

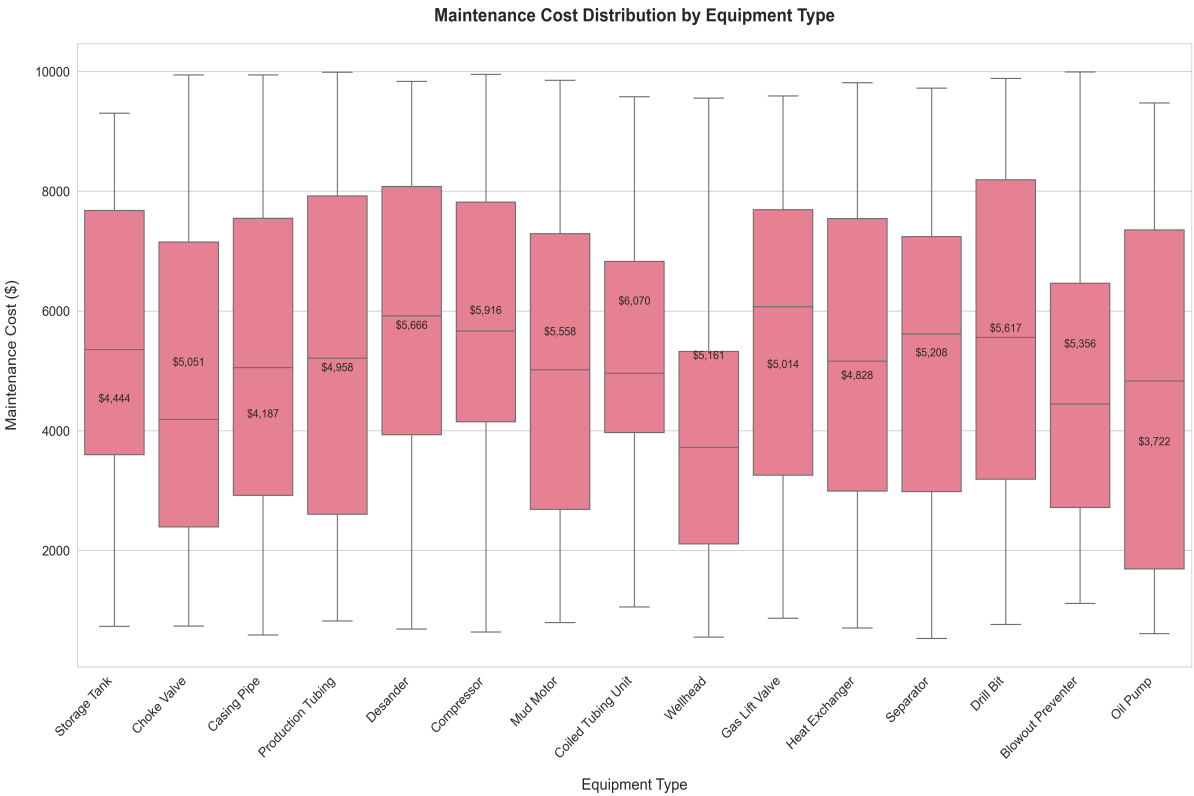
Equipment Maintenance Analysis Report

Executive Summary

This comprehensive analysis covers maintenance operations from 2023-01-02 to 2025-03-14. Key findings include:

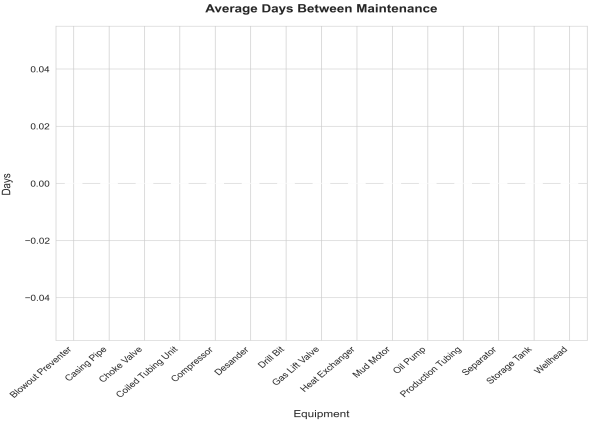
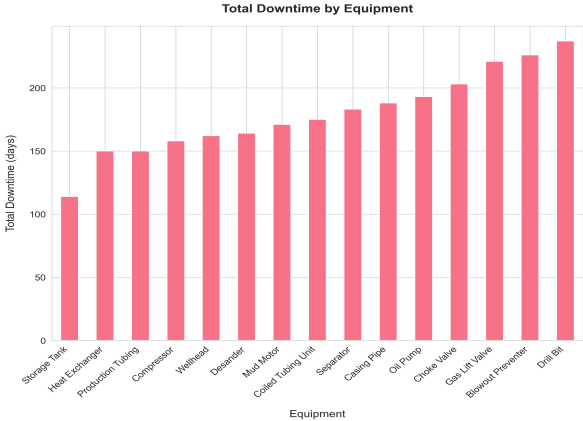
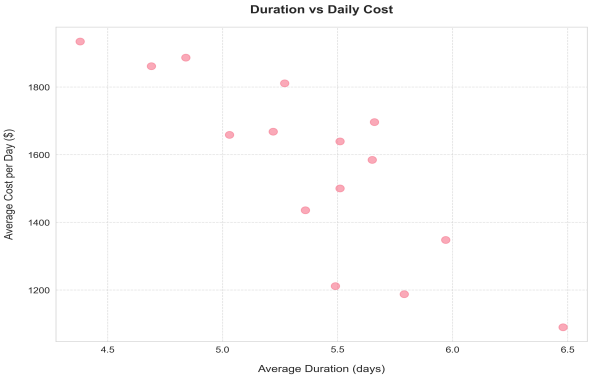
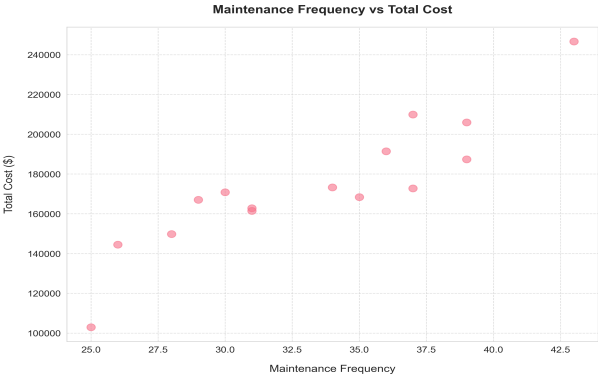
- Total Maintenance Cost: \$2,615,129.08
- Average Cost per Task: \$5,230.26
- Total Downtime: 2695 days
- Equipment Utilization: 92.5%
- Critical Tasks Ratio: 30.4%

