





### i-33 / i-53

#### Indicate Dozer System

- Increase productivity significantly
- Low initial investment - easy upgrade path to fully automatic GNSS system
- Easy-to-use software for all your operators
- Less re-work: material is moved only once
- Reduce staking on the job site

The Topcon 3D-MC indicate system is a low cost indicate-only system ideal for bulk earthmoving machines such as dozers. The GX-30 or GX-55 color touch-screen control box displays where the machine is on the job site and provides constant cut/fill information. Experience the productivity of GNSS machine control at a much lower initial investment with the Topcon 3D-MC indicate system. Calculate blade slope and pitch with a robust tilt sensor mounted on the blade for ultimate grading success.

Now your bulk earthmoving equipment can take advantage of GNSS technology to dramatically increase your rough grading productivity. Utilizing the 3D-MC indicate system on your dozers will insure you move the right amount of material the first time.



### 3D-MC<sup>2</sup>

#### Twice the Speed, Twice the Accuracy

3D-MC<sup>2</sup> utilizes the GX-55 control box, GNSS antenna, MC-R3 receiver, a single MC<sup>2</sup> sensor and intuitive software to deliver position updates 100 times per second. The MC<sup>2</sup> sensor combines a gyro, compass and inertial sensor to measure the X, Y and Z position as well as the roll, pitch, yaw and acceleration.

From its inception, 3D GNSS technology from Topcon has dramatically increased dozer and motor grader productivity due to its accuracy, maximum up-time, and the ability to allow multiple machines to work from a single base station. 3D-MC<sup>2</sup> takes 3D machine control to a whole new level making your dozer a high-speed grading tool. Using the familiar Topcon operator interface, 3D-MC<sup>2</sup> is an easy step up to double your productivity.

Greatly expand the role your dozer plays on a typical job site – move faster, get to grade in fewer passes, with greater accuracy than any other system. Less machine operating time translates into less fuel and less wear on your equipment.



## 3D-MC<sup>MAX</sup> Integrated Dozer System

- Superior performance for any rough or fine grading job site application
- Ultimate blade response
- Eliminates the need for the GNSS antenna mast and cables for the blade
- Single or dual antenna 6-way blade control

A revolutionary dozing system, 3D-MC<sup>MAX</sup> delivers the highest productivity dozer solution for any rough or fine grading application. 3D-MC<sup>MAX</sup> uses two of our industry leading IMU sensors, both the body and blade sensor keep the blade cutting edge on grade for any application. This system was built to keep you productive on any job site – providing maximum speed, maximum control, and maximum performance.

The power of the system lies within the two IMU sensors. These robust and highly precise sensors work together with ruggedized cab-mounted antennas conveniently placed in a secure location on the machine. This intelligent design gives the operator unobstructed visibility and the flexibility to doze at full throttle on any surface, under objects, or in reverse.



## X-33 / X-53 / X-63 GNSS Machine Control for Excavators

- Eliminate over excavation and costly material overruns
- Dramatically increase productivity
- Improve crew safety
- Compatible with your other 3D-MC Topcon systems
- Underwater and blind cuts no longer a problem

Whether working in deep cuts, underwater or on steep slopes, the Topcon excavator systems will eliminate over-excavation and costly material overruns, while speeding up production times.

Excavating has never been easier or faster. The 3D excavator systems use 360° tilt sensors to indicate the position of the bucket and state of the art GNSS technology to provide precise position information. The bright, color, touch-screen control box displays bucket position in real time, providing the operator complete control. Select a variety of screen views from plan, profile, cross section or our popular cut/fill “measure tape” indicator. The excavator systems eliminate the need for a grade checker to constantly monitor cuts, increasing both safety and productivity.



## Millimeter GPS

New Dimension of Precision and Productivity

- Unique technology combines laser and GNSS
- Up to 8,000 ft. horizontal and 132 ft. vertical range
- Simply add on to existing Topcon 3D-MC systems
- Control multiple machines and rovers simultaneously
- User friendly

Millimeter GPS with LazerZone® transforms GNSS into the perfect tool for fine tolerance work. With Millimeter GPS, gone are the days of lost productivity, using stringlines or running manually over hubs.

Millimeter GPS combines the advantages of a laser (multi-user and high vertical accuracy) with GNSS (multi-user and 3D) into one versatile and easy-to-use system.

Unlike other laser technology, the LZ-T5 transmitter creates a 33 ft. high working zone that is 2000 ft. in diameter. Simply add the PZS-1A rover sensor to your existing GNSS system and watch your GNSS vertical accuracy improve to tolerances you never imagined before. Need more coverage? You can link up to four LZ-T5 transmitters for four times the range both horizontally and vertically. Unlike using total stations, multiple 3D-MC machines and GNSS rovers run off one transmitter... there is no limit.



## LPS

Robotic Based Grade Automation

Based on the popular PS robotic total station platform, the LPS offers high accuracy position control over your entire site. The robotic total stations utilize patented X-TRAC technology to track machines. Machine and blade position are updated 20 times per second to meet the tightest job site specs.

Using LPS is simple, place the robotic total station on a known control point, when the 360° prism on the machine is located, the X, Y, and Z position of the cutting edge is communicated to the machine via radio link. Obstructions to the sky no longer hinder your work or slow you down. Whatever the conditions, LPS can get it done fast and accurate.



For more information:  
[topconpositioning.com/3dmc](http://topconpositioning.com/3dmc)

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