

## 3D SCANNING MYTHS

# DEBUNKED

Explore the most common  
misconceptions about 3D  
laser scanning.



# INTRO



## WHAT WE'LL COVER

**When you're working with complex work zones, precise operations, and painstaking procedures, 3D laser scanning is your most cost effective and efficient solution to streamline the collection of accurate measurement data on complicated construction and design projects.**

**When analyzing the current conditions of your site, BIM technologies like 3D scanning tools can instantly and accurately collect comprehensive measurement data for construction jobsite measurement and pre-construction processes.**

**Of course, with innovative 3D laser site scanning technologies- and other similar technologies- comes a lot of questions.**

**In this guide, we'll work through some of the biggest misconceptions about scanning technology and functionality. This way, you can spend less time asking questions and more time implementing new 3D capture solutions, understanding the existing site conditions, and designing for your next contract build-out.**

**Let's get started.**

# MYTH #1

## ALL SCANNERS ARE CREATED EQUAL

Depending on the range, complexity, and size of your worksites, it's important to consider whether you're using the right scanner for the space. Level of Detail (LOD) is a vital factor in effective modeling, so the quality and accuracy of your scanning equipment will certainly have an impact on the value of your results.

If you're assessing large layouts for residential or building construction, tripod scanners are the best tool for the job. Tripod scanners are designed for long-range capture with a 360°x317° field of view and high-precision scanning accuracy.

But, did you know that the highest-quality scanners can capture precise as-built measurements down to just two millimeters? Also, were you aware that many scanners on the market are susceptible to variations in surface types and atmospheric conditions? Speed of capture, battery life, and mobility are all factors to consider when comparing scanners, too.

# MYTH #2

## 3D SCANNING IS TOO EXPENSIVE TO IMPLEMENT

A high upfront cost can make implementation seem scary, but it's been proven time and time again: 3D scanning technologies deliver ROI on every operational front. For example, EC Electric experienced an incredible 90 percent reduction in labor costs from their initial estimate, which didn't account for the use of 3D scanning technology.



TAKE A LOOK  
AT THE FULL  
CASE STUDY



For many contractors, they're already enjoying returns in saved cost, labor, and rework after the very first use. Time and labor savings over manual measurement efforts will depend on your jobsite scope, but most can take well over a month and hundreds of hours between hand-measuring with gauges and instruments, plus production time.

# MYTH #2

## 3D SCANNING IS TOO EXPENSIVE TO IMPLEMENT

Your 3D scanner can turn the task of collecting measurement data into a simple one-person operation. Captured measurement data is imported to a point cloud modeling software to register, visualize, explore, and manipulate as-built scans with precision under even the most complicated project requirements. The increased visualization accuracy reduces potential project errors, so you can avoid rework and change orders that often cost thousands of dollars and derail project timelines.

With integrated, intelligent 3D modeling tools, you'll easily transform your point cloud data into worksite constructible models to save your operations time, labor expenditures, and improve your project's bottom line at virtually every point in the process.

When considering price, also evaluate fringe variables, like the technology warranty, technical & quality support, and technology usability.

# MYTH #3



## IT'S ALWAYS BETTER TO OUTSOURCE SITE SCANS

Outsourcing was common practice in the early days of scanner technology, and is certainly still a viable option for unspecialized firms, or contractors that are looking to try-before-you-buy. But, as the technology has advanced, the incentive to purchase has increased correspondingly. Many contractors are opting to purchase scanning hardware, collect scan data, and hire a service contractor to register the data they collected and model from the scan data. If you're operating a contracting business with an in-house team on multiple projects per year, your laser scanner will improve your bottom line and help your firm maintain a competitive edge.

If you're not ready to purchase and assess the business benefits, we recommend renting a laser scanner through a service provider. If you're growing your contracting business and don't have the volume to justify a purchase, consider renting a 3D laser scanner so you can increase your project profit margin at a lower up-front cost.

# MYTH #4

## NEW TECH TRAINING IS A HUGE UNDERTAKING

With the right tools and software, a day in the increasingly competitive construction market is easier and more efficient than ever. In a contractor survey, 65% of respondents reported significant ROI, with the majority of the remaining 35% admitting to not employing ROI tracking.

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**65% OF RESPONDENTS  
REPORTED SIGNIFICANT ROI  
AFTER IMPLEMENTING  
SCANNING TECH, WHILE 35%  
ADMITTED THEY WERE NOT  
TRACKING ROI AT ALL.**

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With simple set up, an intuitive user interface, and training resources for construction professionals ranging from ideation to implementation, project teams can produce engaging, actionable 3D responsive worksite models that impress clients, improve project accuracy, and close significantly more deals than firms using traditional CAD modeling methods.

# MYTH #4



## **NEW TECH TRAINING IS A HUGE UNDERTAKING**

Once site specification data is transferred to the modeling system, software solutions can automatically detect ductwork, walls, structural beams, columns, and other common elements to save significant modeling time. The 3D modeled project allows clients to envision the final product to project material, fabrication, and scheduling needs, so you can hit delivery targets.

And, as experienced contractors, we know that project success means higher customer satisfaction, more referrals, and most importantly, maximized business growth.