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Topcon's 3D-LPS puts the future of machine control to work for you today. Like no other product available, 3D-LPS uses revolutionary technology to simplify your work without compromising accuracy, so you stay profitably ahead of the competition.

3D-LPS is the world's first local positioning system. It works right from the site plans in your computer, sending grade information to the GRT-2000 total station. The GRT-2000 in turn relays that information to the LS-2000 "Smart" Receiver on the machine, providing the correct real-time grade information for that exact position. Less initial staking is required, while re-staking and conventional stringlining are made unnecessary, saving you time and money. The result? Fast, fully automatic grade control with accuracy that rivals any system currently available.

3D-LPS features include:

- World's only non-radio based Local Positioning System
- World's first self-tracking Total Station with laser communication
- World's first three-way communicating laser receiver
- World's fastest grade communication
- World's easiest-to-use operator interface - the System Five 3D control box

The state-of-the-art components that form 3D-LPS constitute the core of it's breakthrough technology:

Topcon combined its advanced robotic total station technology with field-proven laser communication to create a revolutionary instrument for our 3D-LPS system – the GRT-2000. Unlike radio based system that only send information 5 to 7 times per second, the GRT-2000 communicates 50 times per second with the machine! More information allows the machine to grade faster and reach finish grade in fewer passes.

The LS-2000 is a simple, smart receiver that processes the information from the GRT-2000, then forwards it to the System Five 3D control box. The LS-2000 is able to decode three pieces of information: elevation, design cross-slope, and steering. Don't have a 3D model of the site? No problem... The LS-2000 will also work with any rotating laser so you can keep on grading!

Topcon's System Five 3D control box offers the best of both worlds: a state-of-the-art system interface with Windows® based simplicity. The System Five 3D control box reduces the clutter of the operator's compartment by combining Operator controls and a powerful field computer in one compact package.

Graders:

- System Five 3D Control Box
- 3DMC Software Package (Automatic)
- Machine Brackets
- LS-2000 (Laser Receiver)
- TM-1 Mast
- Smart Knobs (Left and Right Auto Control)
- System 4+ Slope Sensor
- System Four Mainfall
- Rotation Sensor
- Custom Hydraulics
- Cables
- Manuals
- Carrying Cases

Dozers:

- System Five 3D Control Box
- 3DMC Software Package (Automatic)
- Machine Brackets
- LS-2000 (Laser Receiver)
- TM-1 Mast
- Simple Auto/Manual Switch
- Junction Box 3-way
- Custom Hydraulics (Optional)
- System 4+ Slope Sensor (Optional)
- Cables
- Manuals
- Carrying Cases

Items purchased Separately that are required

GRT-2000 (Robotic Total Station)

Elevating Tripod

Ipaq with Topsisite Software Package

	Power
Supply Voltage	10-30 Volts
	Environmental
Operating Temperature	-20 to 60 Celsius
Water Proof	MIL STD 810D Method 506 or IPX6
	Warranty
Standard	1 year

Automatic Control	
Valve Type	Sink, Source, Servo, Solenoid, Danfoss
Valve Driver Over Current Protection	Yes
Physical	
Display	640x840 Color VGA with enhanced brightness
LED Displays	Grade Indicators
Data/Memory Port	Compact Flash & USB
Operating System	Windows CE
Backlight	Auto adjusting
Compatible Machines	
Dozers	Yes
Motorgraders	Yes
Scrapers/Tracktors	No
Excavators	No
Pavers	No
Profilers	No
Compatible Add-on Kits	
Laser Receivers	Yes
Millimeter GPS	Yes
Slope Control	Yes
Sonic Tracker	Yes
TM-1/LS-B2	Yes