



TECHNOLOGY SOLUTIONS FOR YOUR MINE

TECHNOLOGY MADE EASY

Ready to take your site to the next level?

SITECH Southwest is the leading technology solutions provider across Arizona and Southeast California. We provide easy solutions to solve your most complex technology challenges - giving you the power to transform the way you work.

No matter your industry or preferred equipment brand, we offer products and solutions from the top technology manufacturers.

Our inventory is as vast as these pages. But, don't worry; we'll guide you through all that we have to offer.

SURVEY SYSTEMS

Survey Systems provide the accuracy and reliability required for mining operations to increase safety and improve critical processes. With advanced technology capabilities, your mine's work can be transformed through a connected source of information that spans from the offices to the field and back in real-time.

Data Collector Software

Simple to use and learn, Trimble Siteworks Software provides you the ability to quickly resolve survey problems on site as well as the flexibility to complete any task in the field. With an easy-to-use graphical interface, surveyors, grade checkers, site engineers, and foremen can do their jobs faster and more efficiently.

Survey Hardware

You need rugged survey solutions that are easy for beginners and experienced surveyors. Survey devices ranging from Laser, GPS, or Total Stations can tackle your site positioning needs.

Scanners

Advanced 3D scanning systems let you scan with confidence and produce results you can trust. Whether you're doing a topographic survey, capturing as-builts, or scanning fixed infrastructure, choose from LiDAR, optical, or SLAM scanners appropriate for every job.

Mapping & GIS

Mapping & GIS combines positioning, communications and software to equip your mining workforce. These easy-to-use products help you with productivity in every facet of mining by geo-enabling field workforces.

CAD Software

Business Center Software is a powerful tool that can quickly and easily create accurate, integrated 3D constructible models to execute in the field. This complete office software solution helps you work efficiently by streamlining workflows.



INDUSTRIAL UNMANNED AERIAL VEHICLE



UAV/Drones are becoming a viable business tool that can close the gap between what a job looks like on the computer versus what it actually looks like on the ground of your mine site. High-resolution imagery obtained by drones can be uploaded online to process in real-time.



Fixed Wing

Post-Processed Kinematic (PPK) combined with the advantages of vertical takeoff (eVTOL) ensure fixed-wing UAVs have a class-leading flight time of more than 90 minutes with the ability to cover areas as large as 1700 acres in a single flight.

Multi-Rotor

Whether you need a UAV for general video inspection or precise GPS mapping, choose from a range of options including units with heavy payload capacity, units with highly customizable cameras and flight controls, or simplified packages that streamline mapping and video processes.

Specialized Multi-Rotor

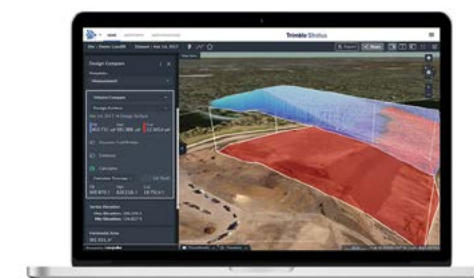
If your UAS jobs are more demanding, you can try specialized multi-rotor applications like high altitude UAVs and contour following flight paths. In addition, choose from specialized payloads like LiDAR, FLIR, non-visible spectrum, and gas detection along with integrated software workflow.

Cloud-Based Processing & Data Sharing

Get consistent results, quantifiable savings, and the confidence you need to map, measure and manage your site. Cloud-Based Processing & Data Sharing takes the complex process of drone surveying and streamlines it into three simple steps: place, fly, & view.

Desktop UAV Processing

You can easily process aerial data on your desktop with photogrammetry-grade processing for unmanned aerial systems (UAS) and terrestrial close-range imagery integrated alongside Trimble Business Center.



MACHINE CONTROL TECHNOLOGY

Connect processing and business data so your team can have centralized information to help reduce risk and increase profits. Machine control technology can provide your mining operation a trusted source of data that can be relied on enterprise wide.

Grade Control Systems

Say goodbye to stakes and other materials that make work more difficult. Work smarter and faster using high precision machine guidance solutions for your tight tolerance grading and cover projects.

Payload & Scale Systems

Whether you require basic weighing information for a conveyor belt, or greater accuracy and data capture capabilities for production loading tools, choose from a variety of scale solutions for loading, hauling, and conveying systems.

Mining Specific Machine Technology

Grade control on a single machine is fine. But miners need more mapping and shared grade information for the entire mine. Peer to peer communications allow machines equipped with the Cat Terrain® integrated machine guidance suite to collaborate by continuously updating progress to the same mine plan. Near real-time updates back to the office enable more timely and effective fact-based management of all drilling, dragline, grading and loading operations.



Among the biggest drivers for the use of autonomous mining technology is operator safety. Mine sites that have put autonomous mining technologies to work have also experienced increased productivity, higher equipment utilization and less machine damage.

Remote Controlled Machines

Safely working around hazards like unstable high walls has always added time and complexity to a project. Until now. Cat Command® provides remote control solutions for dozers and excavators to keep operators out of the cab and out of harm's way. Integration with Cat machines' electronic systems save installation time and speed up machine response time compared to aftermarket systems.

Remote or Autonomous Drilling

Automate one of the most critical processes in the mine - the drilling system. From operator assist functions to fully autonomous drills, the components serve as building blocks that allow you to easily grow and add features and capabilities at your pace.

