

# Leica DigSmart3D 3D GPS excavator guidance



>Fast >Smart >Integrated

- when it has to be **right**

**Leica**  
Geosystems



# Drive your productivity gains with Leica DigSmart 3D

The Leica DigSmart 3D solution brings faster setup, easy operation, improved productivity, reliable support and Leica quality to 3D excavator machine guidance.

When you need to get the job done on time and on budget, Leica DigSmart 3D helps you move more dirt faster, with greater accuracy and improved safety – the first time.

Leica 3D Machine Automation – creating new levels of productivity, control, safety and utilisation. It's a fast, smart and integrated excavator guidance solution.

## The 3D solution

Leica DigSmart 3D breaks new ground for increasing productivity, utilisation and safety.

Leica DigSmart 3D utilises an electronic design file of the site and advanced dual GNSS technology to accurately guide the operator where to dig, and how much. The graphical colour display in the cab of the machine shows the operator where they are on the site, where they need to be and where to dig – with centimetre accuracy.

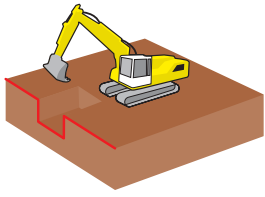
With Leica DigSmart 3D **SmartTools** operation couldn't be any easier. **SlopeTool** for example automatically adjusts the dig depth information to compensate for whatever slope you are working on; **TrenchTool** simplifies trenching and pipelaying, and **RampTool** means you can work anywhere on a site to a desired elevation.

Leica DigSmart 3D's advanced software and easy to use operator interface makes even the most complex tasks more manageable.

## The benefits

- Puts the plan on the machine, allowing operators to be self directing
- Reduces the need for layout, stakes and stringlines
- Reduces over-excavation by accurately guiding the operator to the correct depth
- An easy to use operator interface with tools designed for the needs of machine operators
- Uses advanced Leica Geosystems' dual GNSS technology for accuracy and reliability
- True open systems interface to a wide range of design and CAD systems using our proven Leica X-Functionality interface
- Compatible with a wide range of GPS/GNSS base station systems
- Can also operate as a comprehensive 2D control system for simpler jobs
- One supplier, one integrated solution

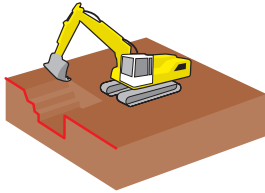
# Rely on Leica DigSmart 3D for your excavation work



## Trenching, pipe laying and layering

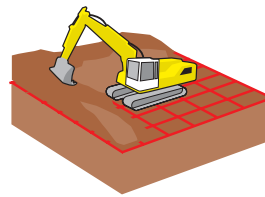
Leica DigSmart 3D's **TrenchTool** mode simplifies even complex tasks. Simply select the centre line reference from the design, key in the desired trench width, and Leica DigSmart 3D guides the operator where to cut, and to what depth.

Need to back fill layers for pipe laying? Just 'tell' the system the desired layer thickness and Leica DigSmart 3D guides the operator to where and how deep to fill.



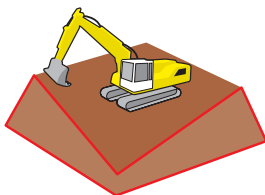
## Slopes, grades and profiles

Regardless of the complexity of the embankment or profile you have to excavate, just select the desired 3D design or 3D Polylines and the system guides you to the correct slope and height.



## Flat areas, pads and footings

Leica DigSmart 3D offers you two simple to use methods for working on flat area grading. Simply select the desired 3D design file, or set an elevation with offset.

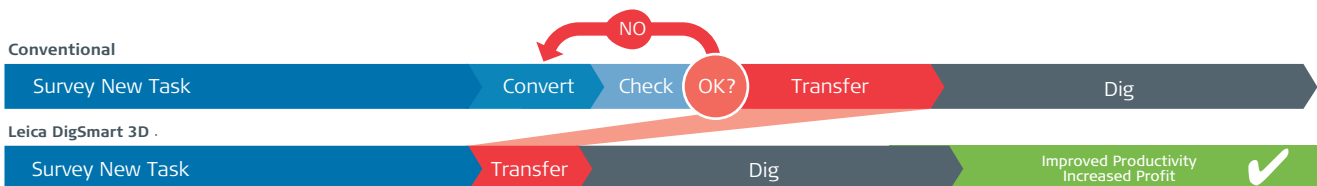


## Working in any direction on any surface

Excavators are one of the most flexible pieces of machinery used on a construction site. They can go anywhere, on almost any slope. Regardless of the complexity of the slope you are working on just select the desired 3D design and **SlopeTool** allows you to work more efficiently by automatically adjusting for the machine slope and roll to help prevent over-excavating.

## Don't have a 3D design?

Fully compatible with Leica System 1200 survey instruments, Leica DigSmart 3D lets you enjoy the benefits of 3D machine guidance on jobs where you don't have an electronic design. Just survey the work with a total station or GPS rover using on board tools to suit the job and then transfer it to the excavator.



Feature	Leica DigSmart 3D
No conventional stringlines or stakes required	✓
Works using digital terrain models and 3D polylines	✓
Dual Leica GNSS receivers using SmartTrack and SmartCheck technology for high positional accuracy	✓
Exchange jobs with survey instruments such as Leica TPS 1200 or GPS 1200	✓
<b>TrenchTool</b> mode for fast, accurate trenching and pipelaying	✓
<b>SlopeTool</b> lets you work at almost any angle on any slope	✓
<b>RampTool</b> for creation of height reference planes based on GNSS elevation	✓
3D wireframe view of plan, including chainages and offsets	✓
English, German, French, Italian, Danish, Swedish, Norwegian, Spanish, Finnish languages	✓
Metric, Imperial or US units of operation	✓
Common hardware platform for Dozers, Graders and Excavators	✓

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.

- when it has to be right.

**Head Office:**

Leica Geosystems AG  
9434 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



Total Quality Management—our commitment to total customer satisfaction. Ask your local Leica dealer for more information about our TQM program.

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