

# Leica GradeSmart 3D 3D Grading solution for dozers and graders



>Fast >Smart >Integrated

- when it has to be **right**

**Leica**  
Geosystems



# Move ahead of your competition with Leica GradeSmart 3D

Leica GradeSmart 3D is a Machine Automation solution for dozing and grading applications that gives you the edge you need on today's competitive job sites. Leica GradeSmart 3D is robust and easy to use, creating new levels of productivity, control, safety and utilisation.

With the choice of a 3D indicate or automatic solution, Leica GradeSmart 3D allows you to grade quickly, accurately, to budget, and on time – the first time.

It's a fast, smart and integrated 3D Machine Automation dozer and grader solution.

## The Smart 3D solution

Leica GradeSmart 3D can operate in either an indicate or automatic configuration, providing the operator with real time grade and project information. Cut and fill values against the required elevation are clearly indicated.

In an automatic configuration, the Leica GradeSmart 3D solution will move the machine's blade to the desired surface elevation in real time. The elevation is based on the design model inside the onboard computer, taking much of the hard work out of creating complex design surfaces.

As the design is based on an electronic model, you are not limited to flats or heights like you would be with a laser or conventional system. This allows more complex designs to be created.

The onboard computer uses GNSS or TPS information to carry out the relevant calculations, and then displays the selected project information in a clear and easy to read manner.

The integrated range of features and smart onboard tools provided by Leica GradeSmart 3D, means you can start work very quickly and improve productivity on your jobsite.

## The benefits

### Fast

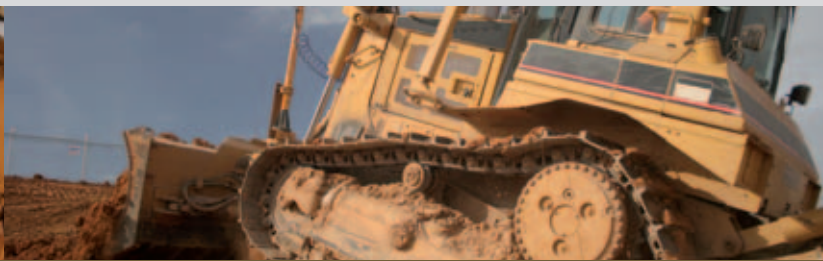
- Increased speed of operation - less stakes and checks reduces delays
- Minimise rework by doing the job right the first time
- Simple touch screen operation is fast and effective

### Smart

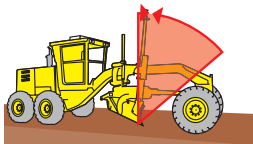
- Puts the plan on the machine allowing operators to be self directing
- Different configurations available to suit different job sites (Grader with GNSS, TPS or Dozer with GNSS, TPS or Indicate)
- Improves machine utilisation
- Easy data handling from office to machine
- Reduced labour costs

### Integrated

- Systems can be moved from machine to machine (e.g. Grader to Dozer)
- Leica 2D grader and dozer systems can be upgraded to Leica GradeSmart 3D
- Uses advanced Leica Geosystems GNSS technology for accuracy and reliability
- Compatible with a wide range of GPS/GNSS base station systems and Leica Total Stations
- One supplier, one integrated solution

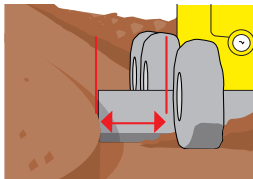


## The Leica advantage



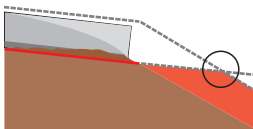
### Mast Tilt: Leica Unique Feature

Leica GradeSmart 3D compensates for changes in mast position, maintaining accuracy with blade roll.



### Side Shift: Leica Patented Feature

Automated control of the blade in lateral movement allows for accurate edges and designs.



### Hold X-Slope:

Allows the blade's position to be held constant across breaklines, enabling more accurate cutting of crowns and batters.

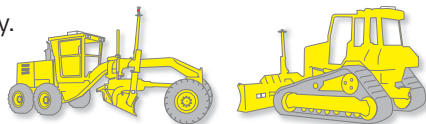
### • Hardware and Software:

A common hardware platform is used across graders, dozers and excavators. It features the latest GNSS or TPS technology, with Leica Geosystems' cutting edge positioning technology, SmartTrack.



### • High Performance:

Windows® XP embedded operating system provides higher performance and increased stability.



### • Ramp Function:

Allows you to start work without a design by creating surfaces on the fly.

### • Wide Compatibility:

Forward and backward compatible with Leica Geosystems Machine Automation laser and cross slope systems.

### • High Grading Accuracy:

Leica GradeSmart 3D offers high grade accuracy to meet even the most demanding applications. From Indicate to GNSS or TPS, Leica has accurate solutions to meet any job site's needs.

## Rely on Leica GradeSmart 3D for your construction work

Application	Leica GradeSmart 3D
Residential and commercial site developments	✓
Roads and highways	✓
Airport runways	✓
Golf courses	✓
Car parks	✓
Flat area work such as pads, slabs and footings	✓
Slopes, grades, embankments	✓
Projects with deviations and more complex design elements	✓
Coarse earthworks	✓
Rough grading to finish grading	✓

Asphalt, concrete or earth, shifting it or laying it. Whether you need simple laser height detection for excavators or need to control a concrete slipform paver to millimetres, Leica Geosystems can help you optimise site productivity with a complete range of machine automation solutions. Plan your own upgrade path to full 3D machine control workstations incorporating GPS navigation, terrain modelling software and automatic blade control.

Dozers, graders, excavators, concrete pavers and asphalt finishers are just some of the construction machines that can be fitted with scaleable, tough and reliable Leica construction machine automation systems. With a wide range of support services to choose from, Leica Geosystems helps master your site.

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**Head Office:**

Leica Geosystems AG  
9435 Heerbrugg, Switzerland  
Ph: +41 71 727 3131

**Technical Centers:**

Leica Geosystems Pty Ltd  
270 Gladstone Road  
Dutton Park, Brisbane  
QLD 4102 Australia  
Ph: +61 7 3891 9772

Leica Geosystems Inc  
5051 Peachtree Corners Circle  
Suite 250  
Norcross, GA 30092 USA  
Ph: +1 800 367 9453

e-mail:  
construct@leica-geosystems.com



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