



# Manufacturing Execution System



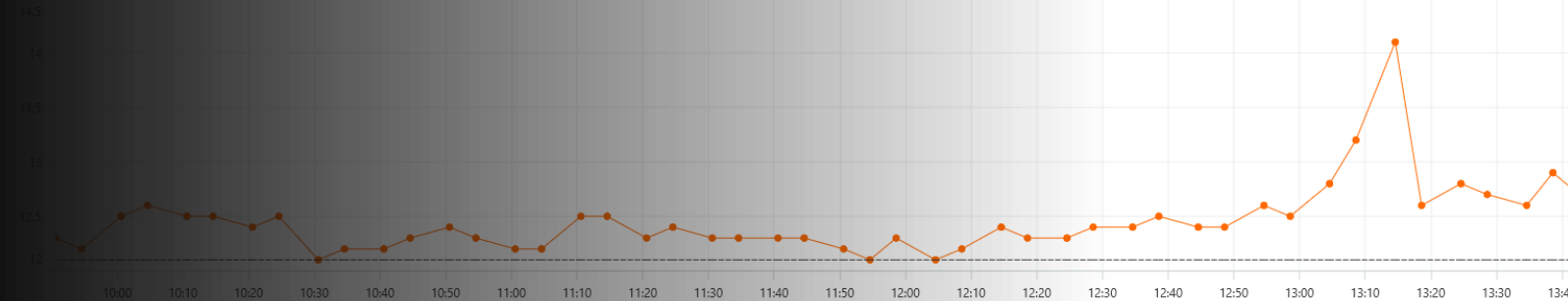
Machine Monitoring  
Production Scheduler  
Shop Floor Data Capture

Martins Engineering Ltd

Activity for Previous 4 Hours  
● Active ● Idle ● Off



Current Output for Previous 4 Hours



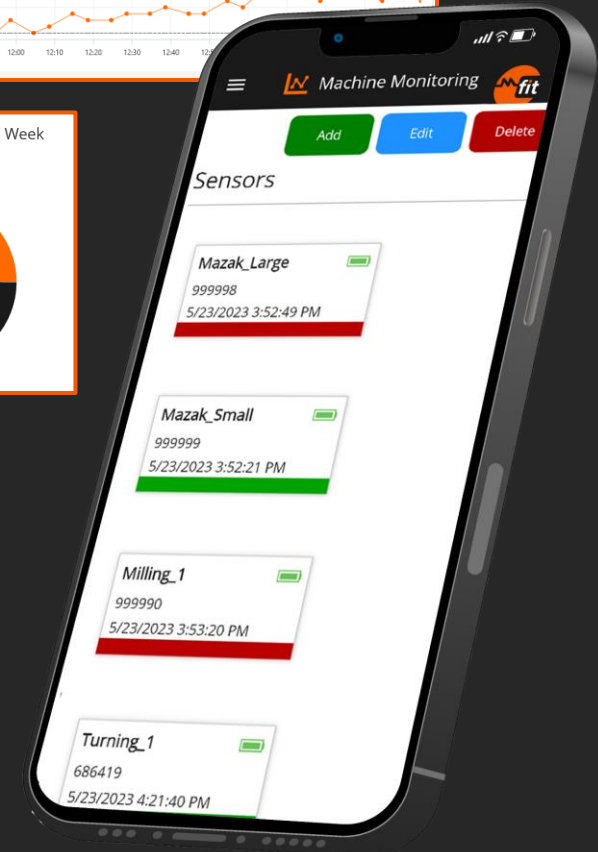
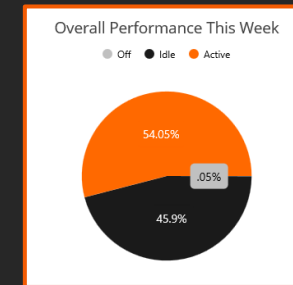
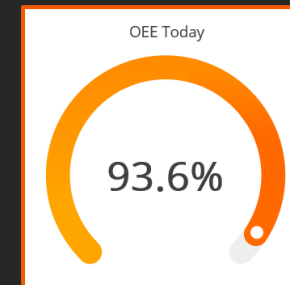
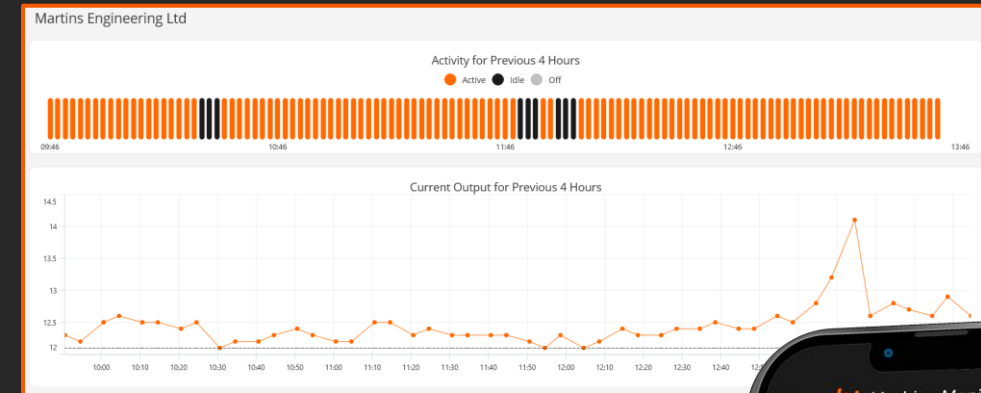
# What is the Fitfactory MES?

