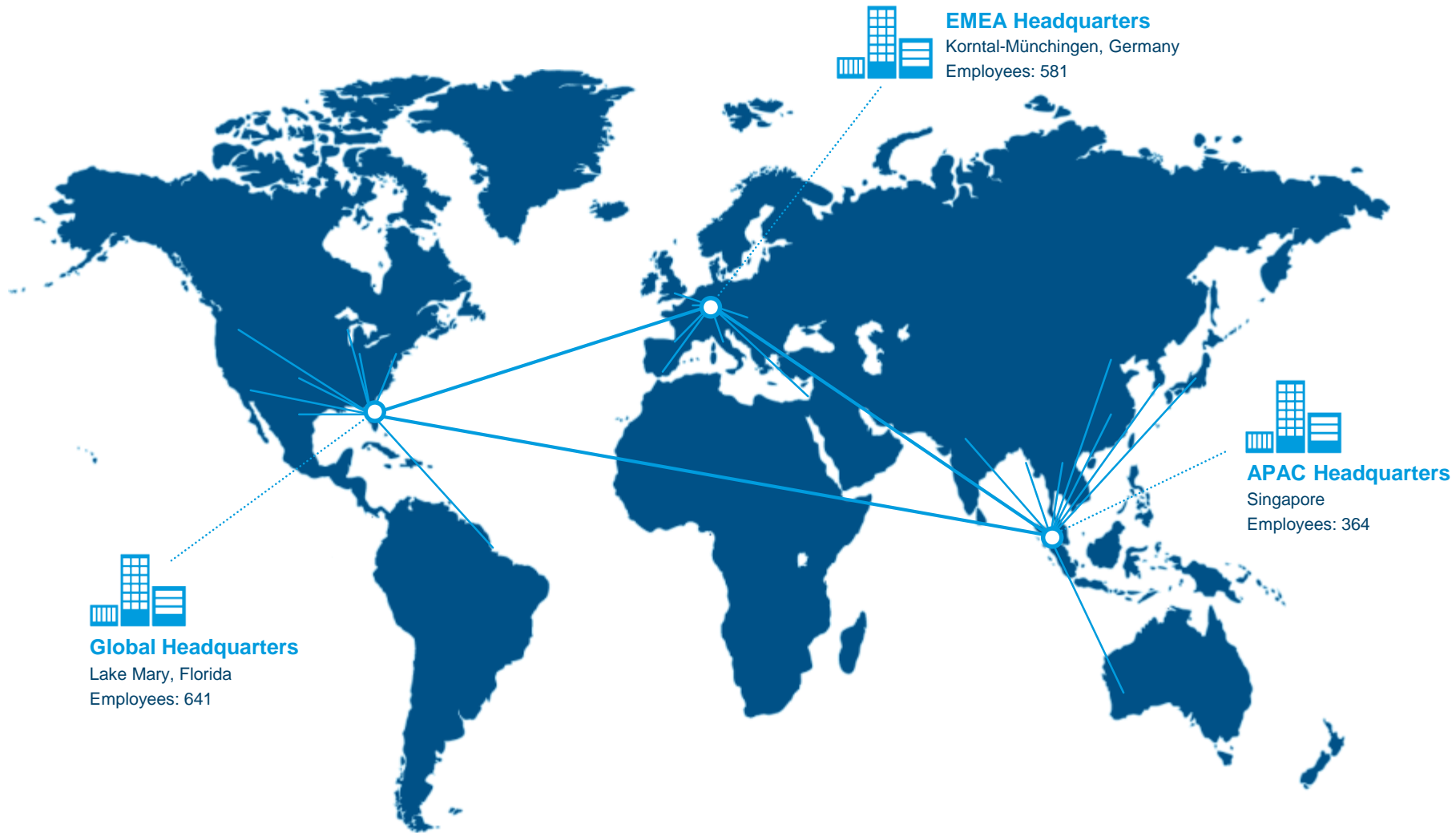




FARO[®] Technologies, Inc.

Company Overview

Global Footprint with Local Sensibility



Headquarters are based in Lake Mary, Florida, Korntal-Münchingen, Germany and Singapore.
Subsidiaries are located in Australia, Brazil, China, France, Germany, India, Italy, Japan, Korea, Malaysia, Mexico, Netherlands, Philippines, Poland, Portugal, Singapore, Spain, Switzerland, Thailand, Turkey, United Kingdom, USA.



