118' DIESEL TANK | MIDSTREAM TERMINAL — MOZAMBIQUE

DIESEL | INTERNATIONAL

OVERVIEW

A fuel storage terminal in Mozambique required an inspection of their primary diesel storage tank. The terminal's remote location meant that taking the tank out of service would have created severe logistical and supply chain disruptions, with impacts far beyond the facility itself.

SOLUTION

Square Robot deployed its submersible autonomous robotic system to perform a full in-service inspection. The robot collected phased array ultrasonic testing data across the tank floor, combining real-time datasets with renavigated passes to maximize coverage density. All inspection objectives were completed without removing the tank from service.

OUTCOME

The inspection achieved 82% PAUT bottom plate coverage. The client avoided 68 days of operational downtime and over $635,000 in costs — a significant result given the logistical complexity of the remote deployment environment.

KEY IMPACT METRICS
✓ Eliminated 382 confined space entry hours
✓ $635,000 in documented cost savings
✓ 68 days of operational downtime saved
✓ 15,554 lbs of CO_2 emissions contained
✓ 82% PAUT floor coverage achieved remotely
✓ 12-year API 653 inspection interval