# 3D MEASUREMENT CASE STUDY

Test Report: Polyga Compact C210



Polyga is a developer of 3D scanners and mesh processing software based in Vancouver, Canada

Thousands of 3D scanning software installations

Core Technology:
Structured light 3D
Scanning & 3d Scan Data
Processing Software

Developed 20+ scanner models

Hundreds of scanner deliveries worldwide in engineering and research companies

# **Products & Technology**

All Polyga 3D scanners use structured-light technology for capturing high-resolution digital 3D scans from real world objects. These systems are great for companies, manufacturers, academic institutions, visual effect studios, and research labs that need 3D scan data for visualization and measurement applications including:

- 3D modeling
- Documentation/archiving
  - Reverse engineering
- Scientific measurement
- Computer-aided inspection
- Rapid prototyping/3D printing



# **Scanning Overview**

#### **Scanners**

Polyga Compact C210

#### Introduction

The purpose of this sample test was to perform a demonstration to capture the dimensions of various objects. Prior to scanning, we placed white modelling clay to create unique geometry around the objects to aid with alignment.

### **Scan Processing Results**

The 3D model rusted pipe consists of 7 individual scans. A 1 inch gauge block was scanned using our HDI C210 system mounted on a large tripod. Two sides of the gauge block were scanned, then aligned and measured using the coordinate tools within Flexscan3D. Modelling clay was used on the object to facilitate alignment by adding geometry. Additionally, the object was sprayed with developer spray to reduce surface reflection.



# **Equipments Used**

Polyga Compact C210



**Lightweight Rotary Table** 





### **Scan Results**





**Download Samples** 

### **Scan Results**



The rusted pipe has a tapered width. Below is an image to show the width of the pipe (~35.6mm)

## **Scan Results**





Actual Measurement	25.40 mm
Object Scan Measurement	25.37 mm

**Download Samples** 

### Our Team Looks Forward To Speaking With You Soon!

www.polyga.com

contact@polyga.com

+1 (604) 293-1767

Unit 221 – 3993 Henning Drive Burnaby, BC V5C 6P7 Canada







