KEY FEATURES OF OUR OEEAI SOLUTION

edgemethods

Automated Ideal Cycle Times

Automates Calculation

Our solution leverages AI and ML models to automate the calculation of ideal cycle times, representing the shortest possible time required to produce one unit of product under optimal conditions.

Performance Benchmarking

These benchmarks are crucial for accurately assessing and improving the efficiency and productivity of manufacturing processes.

Adjustment Suggestions

By comparing actual cycle times to these ideal times, the system can suggest adjustments to minimise cycle times and maximise efficiency, directly impacting the Performance factor of OEE.

Unplanned Loss Automation

Identifies Overruns

Our system identifies overruns beyond ideal cycle times and automates alerts and corrective actions, attributing losses to specific processes, assets, and sub-asset components.

Minimises Downtime

By monitoring and addressing unplanned losses, the system helps minimise downtime and improve equipment availability, directly enhancing the Availability factor of OEE.

Event Detection and ML Integration

Classifies Loss Reasons

Utilises ML models to classify reasons for unplanned losses, learning over time to automate decision-making and improve accuracy.

Predicts Future Events

The system predicts future unplanned events, allowing operators to intervene proactively, thereby maintaining or improving the Quality metric of OEE by reducing defect rates and maintaining production quality.

Direct Causal Analysis

Root Cause Identification

Builds a clear understanding of how assets are interconnected within the production line, pinpointing the root causes of issues to address them efficiently.

Prevents Cascading Issues

By focusing on direct causes of losses, the system ensures timely and effective responses, preventing cascading issues and significantly improving overall efficiency.

Short Interval Control (SIC)

Real-Time Data Updates

Provides real-time data updates to operators to identify and address deviations from the ideal cycle time or quality standards. If an issue is detected, such as an increase in defect rates, the operators have the insights to take immediate corrective actions.

Dynamic Adjustments

Enhances performance, availability, and quality through continuous monitoring and real-time adjustments, creating a more responsive and dynamic production environment.

Why Choose EdgeMethods?

EdgeMethods offers industry-leading expertise in AI-driven operational efficiency solutions, providing dedicated customer support and continuous improvement, along with seamless integration with your existing data sources and infrastructure. Additionally, our solution identifies cost savings associated with top losses and potential carbon savings.

We were voted **a top 10 IoT Solution Provider in 2024** for our innovative solutions

Our solutions have also been **supported and endorsed** by **Innovate UK** (the UK's Innovation Agency) through the **Smart Sustainable Factory division**

Contact us for a free consultative session!

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