



Utilizing SLAM Scanning Technology to Document Wastewater Treatment Facilities

Laser scanning has made it possible to capture many environments in full 3D – but using conventional static scanners can be at times slow and cumbersome. Numerous scanning positions are required to ensure no details are missed, reducing the total area that can be captured per day. As a result, using a static scanner to document Wastewater facilities is a highly labor-intensive process. In contrast, mobile laser scanning devices are next- generation surveying tools with the ability to rapidly cover large, complex areas.

By introducing a wearable mobile mapping LiDAR system, working in conjunction with scans from terrestrial equipment could effectively reduce the amount of time required to scan facilities in the field.

The benefits of this approach would be:

Safety - Less time that Survey crews and dedicated escorts would be exposed to possible hazardous conditions.

Efficiency – Utilizing a wearable mobile mapping system along with the terrestrial equipment scanners would collect more data in a shorter amount of time affording the crews to concentrate denser scans on equipment.

Minimal Impact - Allow us to minimize interruptions in ongoing operations of facilities.



Proven expertise in the reliability market.

SAM offers a full range of geospatial, utility engineering and inspection services to support reliability in the utility industry. Our capabilities are designed from the start by certified photogrammetrists and licensed surveyors. We combine our expertise in these areas with our national footprint to meet your demands and deliver these projects in a timely manner.

We continue to research and validate new advancements in geospatial technologies in the collection and documentation of electric facilities

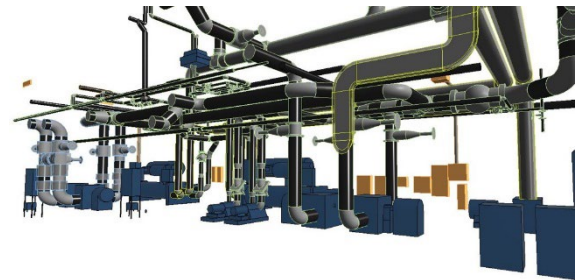
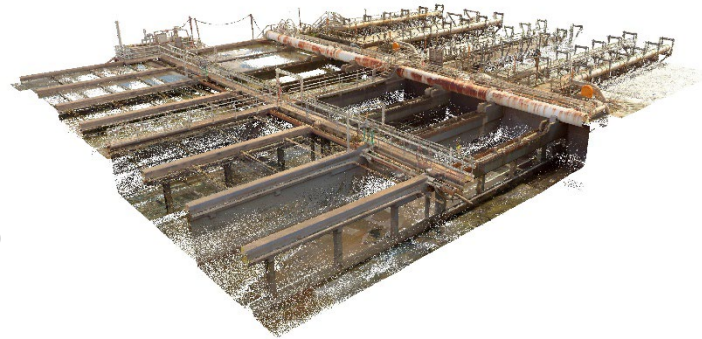
The NavVis VLX utilizes SLAM (simultaneous localization and mapping) technology and concurrent collection of 360° high-definition imagery. The VLX can scan hundreds of thousands of square feet per day, to centimeter-level precision. As compared to terrestrial scanning, that would take weeks to scan the same amount of square feet of space. This mobile scan system offers a quantum leap in how 3D data is collected and processed.

SAM has been Utilizing Simultaneous Localization and Mapping (SLAM) post processing workflows to provide a sound solutions for our clients who are looking to optimize the required documentation and quality while minimizing site interferences and data quality.

Using the SLAM Technology has proven to accelerate field collection for facilities with large-scale programs and enrich the documentation of their transmission assets.

3D documentation with the utilization of laser scanning is now widely accepted and seen throughout all industries, as the solution to establish quality as-built conditions and asset management systems. Clients are understanding and being educated that quality 3D data collection can and will be the foundation to move facilities and companies into the future of a true Digital Twin Model.

Let our experience help guide you through this process of data collection, data processing, and data management.



REACH OUT TODAY

Want to experience the SAM difference for yourself? Learn how we can put our resources to work for your next project. Call us toll free at (800) 656-9525 or visit us at sam.biz.

