

OVERVIEW

Industry Application:	Offshore Pedestal Cranes & Critical Lifting Equipment
Industry:	Oil & Gas Offshore Energy Industrial Operations
Solution:	SIS Predictive Maintenance & Asset Reliability Solution
Key Benefits:	Reduced Downtime Improved Asset Availability Maintenance Compliance Enhanced Safety Predictive Maintenance

BUSINESS CHALLENGE

Offshore pedestal cranes and critical lifting equipment operate in safety-critical environments where reliability, maintenance compliance, and equipment availability are essential to safe and efficient operations. Many operators continue to rely on manual maintenance tracking processes and fragmented equipment data, creating risks around servicing compliance, asset reliability, downtime, and operational performance.

Failure to maintain critical lifting equipment can result in unplanned downtime, increased maintenance costs, reduced asset availability, and elevated safety risk. A more proactive and data-driven maintenance approach is required to ensure equipment reliability and optimize lifecycle performance.

BUSINESS DRIVERS

- Improve maintenance compliance across critical lifting assets.
- Increase equipment availability and operational readiness.
- Reduce manual administration and maintenance planning effort.
- Minimize the risk of unplanned downtime and costly repairs.
- Enhance visibility of asset condition, operating hours, and maintenance status.

SIS VALUE DELIVERED

SIS enables operators to move from reactive maintenance practices to a predictive asset reliability model. Through real-time data collection, automated maintenance workflows, and predictive analytics, potential issues can be identified earlier, helping to prevent failures, improve maintenance compliance, extend asset life, and maximize equipment availability.



SIS SOLUTION OUTCOMES

- ✓ Reduced Maintenance Costs
- ✓ Improved Asset Availability
- ✓ Improved Maintenance Compliance
- ✓ Enhanced Safety & Compliance
- ✓ Reduced Unplanned Downtime

CHALLENGES

- Manual maintenance tracking and record management
- Limited visibility of equipment operating hours.
- Reactive maintenance increases downtime and repair costs
- Fragmented maintenance records across multiple systems
- Lack of real-time data limits proactive maintenance planning

SIS ASSET RELIABILITY WORKFLOW

Equipment Usage & Condition Monitoring



Real-Time Data Collection



Predictive Analytics & Risk Assessment



Automated Maintenance Triggers

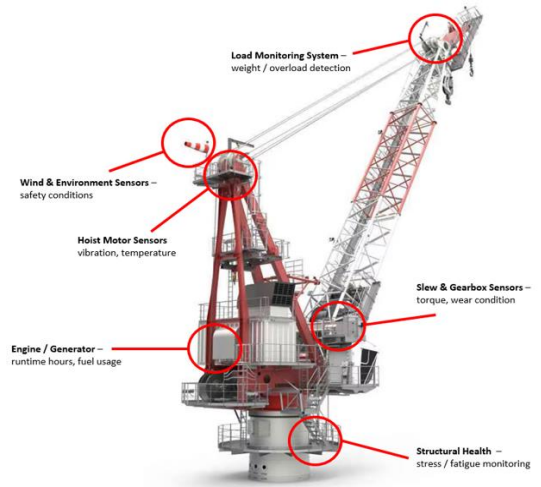


Digital Work Orders



Compliance Dashboard

CRANE CONDITION MONITORING & PREDICTIVE MAINTENANCE



KEY SOLUTION COMPONENTS

Real-Time Monitoring

- Operating Hours
- Equipment Status
- Usage Data

Automated Maintenance

- Service Notifications
- Work Order Generation
- Maintenance Scheduling

Predictive Analytics

- Usage Trending
- Maintenance Forecasting
- Early Risk Identification

Compliance Reporting

- Service History
- Audit Trail
- Asset Status Visibility

FROM REACTIVE TO PREDICTIVE

Traditional Approach: REACTIVE REPAIRS → DOWNTIME → HIGHER COST

SIS Approach: REAL-TIME DATA → PREDICTIVE MAINTENANCE → IMPROVED RELIABILITY

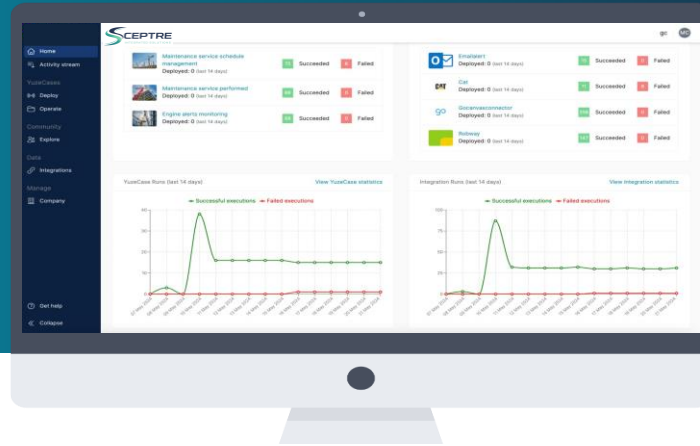
⚡ Reduced Downtime

⚡ Improved Maintenance Compliance

⚡ Predictive Maintenance

⚡ Increased Asset Availability

⚡ Enhanced Asset Reliability



SIS PREDICTIVE MAINTENANCE COMPONENTS

Data Sources Integrated

- Equipment Telematics & IoT Devices
- Maintenance Management Systems
- Enterprise Business Systems
- Notification & Workflow Platforms

Core Capabilities

- Automated Maintenance Scheduling
- Asset Reliability Monitoring
- Maintenance Compliance Tracking
- Predictive Maintenance Alerts
- Operational Reporting & Analytics
- Automated Workflow Management

SIS Value Delivered

SIS integrates equipment data, maintenance workflows, and operational intelligence into a single asset reliability environment, improving maintenance compliance, increasing asset availability, and reducing unplanned downtime.

Why SIS is Different

SIS combines engineering expertise, maintenance strategy, operational technology, and predictive analytics to bridge the gap between asset data and operational execution. By integrating real-time monitoring, automated workflows, and maintenance intelligence, SIS enables measurable improvements in asset reliability, compliance, and availability.



Robway
Safety

Caterpillar

Gocanvas

Outlook

EXAMPLE TECHNOLOGY ECOSYSTEM

ENGINEERING-LED APPROACH

SIS combines maintenance strategy, operational technology, engineering expertise, and predictive analytics to improve reliability across critical lifting assets.