Introduction – FARO Company Overview

- 1981 회사 설립
- 1995 FaroArm® 출시
- 1996 유럽 시장 진출
- 1997 나스닥 상장
- 2000 FARO Japan 설립, 아시아 시장 진출
- 2005 FARO 싱가포르 아시아 본부 설립
- 2010 Focus3D 출시
- 2015 Freestyle 출시



FARO® at a Glance

The world's most trusted source for
3D measurement and imaging solutions

FARO
Accelerate Design
PRODUCT DESIGN



FARO
Empowering Quality
FACTORY METROLOGY



FARO
Proven Facts
PUBLIC SAFETY FORENSICS



FARO

FARO
Made to Order
3D SOLUTIONS



FARO
Informed Lifecycle
CONSTRUCTION BIM-CIM



3D Services

FARO

Creating Value for Our Customers

Architecture, Engineering & Construction



- Capture comprehensive, as built in 3D
- Share as built online with project team
- Detect defects at key points in project lifecycle

Minimize in field documentation time and reduce project risk

Manufacturing



- Inspect on arrival
- Verify measurements to specs
- Quickly identify defects and take action

Eliminate margin impacting scrap and rework costs

Accident & Crime Scene Reconstruction



- Capture entire scene quickly
- Document, preserve and analyze the scene
- Deliver the analysis in 3D

Create faster, accurate, permanent documentation and more compelling presentation(s)

New Product Design & Reverse Engineering



- Digitize the part
- Build the model
- Confirm/verify model to design intent
- Deliver the product

Rapidly execute new designs with low risk

Bringing Value to Life With Solutions

Complete Portfolio of 3D Measurement and Imaging Hardware



FaroArm® and ScanArm®



Laser Tracker



Laser Scanner



Laser Projection



Handheld Scanner



3D Imager

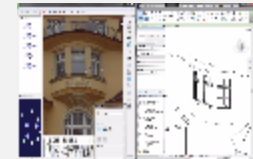


Augmented Reality

Application-Specific Software



Quality Control and Inspection



Construction QA/QC



3D Point Cloud Registration

FARO® Laser Scanner Focus^S 70/150/350



Accuracy

거리, 각도 측정과 dual axis compensator 관련 향상된 정확도

Temperature

확장된 활용가능 온도범위로 다양한 환경에서도 스캐닝 가능

On-Site Compensation

On-site compensation 을 통해 현장 또는 사무실에서 Focus S의 최고의 스캔 데이터를 보장 가능.

IP Rating - Class 54

IP54 방진방수 등급으로 여러 환경에서 활용 가능

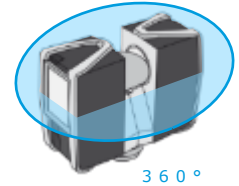
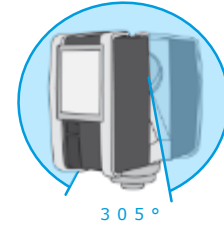
HDR Photo Overlay

HDR camera 를 장착, 상세한 이미지 캡처 가능하고 극한의 밝기 변화에도 자연스런 색상 제공

Accessory Bay

추가 악세서리 연결로 사용자별 맞춤 설정 가능.

Specifications



HDR

High Dynamic Range (HDR) photo recording, 2x / 3x / 5x



Ranging error¹

± 1mm at 10m



Range Focus^S 70/150/350

0.6m – 70/150/350m indoor or outdoor



Light Weight

4,2 kg



Measuring Speed

122,000 / 244,000 / 488,000 / 976,000 points/sec

¹ Ranging error is defined as a systematic measurement error at around 10m and 25m, one sigma.

FARO® Laser Scanner Focus^M 70

Short-Range Scanning - up to 70m

단거리 측정 및 소규모 영역에 이상적인 최대 70M 스캐닝 가능한 M70 모델

Compact and Portable

인체공학적 운송 케이스 및 방수 운송 가능으로 휴대성 극대화

HDR Photo Overlay

HDR camera 를 장착, 상세한 이미지 캡처 가능하고 극한의 밝기 변화에도 자연스런 색상 제공.

Best Value for Money

가장 높은 가성비를 자랑하는 전문가용 스캐너

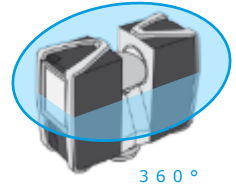
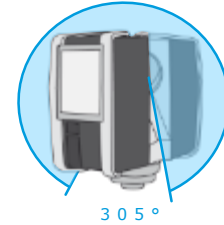
IP Rating - Class 54

IP54 방진방수 등급으로 여러 환경에서 활용 가능.

Temperature

확장된 활용가능 온도범위로 다양한 환경에서도 스캐닝 가능.

