



3D Construction Solutions



SYNERGY
POSITIONING SYSTEMS

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Topcon Enterprise Solutions

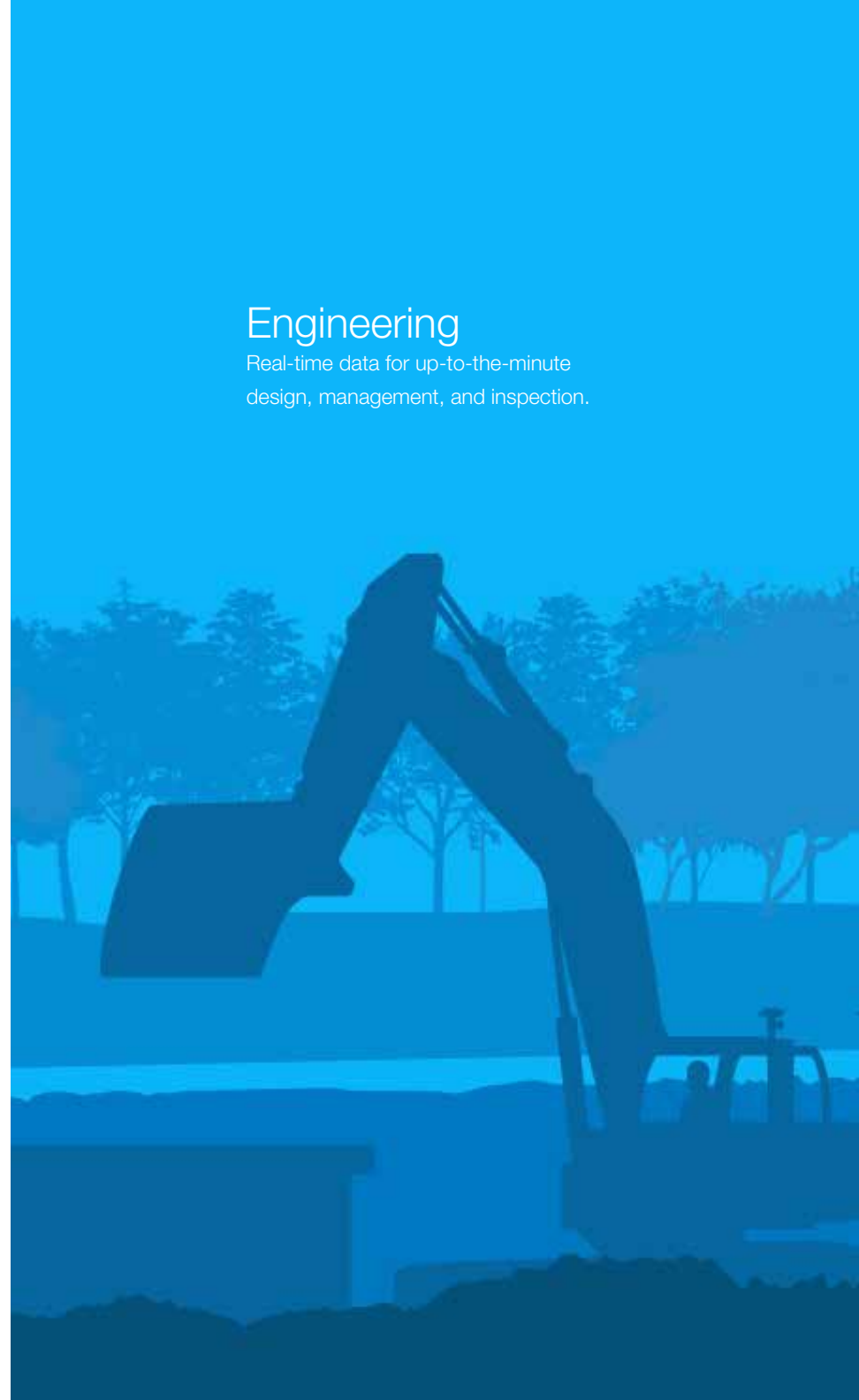
The global construction, geospatial, and agricultural industries are rapidly changing thanks to quantum leaps in communication and measuring technologies that literally transform our perspectives of time and space. These advancements are reshaping the way things are designed, built, grown, and managed.

