



Balemaster

Features:

- **Real-Time Performance Data:** View lifetime statistics like Total Bale Count and Total Baler Hours (non-resettable counters).
- **Predictive Maintenance:** Forecast service of components based on Bale Count (e.g., Ram Rebuild, Top Liners) or Pump Hours (e.g., Oil Change, Oil Filter).
- **Color-Coded Status:** Identify component wear progression with Green, Yellow, and Red indicators.
- **Automatic Alerts:** Receive notifications for critical wear thresholds and alarms. Direct notifications to appropriate personnel. Weekly usage and fault reports can be sent to maintenance/management minimizing data fatigue.
- **Fault Tracking:** Monitor and reset counters for common faults like False Cycling, Hot Oil, and Ram Cycle Incomplete from your online dashboard
- **Customizable Thresholds:** Adjust service presets to match the actual component life in your operating environment.
- **Comprehensive Reporting:** Access Status, Fault, and Production reports via the Report Viewer or receive weekly reports.
- **Troubleshooting:** If problematic situations arise, a user at the touchscreen can send an I/O snapshot to the dashboard which allows Balemaster to troubleshoot without having access to the local network.
- **Minimal Yearly Cost**

Balemaster illumen.X System

Real-Time Monitoring & Maintenance

Our commitment to maximum uptime and extended equipment life is now realized through the **Balemaster illumen.X System**, an IIoT monitoring dashboard. Transform operational data into actionable insights and convert your maintenance strategy from reactive to proactive. The interface provides your team with real-time visibility and forecasting needed to keep your baler operating at its peak performance.

The **Balemaster illumen.X System** tracks critical wear components like Ram Rebuilds, Rollers by Bale Count, and fluid life (Oil Change, Oil Filter) by Pump Hours. When a component approaches its configurable service threshold, the system automatically sends email and/or SMS alerts, ensuring the right personnel are notified before a minor wear issue becomes a major failure.

Beyond scheduled maintenance, the **Balemaster illumen.X System** provides instant fault monitoring for issues such as Hot Oil or Auto-Tie Cycle Incomplete. Every fault event is logged on the dashboard and triggers immediate alerts to the desired team members.

By giving your team the power to monitor, customize thresholds, and access status/production reports, the **Balemaster illumen.X System** ensures your operation is always running efficiently.



Balemaster® illumen.X System



Component Service Thresholds

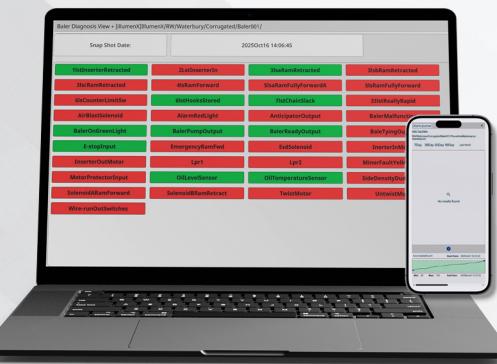
The illumen.X system monitors critical wear components. The following presets are configurable to match your specific operating environment.

Baler Component(s)	Unit of Measurement	Preset	Warn Limit & Bad Limit
Air Breather	Pump Hours	500	Pump Hours Remaining
Oil Change	Pump Hours	17000	Pump Hours Remaining
Oil Filter	Pump Hours	500	Pump Hours Remaining
Auto Tie Rebuild	Bale Count	500	Number of Bales Remaining
Ram Rebuild	Bale Count	17,000	Number of Bales Remaining
Ram Wiper	Bale Count	17000	Number of Bales Remaining
Top Liners	Bale Count	17000	Number of Bales Remaining
Wire Feed Rollers	Bale Count	17000	Number of Bales Remaining

Automated Fault Monitoring

The system instantly logs specific fault events, incrementing counters and triggering immediate email/SMS alerts to the notification roster.

Fault Report	Description
7LST Chain	Inserter Chain has broken or become too loose, limit switch tripped
Auto Tie Cycle Incomplete	Auto Tie Components were unable to complete Tie Cycle in designated time
False Cycling	Ram is Continuously Cycling without full charge of material
Hot Oil	Oil Temperature has surpassed preset limit
Low Oil	Oil Level has surpassed the minimum oil level requirement
Ram Cycle Incomplete	Ram was not able to complete its full cycle in designated time



Instant Troubleshooting

Don't wait for a service tech to arrive. The illumen.X Baler Diagnosis View is a complete snapshot of your baler's I/O status. Balemaster support or your internal team can see exactly what the machine "sees"—identifying stuck switches or failed valves so you can get back up and running faster.