

40' MGO DIESEL TANK | REFINERY — SIDE LAUNCH

MGO DIESEL | INTERNATIONAL



OVERVIEW

A Singapore refinery had several tanks scheduled for robotic inspection to avoid the significant operational disruption that out-of-service inspections would have caused. For this 40-foot MGO diesel tank, Square Robot worked jointly with their local regional partner to deliver the inspection.

SOLUTION

Square Robot collaborated with its Singapore-based partner to execute an in-service inspection using the side launch system — allowing the robot to enter the tank through a side-mounted manway without lowering the product level. The inspection was completed in a single operational day.

OUTCOME

Square Robot completed its scan with 76% bottom plate coverage in a single day. The refinery's critical tanks remained online throughout, protecting both production continuity and environmental compliance.

KEY IMPACT METRICS

- ✓ Eliminated > 100 confined space entry hours
- ✓ > 1,100 lbs CO₂ contained
- ✓ Estimated > \$200,000 in cost savings
- ✓ 76% floor coverage | inspection completed in 1 day
- ✓ Critical plant tanks remained fully online
- ✓ API 653 inspection interval calculated by client