



# Field Services

- *On-Site 3D As-Built Piping & Equipment Modeling*
- *Superior accuracy of Industry leading Leica Instruments*
- *Real Time BOM Development*
- *On-site Model Development & Verification with no Post Processing*
- *Instant Model*

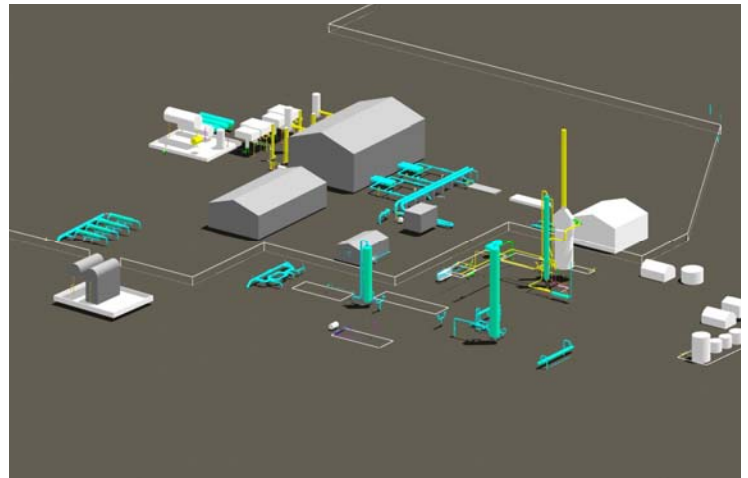


## Creating As-Built models of Piping systems quickly, safely, and accurately

CADWorx fieldPipe for Leica fieldPro leverages speed of “Point and Shoot” Measurement with the power and precision of Laser EDM technology aboard the Leica Geosystems’ Total Station. This software allows IMAGE to model any piping system with pinpoint accuracy. To create as-built models, our operators have only to set up the Total Station, point the laser at a piping item and pick components from the toolbar – the software places components in the model at exactly the right position. Now measuring and modeling hundreds of pipe components on-site in real-time is quick and accurate. Safety is also dramatically improved as it reduces climbing and clambering associated with collecting this data.

### Deliverables produced on-site, on time

Combining Lieca’s Total Station with the functionality of the 3D piping package, CADWorx, which includes piping, steel, HVAC, cable trays, automatic isometrics, bills of material and bi-directional links to stress analysis, IMAGE can develop 3D plant models on-site and in real-time. This dimensional and material information can then be used to generate accurate Fabrication and Assembly Isometric drawings, Bills of Materials, Weld Maps, Cut Lists, and more. All this can be generated in the field on demand and verified and approved in real-time on-site.



### Situations of Optimal Value for Technology

- As-built dimensions are required for job completion.
- Modifications are required on an in-service pipeline and reduction of down-time for rework is of significant importance.
- Accurate “Edge of Skid” connection location must be located on existing equipment so that accurate Tie-in piping can be prefabricated.
- Replacement of old existing piping due to deterioration of mechanical integrity is required.
- Piping spools have been fabricated and must be verified for dimensional accuracy.
- Accurate dimensional information must be obtained about piping that is located in an elevated or otherwise “difficult to access” position.
- An accurate survey of existing piping geometry for export to Caesar II Pipe Stress Analysis program is needed.
- Accurate dimensional variance of Hot & Cold piping geometry is required.