- **Integrated MES:** Combines production scheduling, machine monitoring, and data capture.
- **Enhanced Efficiency:** Seamless interaction between modules for increased shop floor productivity.
- **Open API:** Facilitates integration with third-party and ERP systems, boosting adaptability.
- **Multi-Platform:** Compatible with Windows, iOS, and Android for broad device access.
- **Real-Time Monitoring:** Automated alerts for efficient machine and activity management.
- **Data-Led Decisions:** Provides real-time data for better equipment effectiveness and decision-making.
- **SEQCDP Benefits:** Enhances safety, environment, quality, cost, delivery, and personnel management.



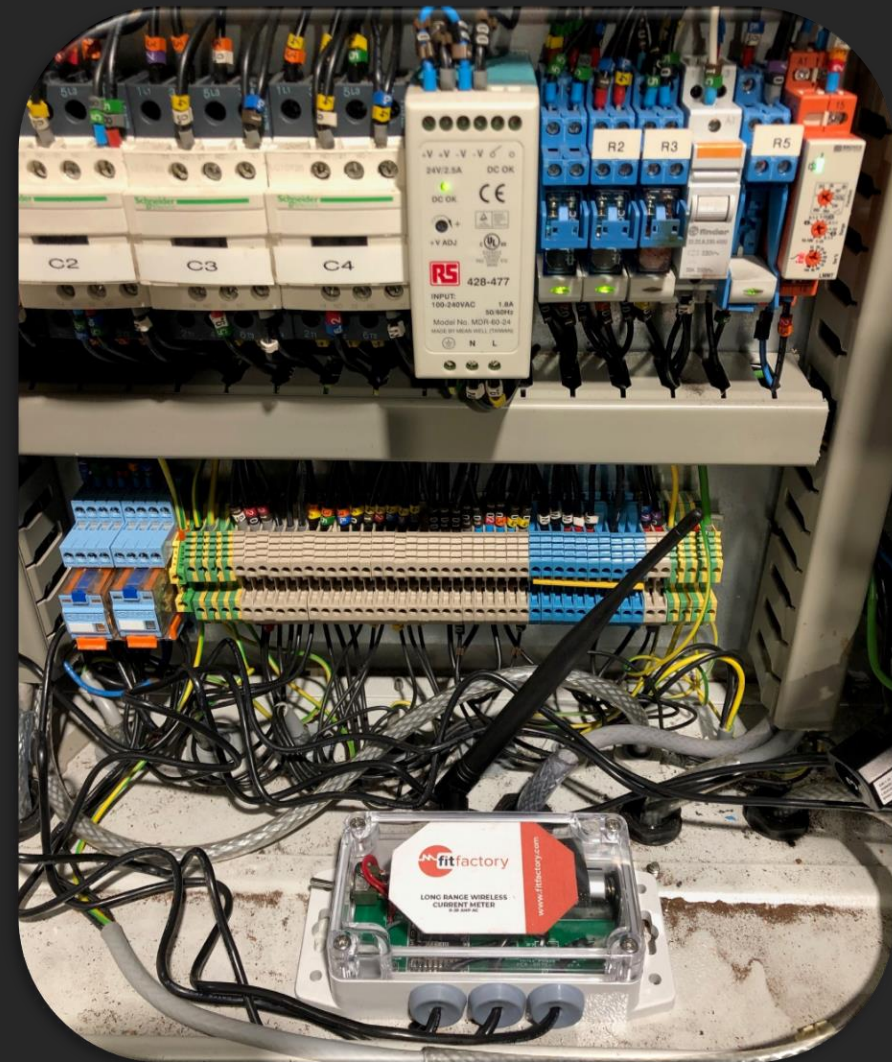
