



Structural Scanning Capabilities

The Structural Engineering department at Pearl Engineering regularly tackles a variety of different projects for our clients, one important service in particular, being assessing, measuring and documenting dimensions of buildings, objects and spaces.

In doing so, the team can provide clients with precise measurements and recommendations that can be used as they plan to replace or install new equipment, make significant structural changes or even add on to the existing space. In order to deliver reliable and accurate information, the Structural Engineering team relies on a few pieces of important technology.

Using lidar laser-scanning technology, Pearl Engineering utilizes FARO scanners to measure and document the size and dimensions of large objects, spaces and even buildings in a fraction of the time it would take a crew taking the same measurements by hand. There have been some exciting additions to Pearl Engineering's toolbox that have opened up new possibilities:

FARO Focus3D X 330

The FARO Focus3D tripod scanner is a highly efficient and powerful tripod laser scanner with indoor and outdoor application potential. Ideal for architecture, civil engineering, construction, forensics, industrial manufacturing and land surveying.

Features:

- Scanning range of up to 330 meters
- Fast and precise readings in direct sunlight
- Accuracy within 2mm
- Vertical range of 300° and a horizontal range of 360°

FARO Freestyle

The FARO Freestyle is a high-precision, handheld object laser scanner. The freestyle is ideal for reverse engineering, package design, documenting hard-to-reach-areas, analyzing vehicle crashes, motion capture and more.

Features:

- Verifiable accuracy of 0.5mm
- Real-time cloud virtualization
- Auto leveling
- No cords/batteries required

FARO S 350

The FARO S 350 tripod scanner is a slightly more powerful version of the Focus3D, offering a massive range of over three and a half football fields. Indoor and outdoor applications including accident reconstruction, architecture, civil engineering, construction, forensics, industrial manufacturing and land surveying.

Features:

- Scanning capability of up to 350 meters away
- Accuracy within 1mm
- Operational in wet conditions and at temperatures from -20°C to 55°C
- Real-time scan processing and registration

Want to learn more? Contact the Pearl Engineering team to learn how we can utilize our advanced laser scanning technology to find a unique solution to your complex problem.