Specifications



HDR

High Dynamic Range (HDR) photo recording, 2x / 3x / 5x



Ranging error¹

± 3mm at 10m



Range Focus^M 70

0.6m – 70m indoor or outdoor



Light Weight

4,2 kg



Measuring Speed

122,000 / 244,000 / 488,000 points/sec

¹ Ranging error is defined as a systematic measurement error at around 10m and 25m, one sigma.

Focus S – Easy to use

원격으로 작동 가능



다양한 기법으로 스캔



간편한 데이터 추출



배터리 구동



FARO® Freestyle^{3D}



Best Value for Money

The Freestyle^{3D} 은 가장 합리적인 가격에 탁월한 성능을 가진 3D스캐너입니다.

Real-Time Point Cloud Visualization

실시간 포인트 클라우드 시각화 기능은 직관적인 데이터 수집을 지원.

Up to 8m³ Scanning Volume

광범위한 스캔 영역으로 생산성 향상.

Automatic Flash

The new auto mode로 조명상태에 따라 LED 조명을 자동으로 조절

Optional On-Site Calibration

편리한 Calibration 기능으로 현장에서도 고품질 데이터를 보장.

Specifications



3D Point Accuracy
1.5mm



Intuitive Plug and Play System



Real-Time point cloud visualization



Lightweight Industrial Grade Device



3D Documentation Solution

Features: IP rating: IP 5X, Best ROI on the market, Auto leveling, Flexibility to work without artificial targets, FARO certified accuracy, No extra power supply required, Easy-to-use scanning software, Seamless integration with Focus^{3D} laser scan data, even in grey scale, Worldwide service and support from local FARO facilities



FARO® Freestyle^{3D} X



Xtra Accuracy

검증된 1mm 정확도로 어려운 스캐닝 작업 가능.

Optional On-Site Calibration

편리한 Calibration 기능으로 현장에서도 고품질 데이터를 보장.

Automatic Flash

The new auto mode로 조명상태에 따라 LED 조명을 자동으로 조절

Real-Time Point Cloud Visualization

실시간 포인트 클라우드 시각화 기능은 직관적인 데이터 수집을 지원.

Up to 8m³ Scanning Volume

광범위한 스캔 영역으로 생산성 향상.

Best Point Filter

The new best point filter 기능으로 노이즈 최소화로 최적의 데이터 품질 제공.

Specifications



3D Point Accuracy

1.0mm



Intuitive Plug and Play System



Real-Time point cloud visualization



Lightweight Industrial Grade Device



3D Documentation Solution

Features: IP rating: IP 52, FARO certified accuracy, Auto leveling, Flexibility to work without artificial targets, No extra power supply required, Easy-to-use scanning software, Seamless integration with Focus^{3D} laser scan data, even in grey scale, Worldwide service and support from local FARO facilities



FARO® SCENE



SCENE WebShare Cloud Integration

SCENE WebShare Cloud data 생성 온라인
통해 제공 가능

Super-Crisp Visualisation

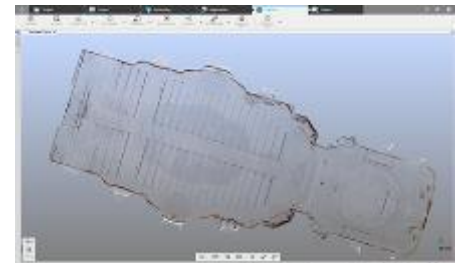
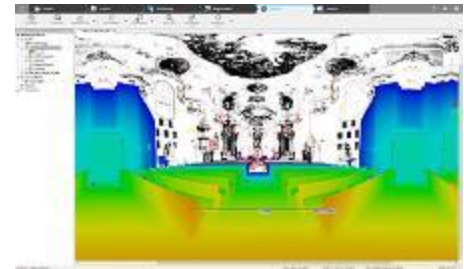
색상 밸런스 신규 기능과 혁신적인 슈퍼
샘플링으로 선명하고 상세한 3D 시각화 가능

Easy Processing of Large Scan Projects

데이터베이스 기술 통해 광대한 스캔 데이터 관리
및 효율적인 처리 가능

Plug-Ins for Extended Functionality

다양한 Apps 설치로 인터페이스 플러그인 제공을
통해 기능 확장 가능.



Features: Native 64-Bit software with multithreading, Efficient workflow from the original data acquisition to the finished project, Minimal manual post-processing editing required thanks to automatic scan processing, Simple and easy to learn, New registration features provide even more reliable automatic scan placement results, Interfaces to numerous industry specific software products.



FARO® SCENE WebShare Cloud



Sharing 3D Laser Scan Data

파트너 및 고객과 쉽고 빠르게 스캐닝 데이터 공유 가능.

