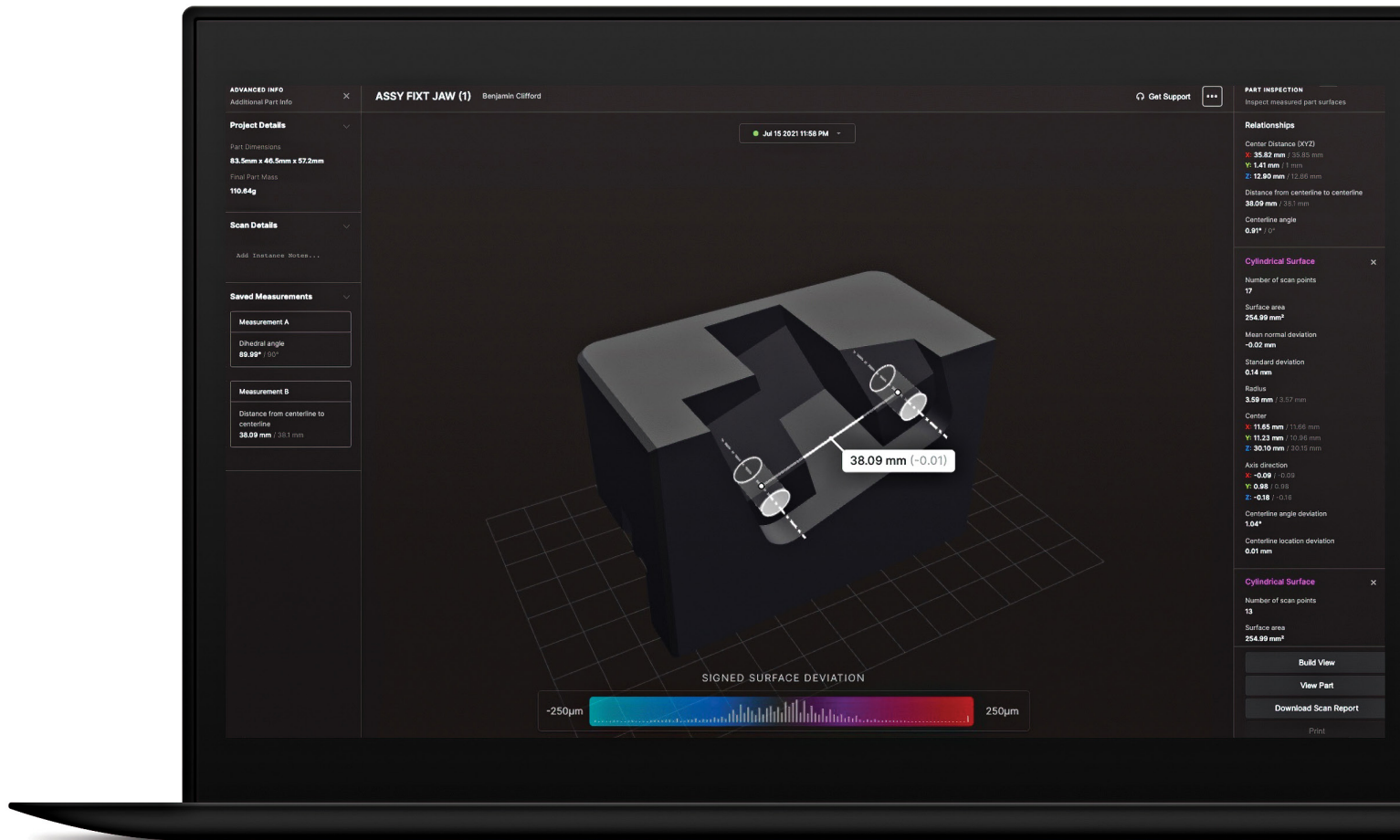


# Blacksmith



## Automated inspection and quality control for additive manufacturing

Blacksmith is autopilot for digital manufacturing. It connects part design, production, inspection, and quality control with powerful artificial intelligence (AI). Print with confidence through automated scanning and inspection turning your *Markforged X7™* 3D printer into an end-to-end solution for all your additive manufacturing needs. Validate quality as you print so parts can be used immediately after printing.

Blacksmith ensures every part is produced exactly as designed. Anywhere in the world, on all of your printers. It scans, measures, and compares dimensional accuracy data of 3D printed parts to their design files — giving manufacturers reliable precision parts right off the print bed. With Blacksmith, you can look forward to faster time to market for parts as a result of less time — and money — spent on inspections and validations.

# Overview

## + AI feature detection

Select from critical part features that are automatically detected for inspection in high resolution and quickly determine if they meet your exact specifications.

## + Precise data visualizations

View automatically generated details and insights about parts using heat mapping and point cloud data capture and visualization. With heat mapping you can capture a quick snapshot of part accuracy or switch to point cloud scanning to view specific measurements of each point captured for a more detailed look.

## + Fiber placement verification

Make sure you are getting the right part every time without having to perform a costly and destructive fiber verification process. Blacksmith enables automatic, in-process non-destructive testing to make sure the fiber is located exactly where it should be to provide the desired strength that you need.

## + Custom quality reports

Select and name specific part measurements that matter most to you in order to detail strength, accuracy, and measurement data. Then, download an automatically generated, customizable digital inspection report around that data for documentation and traceability purposes.

