

99' DIESEL TANK | POWER PLANT

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OVERVIEW

A California power plant needed an API 653 compliant inspection of its 99-foot diesel tank, but had no established process for inspecting its internal floating roof (IFR) tank since tank inspections weren't part of daily operations.

SOLUTION

Square Robot worked directly with the plant to coordinate installation of an external roof manway that aligned directly over the IFR manway, enabling robotic launch and inspection without disrupting plant operations.

OUTCOME

Over 3 days, Square Robot inspected 94% of the tank bottom, keeping the tank online throughout and delivering insight into tank conditions the plant had never had before. The plant received its API 653 compliant inspection with a 20-year inspection interval.

KEY IMPACT METRICS

- ✓ Eliminated 270+ confined space entry hours
- ✓ Almost \$500,000 in documented cost savings by avoiding cleaning and OOS costs
- ✓ 69 days of operational downtime saved
- ✓ 6,600+ lbs of CO₂e emissions contained
- ✓ 94% floor coverage — inspection completed in 3 days
- ✓ 20-year API 653 inspection interval achieved