3D SCANNING & MODELING
It’s Easier to Move a Digital Wall than a Brick Wall

For complex facilities with highly interdependent equipment and systems, ACS’ 3D scanning and modeling services ensure efficiencies in design, schedule, pricing, functionality, and overall building life-cycle costs. The process begins with the identification of critical systems that affect data collection or other critical processes and an in-depth understanding of the facility infrastructure required to support them.

These 3D scanning and modeling tools are used by large and small organizations in industrial, manufacturing, and office applications to help decision-makers and stakeholders proceed with confidence on capital and equipment projects.

BENEFITS OF THESE TOOLS
- Saves Time
- Saves Money
- Accurate Data
- Aids Visualization
- Reduces Project Assumptions
- Safety and Ergonomics
- Eliminates Redundancy, Waste, & Conflict

3D SCANNING
3D High Definition Laser Scanning is used to document project conditions at existing facilities, enabling project stakeholders to identify and better understand current conditions prior to planning for upgrades or additions. This saves time, reduces costs, and minimizes errors.

A laser scan captures millions of individual 3D points along with photographic information for each of those points. Accurate measurements of an area can be obtained by using dimension tools within the scan data. Project team members can measure anything within the project area at any time without additional site surveying. The 3D scanned data provides photographic and dimensional verification of the existing conditions which eliminates guesswork and ensures accuracy of cost estimates.

3D MODELING
When modeling for design considerations, the existing conditions gathered by point clouds, along with the proposed new construction design are consolidated into a virtual environment. This allows the Project Team to identify and locate existing building systems and components accurately and integrate them efficiently with the new design.

Collection and evaluation of such precise and complete data early in the process impacts concept designs and thus the preliminary budget, and ensures that the overall project needs are addressed through the provided solution concepts. Animations are created to explore specific design options with the client to assure early and informed decision-making regarding scope, schedule, and budget.