

70' LUBE OIL TANK | REFINERY

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OVERVIEW

A Texas refinery operated a 70-foot diameter lube oil tank that was subject to heightened quality control and assurance standards. Taking the tank out of service for a conventional API 653 inspection would have been extremely disruptive to production operations and costly to manage.

SOLUTION

Square Robot performed the inspection while the tank remained filled with lube oil and 100% operational. The team navigated the tank's internal layout in a single day of scanning operations, delivering high-density PAUT data across the majority of the tank floor without interrupting refinery production.

OUTCOME

The inspection achieved 90% bottom plate coverage in a single scanning day, providing the refinery with a comprehensive dataset to support their ongoing maintenance and regulatory compliance programs.

KEY IMPACT METRICS

- ✓ Eliminated > 263 confined space entry hours
- ✓ Estimated > \$500,000 in documented cost savings
- ✓ 6,500 lbs of CO₂ emissions contained
- ✓ 90% floor coverage | inspection completed in 1 day
- ✓ Zero production disruption
- ✓ API 653 inspection interval calculated by client