# Machine Monitoring

- **Real-Time Monitoring:** Continuous tracking of machine activity, providing a granular view of uptime.
- **Output Analysis:** Graph showing the current output for the previous 4 hours, highlighting peaks and troughs in production.
- **Daily OEE Performance:** Live OEE (Overall Equipment Effectiveness) percentage for the day, offering a quick snapshot of operational efficiency.
- **Weekly Performance Breakdown:** Pie chart depicting the overall machine performance for the week, categorised into 'Off', 'Idle', and 'Active' states.
- **Comprehensive Sensor Dashboard:** Dashboard also presents the most recent communication date and battery status for every sensor, ensuring full monitoring transparency.



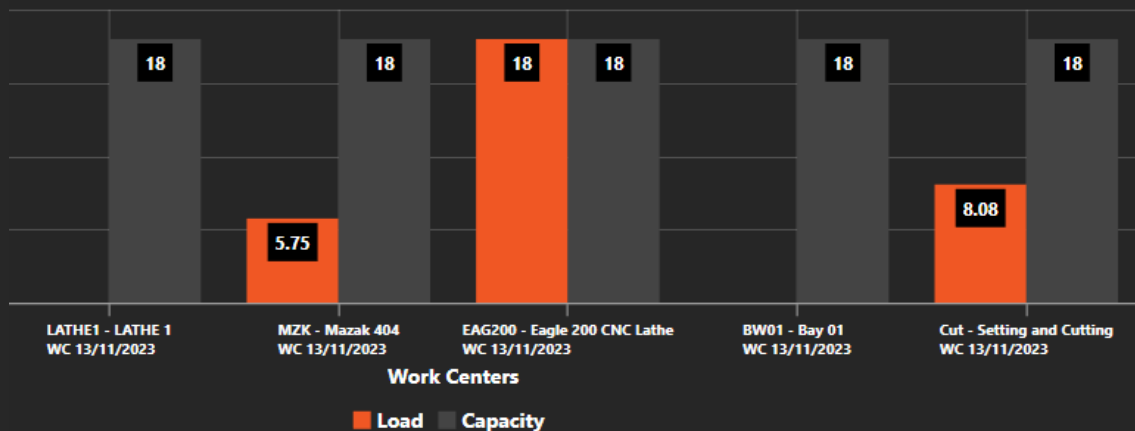
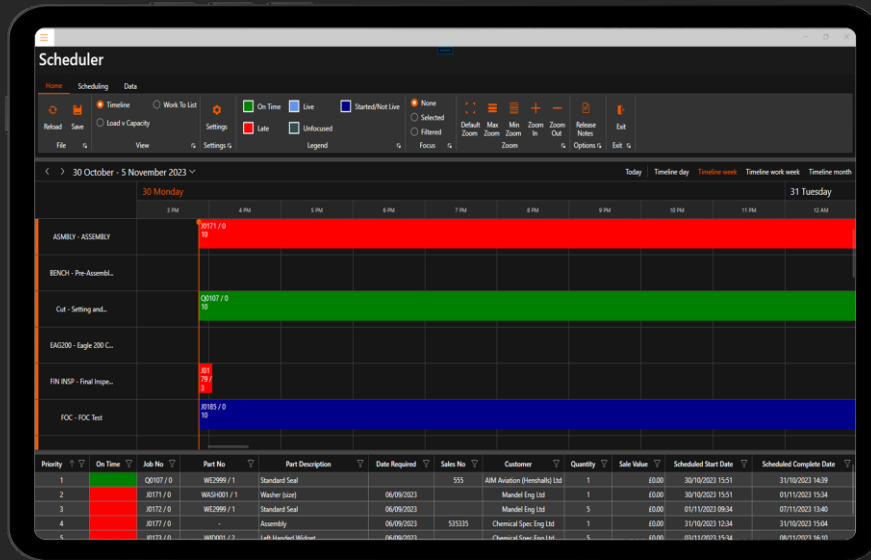
# Machine Monitoring

