone on site. Share updates and corrections to reference model data in real time across the project to guarantee transparency and quick reaction to design updates.
- **Analyses and volumetric progress tracking.** All measured points from machines or field surveyors can be used to create surfaces that allow for surface comparisons for grade checking and cut fill analysis. Use as-built information sent back to ConX to create 3D cut/fill maps that allow you to visualise project progress in real time.
- **Remote communication.** Minimise operator downtime with remote real-time communication between office and machine for troubleshooting, on-the-fly training and setup without travel costs and delays.

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 and follow us @HexagonAB



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Intelligent Solutions Brochure



Leica ConX flyer



Customer Care Packages flyer