Easy Viewing of FARO Laser Scan Data

직관적이고 배우기 쉬운 파노라마 뷰 제공.

Intuitive Project Overview

World map에 사진과 함께 사용 가능한 프로젝트 표시

Simple Distance Measurements

제공된 스캔 데이터 상에서 간단한 측정 가능.



Features: SCENE WebShare Cloud is a cloud-based hosting solution from FARO for easy and secure sharing of scan data worldwide via the internet. With SCENE WebShare Cloud, FARO offers a comprehensive service to provide users with simple access to 3D documentation. Neither technical training nor specialist skills in 3D laser scanning are necessary to work with the intuitive user interface. Digital data, such as 3D documentation, often has to be available to many different project partners. Previously, users having their own internet server, could use SCENE WebShare to present their laser scan projects to clients and project partners.



FARO® PointSense for AutoCAD®



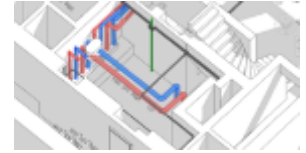
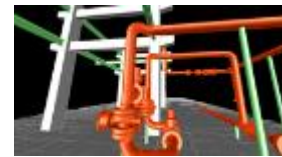
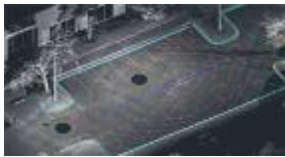
PointSense Basic/Pro
효과적인 Point Cloud
관리