- **Three-Phase Current Meter:** Essential device for real-time machine monitoring.
- **Data Transmission:** Sends data to a local gateway, which then transmits the data securely to the Fitfactory Cloud.
- **Long Battery Life:** Equipped with a long-life battery to reduce energy consumption and maintenance costs.
- **Non-Intrusive Installation:** Current meters can be connected within 30 seconds non-intrusively using CT connectors, preserving the integrity of existing electrical setups.





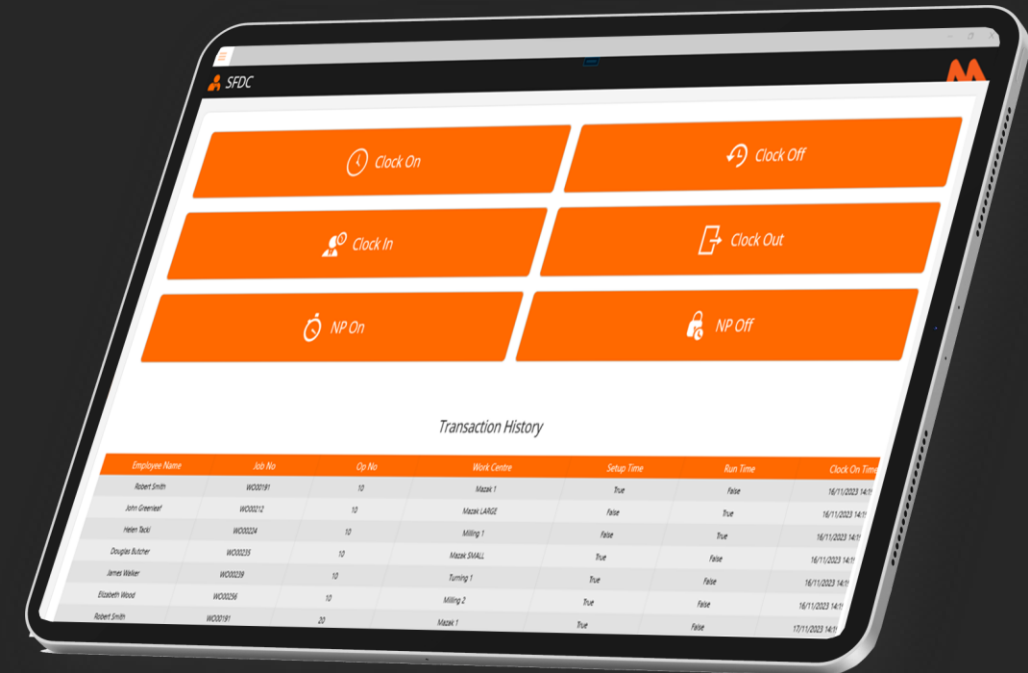
# Production Scheduler



- Advanced Scheduling Capabilities:** Utilises real-time data to optimise production scheduling, enhancing workflow efficiency.
- Increased On-Time Delivery:** Proven to boost on-time delivery by 80%, directly impacting customer satisfaction and company reputation.
- Optimised Job Clustering:** Groups identical jobs together to minimise changeover times, thereby reducing waste and improving delivery times.
- Dynamic Adaptation:** Adjusts schedules in real-time based on shop floor activity and machine status, ensuring the highest levels of operational responsiveness.

# Shop Floor Data Capture

- **Real-Time Data Capture:** Accurately records all shop floor activities, providing instant data on machine status and operative tasks.
- **Automated Time Tracking:** Integrates time and attendance tracking to monitor operative work hours and productivity.
- **Flexible Clocking Mechanisms:** Provides various options for employees to clock in and out, including mobile devices and dedicated terminals.
- **Enhanced Operational Insight:** Delivers a detailed analysis of time spent on each job, aiding in workforce planning and efficiency.



# Architecture