Autonomous Hauling

Get ready to move into the next era of mining. Fully autonomous hauling solutions help you improve productivity, efficiency and profitability while reducing overall costs.

REMOTE OR AUTONOMOUS MACHINE CONTROL



FLEET & ASSET MANAGEMENT



Replicate or sustain what's working with fleet & asset management. You can glean insights that drill down into the trenches or take a big picture look at your mine. This holistic information will set up managers to make informed decisions about operations, safety and maintenance.



MineStar Fleet

Master your mine. MineStar Fleet analyzes operational and equipment data up and down your value chain, then gives you insights to run a leaner operation by driving best-in-class performance in everything from equipment scheduling and material movement to fuel monitoring and cycle times.

Trimble InsightHQ

Trimble InsightHQ provides you visibility to respond to issues, optimize production and productivity in real-time. On your web browser or mobile device, view near real-time productivity, availability, performance dashboards and reports for extraction, processing and load-out.

Trimble WorksManager

Surveyors can drive less and measure more by sharing information directly from the field using Trimble WorksManager. Whether you're in the office working on a design or in the field working on a survey, you'll be in the know and can share information in real-time.

Trimble Connected Mine

Reduce risk and variability management. Trimble Connected Mine is an enterprise-level solution that integrates sensing, monitoring, control, data management, business intelligence, and enterprise information management.

WIRELESS

Wireless network infrastructures can effectively support your ever-growing mobility demands. The most adaptable, scalable, and readily deployed private mobile broadband networks on the market today.

Rajant Kinetic Mesh®

Fully mobile, always adaptable. Rajant Kinetic Mesh® networks run efficiency and productivity-enhancing mining applications 24/7 across your diverse operating environment. The patented InstaMesh® networking software helps create a self-healing network able to dynamically adapt as people and assets move across your environment— all while keeping the network available, intact, and secure.

Ceragon Wireless Backhaul

Ceragon's unique wireless backhaul technologies provide a highly reliable, high-capacity wireless backhaul with minimal use of spectrum, power and other resources. It enables increased productivity, as well as simple and quick network modernization.

Rugged Outdoor Wireless

Bringing your field data into the office has never been easier or more reliable. Fixed location Wi-Fi networks for sensor management, industrial IOT, and general communications often have unique requirements.



SITUATIONAL AWARENESS

Provide situational awareness technology to operators, alerting them to hazards before they become a threat. Today's technology can visualize all machines and personnel within a specific radius as well as alert operators when a machine or object is in close proximity before a collision occurs.



Detect for Personnel

Look out for your most valuable assets – your workers. Cat® Detect for Personnel utilizes Radio Frequency Identification (RFID) technology to allow any vehicle equipped with an antenna to detect ground workers, on any jobsite, wearing an equipped safety vest or hard hat.

Proximity Awareness

Let your machines talk to each other. Proximity Awareness uses GNSS and tracks machines, allowing operators to view other machine locations and provide proximity-based alarming using Dedicated Short-Range Communications (DSRC), the same protocol used in the automotive industry.

Driver Safety System

Keep safety at the forefront of your operator with a non-intrusive, in-cab fatigue detection technology that instantly alerts operators the moment fatigue or distraction is identified. The fatigue technology works by monitoring eye-closure duration and head pose. If the Driver Safety System detects fatigue or a distraction, the operator is immediately alerted through configurable in-vehicle seat vibration and/or audio alarm.



Fix what needs to be fixed. Monitoring, diagnostics and prognostics technologies can track information on a number of machine functions including fluid analysis, component life, haulage optimization and more.

Health

Know what's going on inside your equipment. Utilize Health to deliver critical machine condition data to your fleet and identify potential problems long before failure.

VisionLink®

Know when and where your equipment is working. VisionLink integrates site productivity with asset and fleet management. SITECH personnel will watch and make sure your machine is providing accurate site productivity information so you can keep your machines running efficiently.

Trimble 4D Control

Improve your safety decisions with automated, real-time slope stability monitoring. Trimble 4D control software easily manages a wide variety of monitoring sensors from total stations to piezometers and crack gauge.

CONDITION MONITORING



SUPPORT SERVICES

Quality technical support is essential for maximizing productivity. We have a fully equipped service center and certified service technicians ready to offer you a wide range of technical services.



Field Support

Receive 24/7 assistance from on-site resident engineers in Arizona. With diverse skill-sets, our field team can support you with preventive maintenance, service, system architecture development and more.

Repair Center

We have a certified and preferred service authorized Trimble Repair Center in Mesa, Arizona. At our Repair Center, our technicians can service, repair and calibrate Trimble, Caterpillar, Spectra Precision and many other manufacturer brands.

Training

Get the most out of your systems. Take advantage of our customized training available for any of our products. We offer dedicated training at your site or open classes at one of our locations.

Wireless Network Engineering & Design

We design, deploy, and maintain a variety of wireless networks for mining and other industrial clients. You can choose from a full range of services from radio frequency surveys, network planning, hardware selection, and full network deployment.

3D Modeling & Data Conversions

Our team of knowledgeable and experienced engineers can help you prepare 3D models for site work, machine control, layout, and additional uses. We can also support you by processing your 3D data from any type of data collection including: RTK, Machine, LIDAR and Photogrammetry. Once finished, we'll deliver it back to you in the format of your choice.

PRODUCTS & PARTNERS:



Thanks to our partners and products, we can provide you solutions under Heavy Civil, Geospatial, Data Modeling and Analysis.



24/7 Support
IS JUST A CALL AWAY



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