

CASE STUDY

Advanced NDT for FMG Cloudbreak Mine Tank Construction



WHY APPLUS+?

CIVMEC engaged Applus+ for this project due to our expertise in advanced Non-Destructive Testing (NDT) solutions and our ability to deliver high-quality inspection services efficiently. Our ability to provide Phased Array Ultrasonic Testing (PAUT) instead of traditional Radiographic Testing (RT) ensured minimal disruption to the project while maintaining compliance with API 650 standards.

OBJECTIVES

- **Conduct thorough inspections of welded horizontal and vertical welds**, specifically 'T' joints, on the new steel water tank.
- **Ensure compliance** with API 650 requirements.
- **Eliminate project downtime** associated with traditional RT methods.
- **Improve data quality and risk reduction** during the inspection process.

SOLUTION

Applus+ deployed two Advanced NDT Technicians to the Cloudbreak iron ore mine in the Pilbara region, Western Australia. Our team utilised PAUT, a superior alternative to RT, to inspect the welds efficiently. The project was completed within four days, ensuring a swift and effective inspection process without causing delays.

BENEFITS

- 1 INCREASED EFFICIENCY**
 The use of PAUT significantly accelerated the inspection process, reducing downtime and allowing for seamless project execution.
- 2 COST-EFFECTIVENESS**
 Eliminating RT logistics and downtime resulted in overall project cost savings.
- 3 IMPROVED DATA ACCURACY**
 PAUT provided superior defect detection and characterisation, ensuring the highest quality standards.
- 4 ENHANCED SAFETY**
 By eliminating the need for radiography, Applus+ minimised safety risks associated with radiation exposure and exclusion zones.

OVERVIEW

Company: Civmec
End market: Mining
Service: Advanced NDT

KEY METRICS

- 
0 project downtime
- 
4 Days to complete project
- 
0 wait time for results