

Laser Data Collection Project

Skid Mounted Steam to Hot Water Converter

Project Scope

The client was replacing a skid-mounted steam to hot water converter. The key tie-in points had to be accurately located and referenced to plant coordinates. New socket welded piping would replace the old threaded lines. Client wants a 3D model of the existing skid to aid in the design of the replacement.



Figure 1: Site photograph of existing hot water skid to be replaced



Figure 2: Nearly 500 data points were recorded of the piping, equipment, and steel skid structure

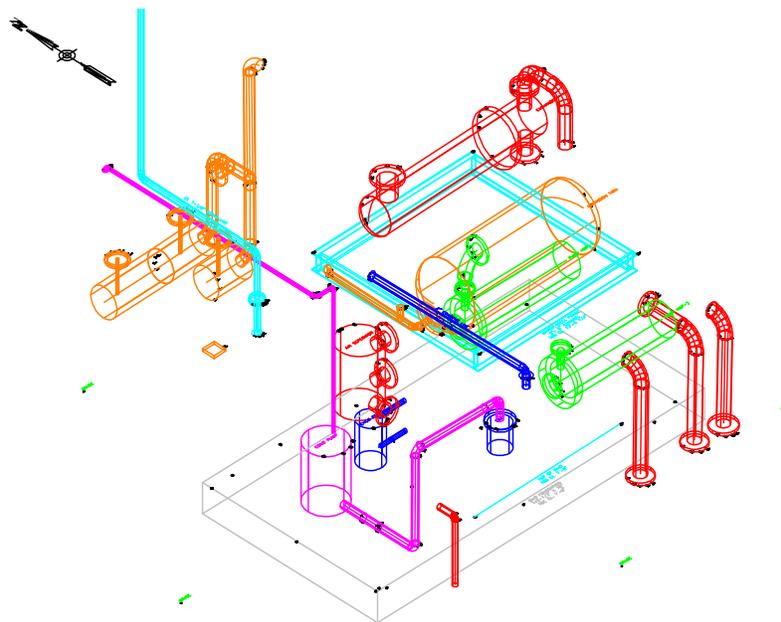


Figure 3 : The captured data points were used as the basis for developing a 3D solid model in AutoCAD

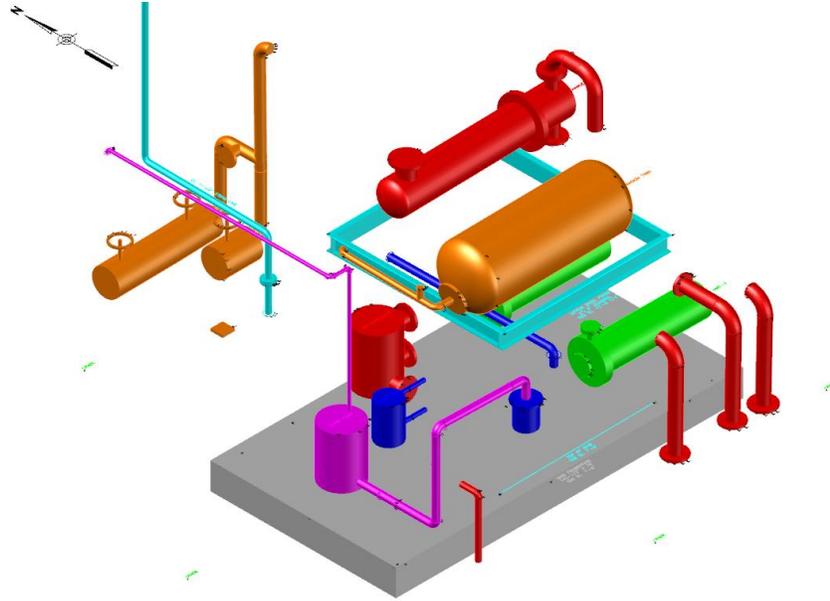


Figure 4: A rendered image of the 3D solid model to help visualize location and relationships

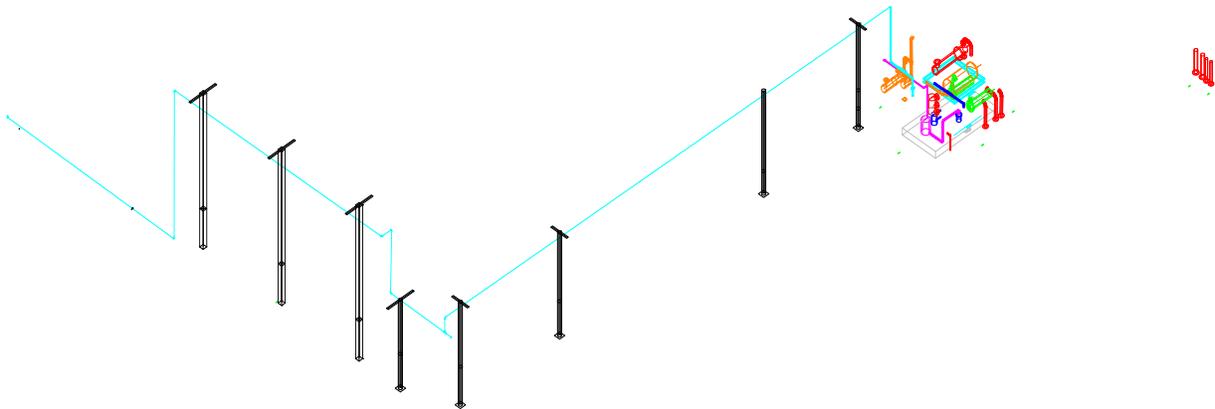


Figure 5: Later, piping supports and water supply lines were also surveyed and merged into the previously 3D model