

## EMCONF 29 April 2025





### **Contents**

- Meet the speaker: Mark Cawley
- Meet the business: RS Industrial Services
- Current Trends And Hot Topics
- Best Practice What Does Great Look Like
- Different Approaches to Maintenance Opportunities
- Advantages & Challenges of Outsourcing
- Repair vs. Replace
- Al and Machine Learning



# **Meet The Speaker**

**Mark Cawley** 

CEO

**RS Industrial Services Ltd** 

Tees Business of the Year 2025





# Meet The Speaker

### Mark Cawley - Chief Executive Officer, RS Industrial Services Ltd

Over two decades of leadership experience in Maintenance, Repair, and Operations (MRO) across various industries

Prior to RS Industrial Services, over 20 years in surface treatment and environmental services

Expert in providing outsourced industrial services to engineering and manufacturing industries

Pragmatic leadership style with a forward-thinking approach with a data driven, technology focus

Passionate about transforming the approach to MRO by driving smarter, safer, and more efficient solutions



### **Meet The Business**

RS Industrial Services (RSIS) is a trusted UK provider of outsourced

- Cranes & Lifting Maintenance, Repair, Servicing, 24/7 Breakdown
- Industrial and Safety Supplies
- Accredited Training Services

Focused on service quality and operational reliability
Supporting a wide range of industries, delivering tailored solutions across the MRO landscape

#### **Our Vision:**

We're committed to being a dependable partner to help businesses operate more safely, efficiently, and sustainably

Our continued investment in people, technology, and services supports our customers to drive operational success and long term growth







### **Current Trends And Hot Topics**



Smart Sustainable Operations



Skills Shortages



Cost Reduction Pressures



Lead Time Challenges



Safety & Compliance



# Safety - Best Practices & Safety Stats

249 industrial overhead crane incidents that occurred over a 10 year period

37% - Crushed by the Load

The 249 incidents resulted in

135 Injuries

**133** Fatalities

27% - Load Dropped

Average major injury cost of over £150,000 while the average fatality has a cost of around £3 million

### **Safety Best Practices**

- Conduct Daily Inspections: Always inspect the crane and hoist before each shift for signs of wear or damage
- Ensure Proper Load Handling: Never exceed the rated load capacity and always center the load
- Enforce No-Go Zones: Keep all personnel out from under suspended loads and clearly mark crane operating areas to prevent accidental entry
- Train & Certify Operators: Only qualified and certified personnel should operate cranes ongoing training helps keep safety top of mind



### **Best Practices – What Does Great Look Like?**

### What's good?

What's great?

Regular scheduled inspections of cranes and lifting gear

Predictive maintenance using IoT sensors and AI to identify issues before they happen

Quick response times to breakdowns

Proactive service plans that prevent breakdowns entirely

Maintenance records kept on paper or simple spreadsheets

Fully digital maintenance logs with real-time updates, accessible on mobile devices by field technicians

Learning is "one and done"

Learning is continuous, personalised, and tracked with certifications and skill gaps monitored digitally



### Different Approach To Maintenance

3% of all working days are lost annually due to faulty machinery

#### **Proactive, Not Reactive**

- We focus on identifying wear, inefficiency, and risk before failure occurs.
- Predictive maintenance strategies reduce downtime, lower costs, and extend equipment life.

### **Lifecycle-Centered Strategy**

- Maintenance decisions are driven by data.
- We evaluate equipment condition, usage, and criticality to choose the right solution, whether that's strategic repair, smart refurbishment, or complete replacement.

The average cost of downtime per hour is around £5,000 in the UK



### Opportunity - Operational Breakdown & Near Misses

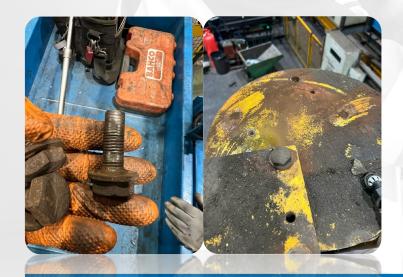
#### No Maintenance Schedule

Rope guide falls 35m from height landing right next to operator

Significant near miss

Downtime





### In House Maintenance

Bolts sheared on swing jib fixing plate

- Maintenance team removed bolts to replace
- 2nd team member moved crane with only one bolt in place
  Resulted in jib crane crashing to ground

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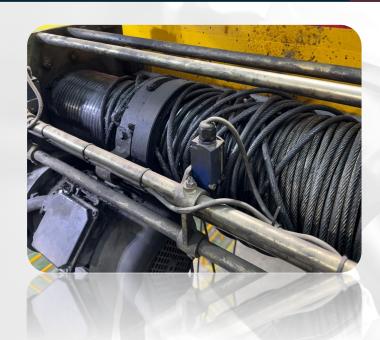
What does it cost you?

Avg. Breakdown Job £1,377

Avg. Service Job £190 per crane



# Solution - Operational Breakdown



### **Operator Failure**

Side pulling causing rope damage

Job Replacement Cost £2,000

- Labour to replace

Solution - Angle Limit Sensors
Prevents operators from side pulling
preventing damage to wire rope drum
Prevents need for wire rope replacement





# **Opportunity – Workforce Safety**





- Halo lights project on to floor below load
- Safety area around hook
- Lifting operation cut if person enters area
- Perfect for noisy environments
- Reduces risk of collision between load and workforce
- 27% of accidents from dropped loads



# **Advantages of Outsourcing**

### **Advantages For Engineering & Manufacturing**

- Cost Efficiency
- Access to 24/7 Expertise
- Scale Operations
- Focus on Core Business
- Technology Integration
- Boost innovation
- Globalisation & Diversification
- Nearshoring Growth
- Sustainability Focus

#### **Perceived Challenges of Outsourcing**

- Loss of Control
- Quality Risks
- Communication Barriers





## Repair vs Replace - Our Approach

#### When to Repair:

- Asset health is still strong: core structure in good condition
- Cost-effective repair, e.g., < 50% of new asset value

#### When to Replace:

- Chronic breakdowns: Frequent failures despite repairs
- End of useful life: Structural fatigue, corrosion, or outdated design

### EQUIPMENT LIFECYCLE EVALUATION



#### 1 Install

Initial setup, commissioning, load testing, certifications



#### 2 Operate

Daily use under correct conditions



#### 3 Maintain

Regular inspections, preventative maintenance



#### 5 Decision: Repair or Replace

- → Minor wear = Repair
- → Major damage or obsolescence = Replace



#### 6 Extend or Restart

Return to operation or install new equipment



## Al and Machine Learning

### Al vs. Machine Learning – What's the Difference?

- Artificial Intelligence (AI) broad concept of machines performing tasks in a way that mimics human intelligence
- Machine Learning (ML) subset of AI, machines learn from data, improving over time without being explicitly programmed

### How we see Al and Machine Learning shape the future of engineering

- Predictive Maintenance
- Smart Load Handling
- Autonomous Lifting Systems
- Real-Time Risk Detection

### The future of engineering using Al

- Intelligent Scheduling Optimising maintenance schedules
- Workplace Safety Enhancements looking for potential hazards and unsafe behaviour
- Enhancing stress testing using large amounts of failure data, ML can enhance understanding



# Questions