The Trimble® SX10 Scanning Total Station redefines the capabilities of everyday survey equipment by providing the world’s most innovative solution for surveying, engineering, and scanning professionals. This innovative and versatile solution allows users to collect any combination of high-density 3D scan data, enhanced Trimble VISION™ imaging, and high-accuracy total station measurements, allowing you to capture exactly what you need, saving you time and money on every job.

Topographic Survey/General Surveys

Boundary/Land Title Surveys
Use a combination of high-accuracy surveying and high-speed scanning to quickly document all the features of your land title survey including location of boundaries, buildings, easements and site improvements. Back in the office, engineers can visually see the full context of the site and surrounding elements including right-of-way features, encroaching elements or complex structures. CAD technicians can easily understand and extract additional site information from scan data and images without costly site revisits.

Roadway/Corridor Surveys

Roadway design and Topo
Improve safety and reduce costs by scanning road corridors and intersection details such as roadway surfaces, overhead power lines and lane striping without putting the surveyor in harm’s way and all while minimizing the need for road closures. Capture critical measurements such as flow-lines, manholes, and right-of-way monumentation with prism observations and then use these back in the office to define critical engineering elements of your survey. Add detailed imagery to provide site context, improving communications between field and office teams.

Volumetric Surveys

Stockpile volumes
Quickly scan stockpiles, gravel pits or excavation areas, and deliver rough volumes directly in the field. Use combined scan and survey data to validate cut and fill to design or construction subgrades with speed and confidence. Back in the office, use scan data along with Trimble Business Center’s powerful tools to easily define surface boundaries and breaklines for precise volume calculations all without surveyors ever having had to walk the base of an unstable stockpile. Deliver most accurate volumetric measurements by combining survey controls with density of points to create complete surface and clear delimitation.

Infrastructure Surveys

Civil Infrastructure As-Builts
Capture rich, accurate and complete geometrical/visual documentation of critical infrastructure such as bridges, dams, tunnels, complex structures and more for as-builts, clearance, deformation monitoring and retrofit design. The simple framing techniques combined with 600m scan ranges allow users to maximize the SX10’s high-speed scanning to rapidly collect the level of detail needed even on large or remote structures. Reduce field collection and office processing times and ultimately deliver information to clients quicker than before.
Building As-Built and Design Surveys

Acquiring the full context of the site has never been easier. With the Trimble SX10’s unique and instant combination of survey data, dense scan data and multiple resolution imagery, you can be confident that you’ll capture even the smallest details for your as-built models. Interoperability with CAD packages ensures the data can be quickly utilized for land development, architectural design, as-built verification or BIM/VDC modeling.

Utility Design Survey

Whether you’re surveying water, sewer, power or gas, the Trimble SX10 is ready to fit your needs. No other total station offers the versatility to lay out future improvements and completely capture existing site conditions, all with the speed and accuracy to fit even the most demanding of projects. Add detailed imagery to provide site context, improving communications and capture details of buried assets.

Power Line Inspection/Clearance

Reduce the time normally needed to capture DR measurements on power utilities by simply scanning and taking a panorama of the objects you need. By capturing power lines and its entire environments, clearance from ground surface or surrounding vegetation is instantly referenced. In Trimble Business Center you can directly connect to geodatabase and ensure GIS ready data delivery.

Forensics/Crash Scene Investigation

Minimize road closures by reducing the time it takes to capture evidence at the scene. The SX10 is the one tool with all the capabilities you need, combining the power of a scanner, a total station and a combination of panoramic and zoom cameras. The simplicity of the field and office procedures also reduces your investment cost with minimal software training required to enable teams to deliver quality reports.

Mine/Quarry Survey

The exceptional scanning range of the SX10 allows site surveyors to maintain a safe distance from operating machinery all while capturing dense data on highwalls or stockpiles. Targeted framing of areas to be captured enables a fast and efficient data collection. The survey workflow eliminates the need for complex scan target registration and provides instant information for time based volume analysis in the office.

Tank Calibration/Inspection

With scanning capabilities integrated into a traditional total station, the Trimble SX10 and Trimble RealWorks Advanced-Tank Edition, combines a recognized tool for rapidly performing storage tank inspections and calibrations. Always under short timeframe constraints, the capability to combine high density scan points with traditional measurements results in a safer field work and more complete structural information to produce accurate tank asset information.

Dimensional Control

Combine traditional high-accuracy survey points with 3D scans of critical assets to provide visual and geometrical context to engineering teams. The Trimble SX10 ensures you provide the highest quality verification to your clients with a wealth of data to provide the utmost confidence. High density point clouds captured on complex shapes allows for accurate surface analysis and inspection workflows.