Topcon works to stay a step ahead of customer's needs by creating solutions that embrace and extend these advancements into the way they work, everywhere they work. Our integration of high-accuracy positioning, high-speed imaging, cloud-based information management, and down-to-earth simplicity creates higher productivity and better results with lower environmental impact.

**YOUR PRODUCTIVITY.
TECHNOLOGY.**

Engineering

Real-time data for up-to-the-minute design, management, and inspection.



The connected strategy

Site Management

Unified control of equipment, scheduling, grade management and more.

Utilities and Infrastructure

Existing, planned and placed — always connected to the design model.

Building

Layout, structure, MEP, finish and all details in between — controlled from one source.



Planning & Mass Excavation

Rough Grading & Utilities

Fine Grading & Surveying

Paving & Compaction

Unique Productivity Solutions for the Entire Construction Cycle

Topcon products bring efficiency and productivity to virtually every phase of the construction operation. At Topcon we are continuously finding new solutions to meet the needs of every customer's unique demands, no matter the size of the job.

Scheduling & Planning
Clearing & Grubbing
Roughing in Subgrade
Utilities
Finish Subgrade
Place Base Material
Finish Base Material

Trimming
Paving
Compaction
Jobsite Management
Machine Management
Operator Management



3D Construction Solutions

Since the industrial revolution, contractors have been responsible for creating the modern world we live in.

This creation involves many applications and specialty contractors; from mass haul planning to bulk earth moving, from placing utilities to fine grading and paving. No matter the specific need, Topcon has advanced construction positioning technologies designed specifically for each phase of the job.

Tolerances and accuracies needed for modern job sites continue to raise demand for technological advancements. With the ever increasing capabilities and benefits from technology, and the increased need for contractors to stay competitive, the way we are managing our job site has changed. Taking control of material and machine management as early as possible helps contractors stay ahead of schedule, and finish jobs faster than they ever thought possible.

As a leader in the precision measurement and positioning industry for more than 85 years, Topcon is leading the way with innovative, productive construction solutions. Our sole focus is to help you complete your jobs faster, with greater accuracy, and with the best quality possible. No matter if your job is big or small, simple or complex, Topcon has a solution designed specifically for you.







Bulk Earth Moving

Take control of mass excavation

Let's face it; managing your bulk earth moving is a difficult process. The good news is that this phase offers tremendous opportunities for increases in productivity and profitability. The best news is that Topcon has new, affordable, easy-to-use systems designed specifically for bulk earth moving.

These new 3D systems make sure you are moving the right amount of material, to the correct area, all with visibility to other operators on

your site. Our advanced mass haul planning software will help you manage your material from the start of your job, saving you time and making you money. Paired with our Haul Truck system you can automatically control your loads and dumps; and real-time visibility to track progress and control scheduling is possible.





Excavating

Utilities become a breeze

Over and under excavation is a common occurrence on all construction sites. What if you could take the same basic components used on your dozers and scrapers and add them to your fleet of excavators? With Topcon, you can. Dig to the proper depth the first time, every time with high end, 3D Excavator control systems.

Topcon's excavator systems provide operators the correct elevation and slope information at all times which leads to an instant increase in productivity, labor, fuel savings, and less wear and tear on your machines. You will also reduce material waste — no more having to backfill or bring in extra bedding material due to over excavation.





Fine Grading

Cut and place materials accurately

Topcon is the world leader in innovative, high-end positioning systems for grading machines. Our systems have set the standard in reliability, intuitive operation, and upgradeability for over 25 years. Use Topcon automatic grade control systems to quickly and accurately cut to final grade, bring in your base material, and place your final aggregate material.

Jobsite tolerances in this phase are of the utmost concern, and only Topcon Machine control solutions help you move more material, in fewer passes, at higher speeds, no matter the complexity of the design. That's the Topcon difference!





Paving

Higher quality, smoother roads

Topcon has set the industry standard for paving technologies for over 25 years. Advancements in technology have allowed us to manage all the phases of the paving process; from milling to trimming, to both asphalt and concrete paving, and even compaction, Topcon has unique solutions for each machine.

