

Fixed Tool Tracking & PM Logs to Stop Expensive Rig Downtime

CLIENT PROFILE

A major oil & gas drilling contractor operating multiple onshore and offshore rigs. Their operations depend heavily on highly specialized tools, drilling equipment, hoisting machinery, safety systems, and downhole assemblies, each needing strict tracking, calibration, and preventive maintenance.

With every hour of downtime costing significant money, improving equipment readiness was essential.

CHALLENGE

The rig operator struggled with recurring breakdowns and tool-related delays:

- Poor traceability of critical tools, such as torque wrenches, drilling jars, MWD/LWD tools, BOP spares, and downhole equipment.
- Missed preventive maintenance (PM) for rig hoisting equipment, pumps, and hydraulic systems.
- Calibration certificates often outdated or unavailable during audits.
- Tools frequently misplaced between rig sites, leading to urgent (and costly) replacements.
- Technician logs inconsistent, incomplete, or missing evidence of work performed.
- No unified dashboard to predict failure trends or identify neglected equipment.



Asset Infinity deployed a robust Rig Equipment & Tool Reliability System, centralizing tracking, PM, and calibration workflows across all rig sites.

- Every high-value tool tagged and tracked from tool crib → rig floor → maintenance bay.
- Real-time visibility into tool location, usage history, and assigned crew.
- Alerts for overdue returns prevented tool shortages.

- PM schedules for pumps, top drives, mud systems, generators, cranes, and hoisting equipment.
- Standardized checklists for lubrication, pressure checks, inspection of wear parts, and safety tests.
- PM overdue escalations reduced slippage dramatically.

- Centralized repository for torque wrench calibration, pressure gauge checks, sensor inspections, and BOP component certifications.
- Auto-reminders for upcoming calibrations.
- Tools blocked from assignment when calibration expired.



- All service jobs recorded with photos, readings, spare usage, and signatures.
- Geo-verified entries confirmed on-site work.
- Helped supervisors validate quality of repairs.



- Consolidated view of equipment readiness across all rigs.
- Early warnings for tools nearing failure or overdue PM.
- Trend analysis for frequently failing components.

Better audit readiness with complete calibration and maintenance documentation.



By digitizing tool tracking, maintenance, and calibration processes, Asset Infinity helped the rig operator reduce downtime by 31%, strengthening operational reliability and protecting revenue in an environment where every minute matters.