Equipment Analysis

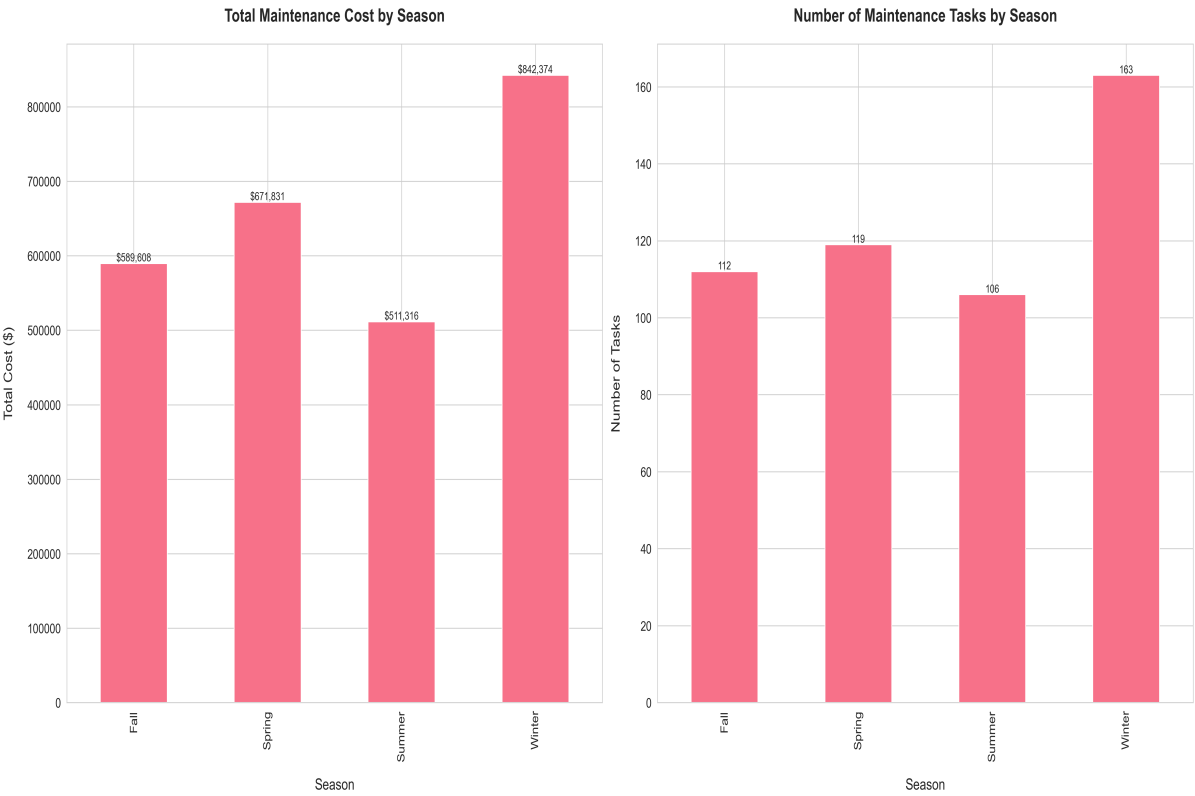


Equipment	Total Cost (\$)	Average Cost (\$)	Tasks	Duration (days)
Blowout Preventer	187,390.23	4,804.88	39.0	226.0
Casing Pipe	191,436.94	5,317.69	36.0	188.0
Choke Valve	172,730.12	4,668.38	37.0	203.0
Coiled Tubing Unit	162,843.47	5,253.02	31.0	175.0
Compressor	170,787.24	5,692.91	30.0	158.0
Desander	167,000.68	5,758.64	29.0	164.0
Drill Bit	246,670.32	5,736.52	43.0	237.0
Gas Lift Valve	209,873.13	5,672.25	37.0	221.0
Heat Exchanger	161,469.48	5,208.69	31.0	150.0
Mud Motor	173,303.70	5,097.17	34.0	171.0
Oil Pump	168,355.84	4,810.17	35.0	193.0
Production Tubing	149,797.30	5,349.90	28.0	150.0
Separator	205,968.26	5,281.24	39.0	183.0
Storage Tank	144,507.80	5,557.99	26.0	114.0
Wellhead	102,994.57	4,119.78	25.0	162.0

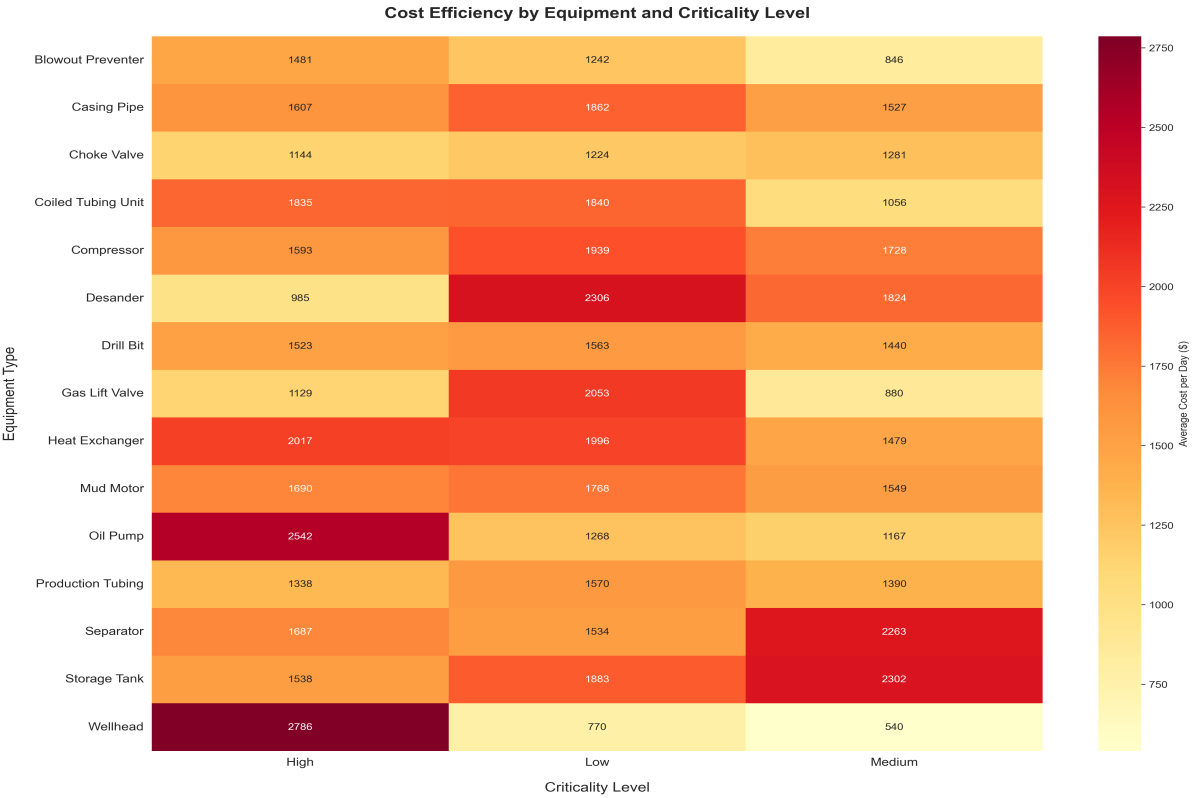
Reliability Analysis



Seasonal Patterns



Cost Efficiency Analysis



Recommendations and Action Plan

Based on the analysis, we have identified three key areas for improvement, prioritized by their potential impact and return on investment:

1. Cost Optimization (High Impact)

Current Status: Top 3 cost contributors: Drill Bit, Gas Lift Valve, Separator

Action: Implement predictive maintenance for high-cost equipment

Key Steps: Deploy condition monitoring sensors • Establish predictive maintenance schedules • Review maintenance procedures

Expected Outcome: Potential savings: \$132,502

2. Equipment Reliability (High Impact)

Current Status: Most problematic: Drill Bit (43 interventions)

Action: Upgrade or replace frequent maintenance equipment

Key Steps: Evaluate replacement options • Implement enhanced monitoring • Review maintenance protocols

Expected Outcome: Estimated cost reduction: \$98,668

3. Maintenance Scheduling (Medium Impact)

Current Status: Peak activity in Winter

Action: Optimize seasonal maintenance distribution

Key Steps: Redistribute non-critical tasks • Increase staff during peak periods • Implement preventive measures

Expected Outcome: Workload optimization and reduced overtime costs