You can even manage your material to millimeter accuracy with Topcon's revolutionary LaserZone technology. This solution will give you unparalleled freedom and productivity no matter how large or small the paving job. One of the most important parts of the paving process is proper compaction and with Topcon systems you will achieve optimal pass counts easier than ever.



Hardware Solutions

Topcon set the standard for machine control over 25 years ago, and continues to improve technologies to meet the needs of the customers.

Topcon's innovative products include the world's first inertial sensor for high end blade measurements and is still the only manufacturer with millimeter tolerance technology. Now, we are the only manufacturer with a full line of machine control solutions designed for each phase of your job.

Ranging from 2D machine control to 3D GNSS indicate systems, all the way to fully automatic systems, Topcon has a solution that fits your needs, no matter the size of the job. With machine control components designed ruggedly, and placed in the safest areas on the machine, you are ensured of a system that will withstand the harshest construction environments.

The products shown are examples of our most popular machine control hardware components. There are different models available based upon the desired accuracy and specific requirements of the application. Please contact a Topcon distributor or visit our website to learn more.



In-Cab Touch Screen Display

GX-60

This construction tough, touch screen, in cab display shows the operator his real time position on the job site. Real-time cut fill and grade verification is right at the operator's fingertips.

- 6.5" Color, Touch Screen Operation
- Fully Functioning Windows Computer
- Rugged, Cast Aluminum Housing



Low Cost Touch Screen Display

GX-30

This indicate, touch screen, in cab display lets the operator see his machine in real time. Easily switch from both 2D and 3D operating modes for a large variety of applications.

- 4.3" Color, Touch Screen Operation
- Easy to Use
- Upgradeable Systems



GPS Receiver/ Valve Controller

MC-R3/MC-G3

Topcon's MC-R3 and MC-G3 are the heart of our 3D-MC systems. The MC-R3 contains the GPS receivers, radios, and valve controllers in a single, built-to-last, housing.

- Safe, In-Cab Mounting
- Rugged Design
- High Performance



GPS Receiver

MC-i3/PG-S3

The MC-i3 houses different combinations of GNSS, Sitelink3D, and RTK radio boards for unique, stand-alone indicate systems. Together with the PG-S3 ruggedized antenna, these components provide a robust solution for indicate machine control.

- Ruggedized, Water-Proof Housing
- Vanguard Technology
- Full Satellite Constellation Tracking



Inertial Measuring Unit

3D-MC² Sensor

Only Topcon 3D-MC² technology allows dozers and graders to more than double grading speed — with near finished grade precision — no matter how complex the design. Measurements of 100 times per second create unmatched accuracy and speed.

- Unmatched Productivity
- High Grading Accuracy and Smoothness
- Increase Speeds up to 200%



Positioning Zone Sensor

PZS-MC

With this Topcon only solution, turn your finishing machines into millimeter accurate automation tools. Simply replace your standard GPS antenna with the PZS-MC and increased tolerances on your job sites are met with zero issues.

- Grade to Tighter Tolerances
- Increased Productivity
- Up to 300% More Accurate Than Standard GPS

Software Solutions

The ideal Construction Solution is only as powerful as the software that controls it.

The most critical part of a successful solution is the software workflow. The hardware components available from Topcon will all perform precisely in the field. But what connects you to the office and the updated design files? What really drives your productivity? The software.

Topcon software is the leader in cloud-based, intuitive operation, and modular services. The most important aspect of software for contractors is its ease of use and reliability. Topcon offers unmatched software packages with this in mind, keeping your production rate high, and your time spent learning low.

The products shown are an example of the most popular construction software. There are different modules available based upon the desired accuracy and specific requirements of the application. Please contact a Topcon distributor or visit our website to learn more.

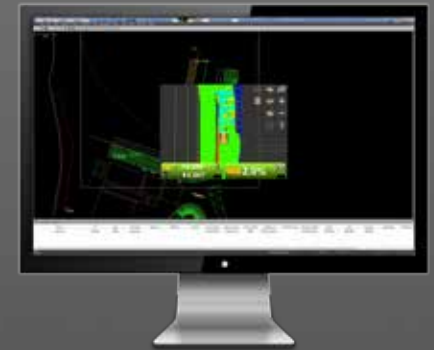


Grade Management System

Pocket 3D

Pocket 3D puts the power of GNSS based site management in the hands of site foreman and grade checkers, making it easy for them to verify grades, reset stakes, or locate utilities on site.

