

Beating project schedules and budgets

Quantapoint provides laser scanning technology and services that help clients from the architectural, process, power and offshore industries achieve 'Zero-Defect Projects™'. The company digitises facilities using its patented laser scanning technology and provides professional services for visualisation, analysis, quality control and decision support to help eliminate potential risks across the project lifecycle. According to CEO and founder Eric Hoffman: "The primary value we provide is the elimination of uncertainty and risk."



*Eric Hoffman
(CEO and founder
of Quantapoint)*

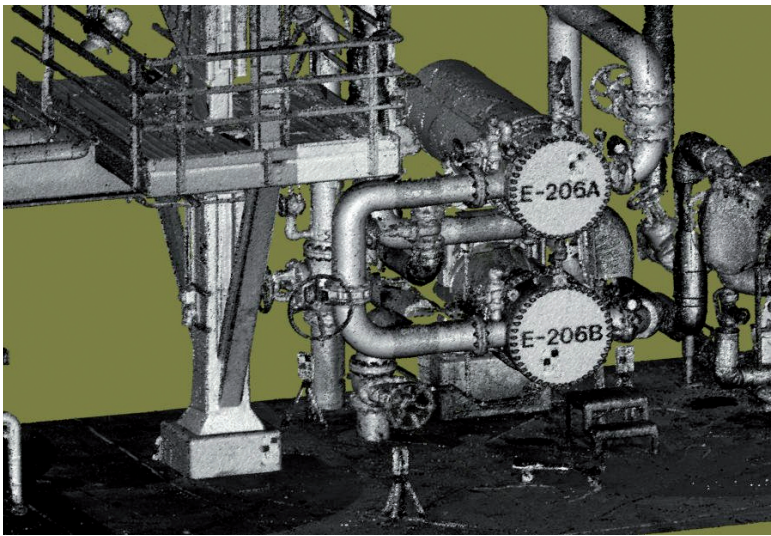
Quantapoint started out as a contract engineering and robotics firm in 1991 in Mr. Hoffman's basement. In the first year of business, the company generated a contract for the development of a walking robot for NASA and created the first commercially available gray-scale range finder. Over the next few years, Quantapoint continued its work in robotics research, primarily in environmental sensing or 'enabling

robots to see their surroundings'. Despite many successful projects, Mr. Hoffman decided to refocus the business in 1998. "You can only go so far in contract work. There is no repeat business, for instance. So we looked at everything we developed over the years and decided to commercialise our large scale 3D laser imaging technology, which we had applied to measuring man-made facilities, such as refineries, buildings and other structures."

Since refocusing the business, Quantapoint has completed more than 1,200 projects and 150,000 zero-incident man-hours worldwide for the architectural, process, power and offshore industries. The company has worked on more than 70 offshore platforms for clients such as BP, Chevron, ExxonMobil, and on over 70 refineries and chemical facilities for clients like Shell and Atofina, and hundreds of government, educational and historical buildings, including the Guggenheim, Parthenon, US Capitol and Yale. "When a company takes on a capital project – such as modifying an existing facility – traditionally there is a large amount of rework and wasted money involved. They may spend 10 to 25% of their overall budget on fixing project errors," Mr. Hoffman explains. "With the capabilities and techniques that we have developed, we can drive this wasted capital down to almost zero."

At the core of Quantapoint's services is patented laser scanning technology that is designed to provide high-speed, high-resolution 360-degree data capture. The laser scanning technology helps to ensure that data can be safely collected in a variety of real-world situations with minimal elevated work.

"The first step of what we do – and what brings so much value – is digitising the facility to put critical facility as-built information at our client's fingertips. We then use our award-winning Laser Model technology which can be accessed on a computer and in the design tools that engineers, architects and owners use. This shows the digitised facility efficiently and in



Laser Models of a Refinery

a very realistic way in all those tools. Someone who is designing a plant can actually see it and measure it as if they were actually at the facility."

The company's unique Laser Model™ technology integrates all laser scan data to provide detailed, high-definition 3D solid models of a facility. Laser Models offer clear advantages over older "point cloud" technology, whose sparse data make it difficult to visualise or understand the facility and more likely to miss critical design details. Laser Models are visually clear and actually look like the facility, whereas the 'foggy' point clouds do not look like the facility and are difficult to use, interpret or understand. Also, Laser Models integrate redundant data while verifying and preserving measurement

accuracy. This results in file sizes that are ten or more times smaller than the equivalent point clouds and can be easily shared across a network.

Quantapoint also provides analysis, quality control, documentation and decision support services to eliminate the most common sources of preventable project defects from across the project lifecycle. It is Quantapoint's unique combination of innovative laser scanning technology and professional services that help our clients achieve Zero-Defect Projects™, beating project budgets and schedules by 15% or more and saving millions of dollars and thousands of man-hours.

"The primary value we provide is the elimination of uncertainty and risk. By

helping to avoid all of the mistakes that can occur from not knowing exactly what is there, clients end up not only making fewer mistakes, but when they shut the plant down to put the new equipment in, it is operational again much faster."

As an innovator, Quantapoint has been issued several US patents and has received various awards. Earlier this year, Quantapoint Laser Model technology was recognised by FIATECH as a significant technological achievement that will provide benefits to the capital projects industry. Laser Model technology has also received awards from R&D Magazine and the Engineering and Construction Contracting Association, and the company has been recognised as one of the 100 fastest growing privately held companies in Pittsburgh and the surrounding region for three consecutive years. ■

Quantapoint at a glance

Quantapoint provides laser scanning technology and services that help our clients achieve Zero-Defect Projects. The company 'digitizes' facilities using patented laser scanning technology and then use our award-winning Laser Model technology to create a high-resolution Digitized Facility that can be accessed directly or within various CAD packages. Quantapoint also provides analysis, quality control, documentation and decision support services to eliminate the most common sources of preventable project defects from across the project lifecycle. It is Quantapoint's unique combination of innovative laser scanning technology and professional services that help clients achieve Zero-Defect Projects, beating project budgets and schedules by 15% or more and saving millions of dollars and thousands of man-hours



Quantapoint
275 Curry Hollow Road - M100
Pittsburgh, PA 15236
USA
Phone: +1 412 653 0100
Website: www.quantapoint.com