



Quantapoint Case Study

Shell Oil Ultra-Low Sulfur Diesel Project – Refining

Various North American Refineries

Situation

Shell Oil Company modified several of its US refineries in order to comply with Low Sulfur Diesel requirements. The project involved significant modifications to several operating units at five refineries located in Washington, Texas and Louisiana.

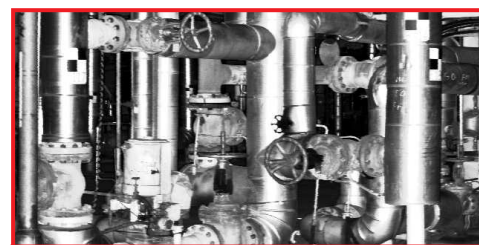


Challenge

Common to each facility was a lack of accurate and current existing condition documentation. The goal was to select a work process that provided a highly accurate and detailed 3D model in a fraction of the time required by traditional surveying techniques. It was further required that 3D laser scanning would generate a model that would not require a costly and time-consuming re-modeling effort.

Solution

Quantapoint was selected to perform laser scanning to generate the data needed to achieve detailed engineering design and construction goals. Our 3D data was used for preliminary and detailed engineering design.



*Quantapoint 2D Laser Scan (Not a Picture)
Each Point is a Measurement*

Results

A few unique aspects about Quantapoint's contributions to this project include the following:

- ❖ Quantapoint performed laser scanning at five refineries located throughout the United States. A total of eight operating units were scanned in their entirety. Quantapoint's scope of work included the following operating units and areas: Hydrotreater Units, Gas Oil Hydrotreater Units, Diesel Hydrotreater Units, Piperacks, OSBL Tie Points
- ❖ Generated almost 1,000 laser scanned images and completed documentation of the facility in a fraction of the time required by traditional surveying methods.
- ❖ Required approximately one to two weeks of fieldwork at each unit to collect data. 3D models were issued within one week after completion of fieldwork.
- ❖ Enabled detailed engineering design to be executed in India.