- Industries Easiest User Interface
- Check Grade and Verify Cut/Fill
- Volume Quantities and As-Builts



Construction Office Software

3D-Office

3D-Office allows you to create, edit, import/export, design, and prepare design files for any jobsite. 3D-Office is also used to remote connect to machines and rovers to send new job files, offer remote support, and send messages.

- Complete Site Design Package
- Real-Time, Color, Cut/Fill Mapping
- Sitelink3D Compatible



Data Collection Software

MAGNET® Field Site

MAGNET Field Site is a powerful data collection software for construction measurement and layout activities. Magnet Field Site is a part of the total Magnet system of solutions, which increases customer productivity by connecting the project site and the office staff.

- Easy to Use Interface
- Move Files Straight to Machines
- Versatile Controller Software



Total Job Site Management System

Sitelink3D

Sitelink3D is a complete communication system providing data control, machine tracking, and a reporting system in one solution. With Sitelink3D, Topcon expands its highly advanced machine control systems to include remote machine support, electronic job file transfer, and real time project management information.

- Manage Machines and Rovers From the Office
- Remote Connect to Machines
- Send Job File Updates Remotely



Planning, Scheduling, and Reporting Tool

Sitelink3D Enterprise

Sitelink3D Enterprise allows you to plan, schedule, set up tasks for machine and get reports, all in real time. Reporting can be customized to fit the management needs of your organization.

- Jobsite Productivity Reports
- Jobsite Planning
- Jobsite Progress and Volume/Haul Reports



Scheduling, Production, and Earth Moving Management

DynaRoad

DynaRoad is a project management system specially developed for scheduling production control and earth works management. The software provides benefits in all project phases by allowing quicker, more realistic, and accurate planning and analysis compared with traditional methods.

- Mass Haul Management
- Gantt Chart Schedules
- Resource Planning



Shatter the Final 3D Automation Production Barrier – Speed

With existing traditional 3D-GPS machines control systems, grading took multiple passes at slower speeds. 3D-MC² uses revolutionary technology to reach an unbelievable new level of performance. With speeds four times than a standard machine, and two times faster than any 3D machine, one machine can easily perform the work normally done by 2 or 3 machines. 3D-MC² is built on our same easy to use interface so your operators will have no problem putting it to work right away.



3D-MC²

3D-MC² uses breakthrough technology to reach an unbelievable new level of performance; four times faster than a standard system.



