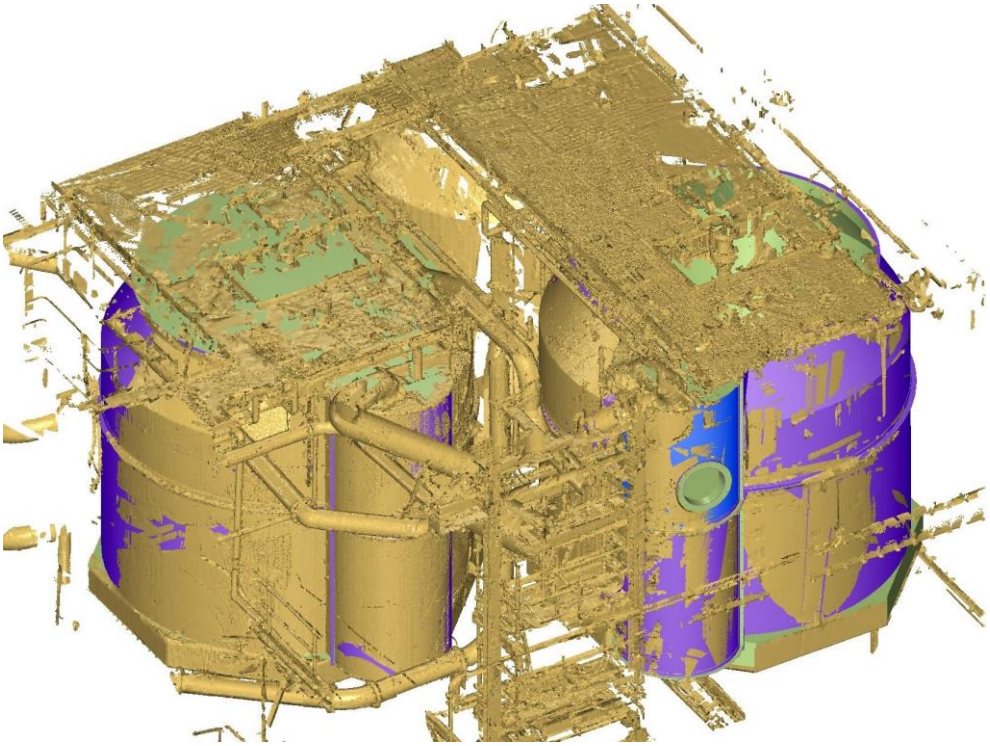
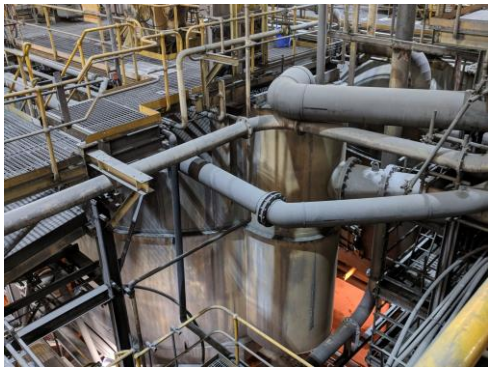
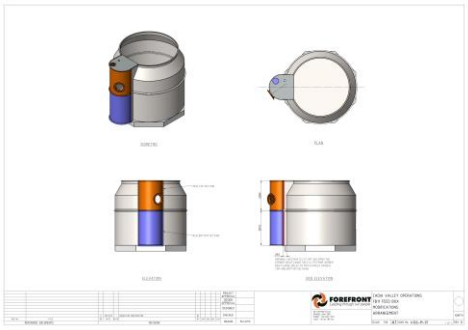
Flotation Cell Feed Box Reverse Engineering







Forefront Services was engaged to reverse engineer and fabricate a flotation cell feed box that has failed and requires replacement. No drawings were available for the existing unit, (and it is currently not removable); therefore, 3D terrestrial scanning technology was used to gather point cloud data from around the box and its connections. From this data, a CAD model was produced, then the model overlaid in the scan for dimensional checking, new flange placement and clash detection. Fabrication drawings were also produced, and the new box manufactured, rubber lined and painted in our Orange workshop.

Forefront Services deliverables included:

- 3D point cloud of the existing feed box and connections
- 3D model developed from the point cloud data
- Dimensional confirmation (scan to model) and clash detection
- Manufacturing drawings
- Feed box fabrication
- Surface treatment (blast and paint in accordance with client specifications)
- Rubber lining

Forefront completed the project on time and on budget ready for the installation to take place during a planned outage.

Commodity:
Gold

Location:
New South Wales

Service:
3D Terrestrial Scanning, Engineering Design, Fabrication and Rubber Lining