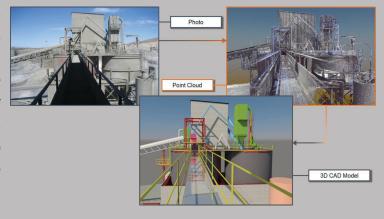


DOCUMENTATION

3D laser scanning uses a non-contact, non-destructive technology to create a digital, three dimensional (point-cloud) image of physical objects. ZAP uses this technology to capture the "as-is" condition of an existing site so that new equipment can be drawn in the 3D CAD software, utilizing the scan as a reference. The scan is able to detect equipment that may not be included in the model, and avoid potential design conflicts.





3D SCANNING APPLICATIONS

- Reduce required field time
- Reduce potential errors and rework
- Improve model and constructability reviews
- Higher precision tie-points
- Allows for better pre-planning

- Design engineering for modifications and upgrades
- Piping layout
- Post-construction as-built documentation
- Post-accident image capture for root-cause analysis
- Better visualization during design process

DELIVERABLES

Native point-cloud files

• Jet stream viewer files

Autodesk files







TECHNICAL INQUIRIES Christian Ortega ortegac@zapecs.com 720.923.7096 COMMERCIAL INQUIRIES Evan Anundsen

anundsene@zapecs.com 303.656.4829