World's First Millimeter Accurate GPS System

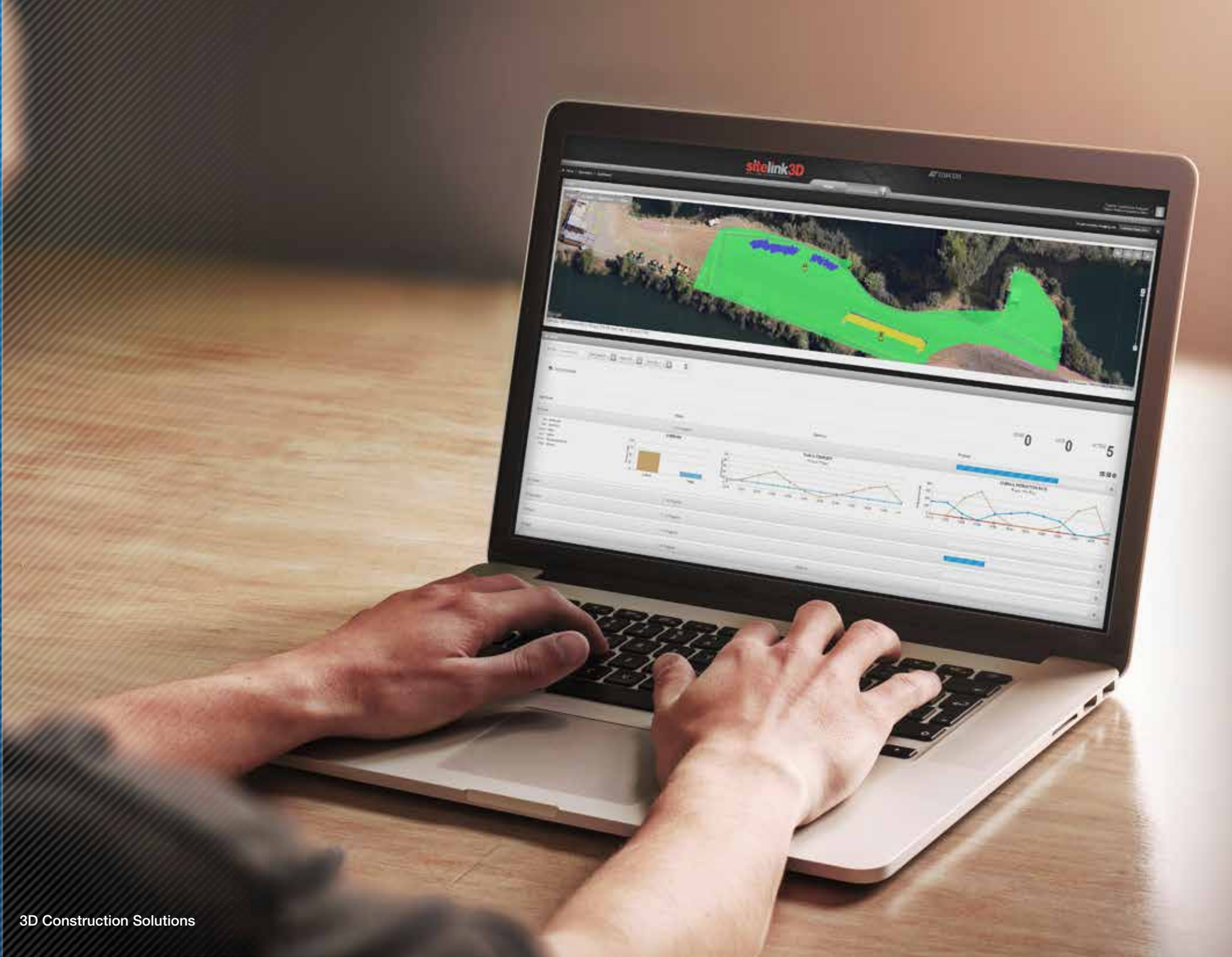
Topcon proudly offers a unique dimension of control technology- Lazer Zone. You can manage your grading machines to millimeter accuracy with a unique combination of GNSS technology and a high-precision land-based laser transmitter. These same components can be added to your asphalt and concrete paving machines, ensuring the highest quality of work throughout all phases of finish grading and paving. And your quality-control checker can add Millimeter GPS to his rover, so even your grade verification is done with millimeter accuracy; no other manufacturer offers this technology.



Millimeter GPS

Imagine taking your GPS system and transforming it into a super precise measuring device that rivals a robotic total station. At a fraction of the cost of a robotic total station, and without the single-user limitation, that's the power of millimeter GPS.





Real-time, 3D Planning, Scheduling, and Reporting Software

Imagine being able to view and manage your machines on their job sites in real time. With Sitelink3D you're not just connected to the jobs, you're in control of them, from anywhere, any time. Part of Topcon Enterprise Solutions, Sitelink3D lets you view productivity reports, as-built volumes and surfaces, and job-site progress all from your office, tablet, or even a phone in real time!

With Sitelink3D you don't have to drive out to the job site to deliver change orders or new job files. Now just send them directly to the machines using the electronic data transfer option. Connect to your equipment to troubleshoot issues remotely and easily view machine progress and production rates from anywhere in the world. Reporting can be completely customized to fit the management needs of your organization, another technology available only from Topcon.

Sitelink3D

Sitelink3D is a complete site communication system providing data control, machine tracking, and a reporting system in one solution.



TotalCare

This online resource comes with real live people ready to help. Get expert training from Topcon University's large collection of online materials, and expert help directly from Topcon Technical Support.

Access software and firmware updates, current publications, and guidance from the experts at Topcon all right from your computer or mobile device.

Please visit the TotalCare website to learn more.

topcontotalcare.com





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