PointSense Building
2D Building Plans을 위한
설계 도구

PointSense Heritage
빠른 3D 데이터 구축

PointSense Plant
Plant 모델링 최적화

PointSense for Revit
3D models in Revit point
clouds



ShipBuilding - BWTS/BWMS



Focus3D X330 HDR - 1/5 Resolution HDR 3x 12scans

https://www.youtube.com/watch?v=z4dbMP-D_4A

FARO

Construction



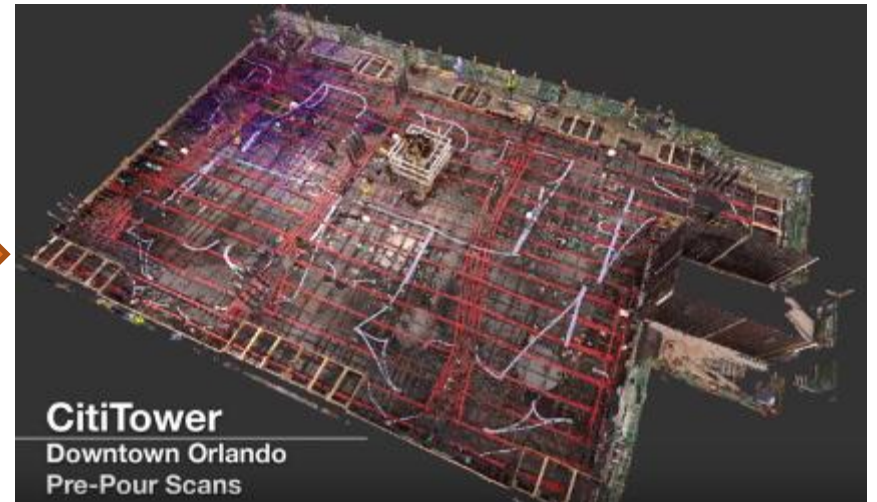
Baker Verifies Construction Quality



<https://www.youtube.com/watch?v=T1rz8nNi17M>

FARO

BIM, City Tower



Architecture



St Johannes Baptist church in Baden Württemberg

FARO Focus 3D Project Video: Dischigen

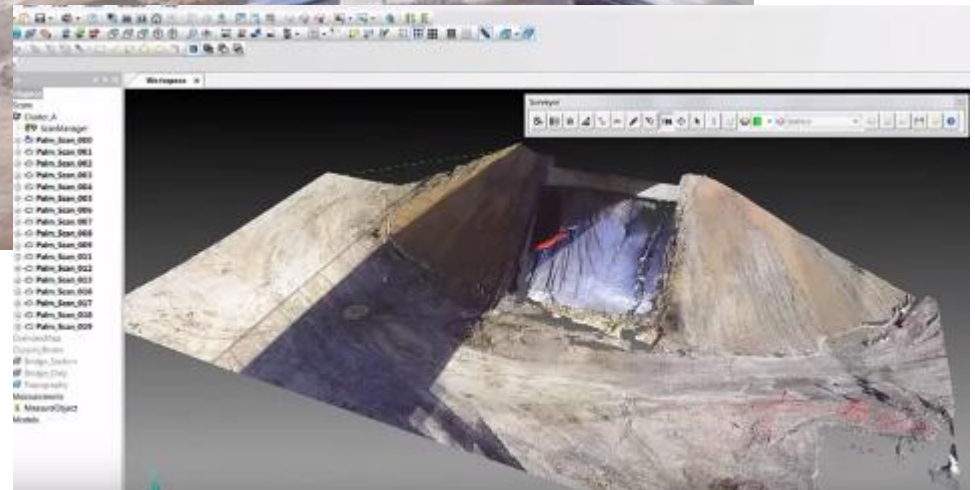
Scan



Photo

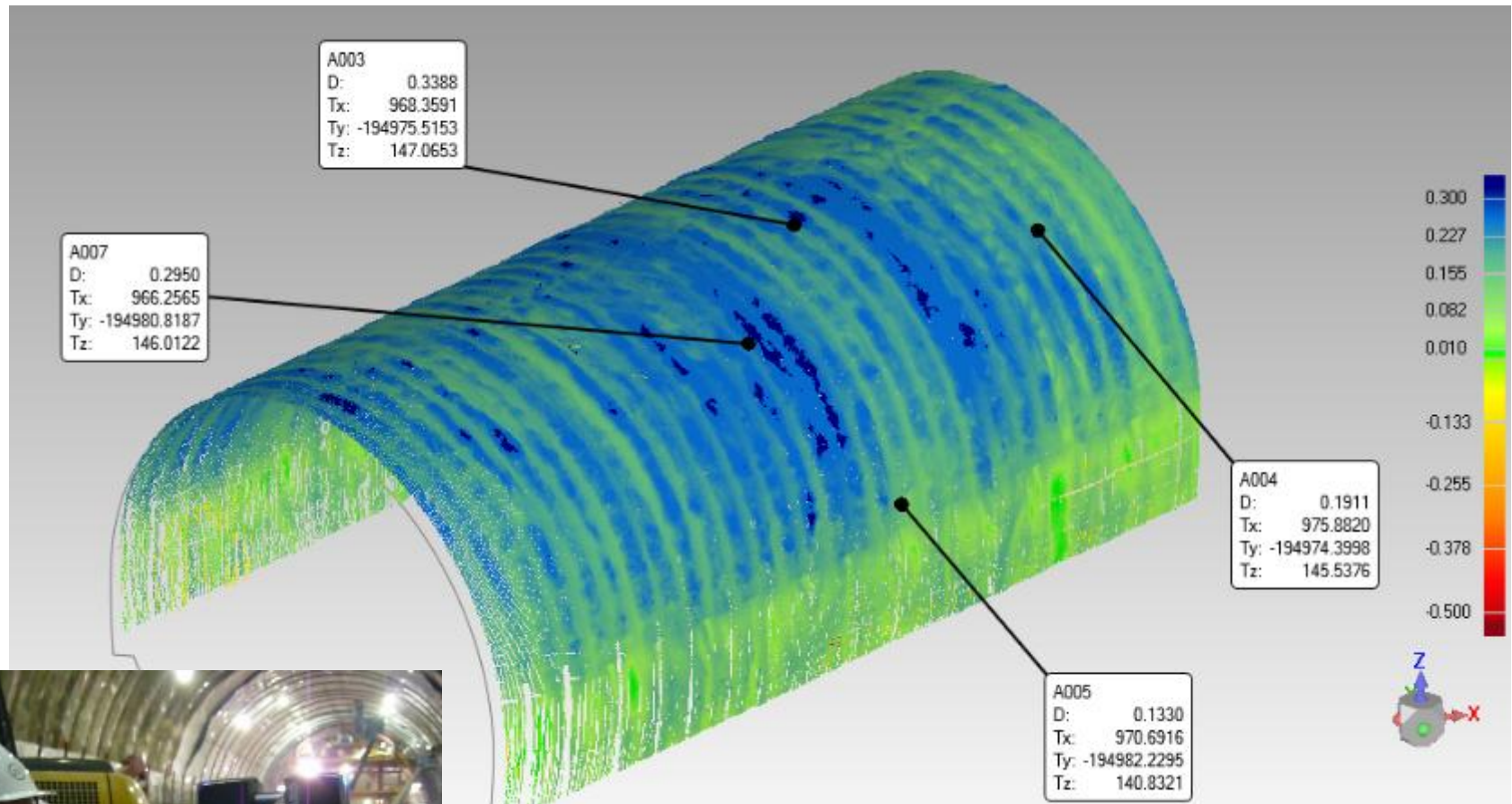


Civil Engineering & Survey



New bridge with future expansion plans,
needed as-built for future design

Survey & Measurement





Thank you
