



Thickener Feed Pipe Reverse Engineering



Forefront Services was engaged to reverse engineer and fabricate a thickener feed pipe that had failed and thus was impacting thickener performance. No manufacturing drawings were available for the existing pipe; therefore, 3D terrestrial scanning technology was used during an outage to gather point cloud data along the pipe and its connections. From this data, a CAD model was produced, fabrication drawings created, and to assist with manufacture full-size wrap arounds were printed and used to cut and align the pipe during fabrication.

Forefront Services deliverables included:

- 3D point cloud of the existing pipe and connections
- 3D model developed from the point cloud data
- Manufacturing drawings and full-size pipe wrap arounds developed to assist with the cutting and alignment of each section
- Pipe 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 the next planned outage.

Commodity:
Gold

Location:
New South Wales

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

