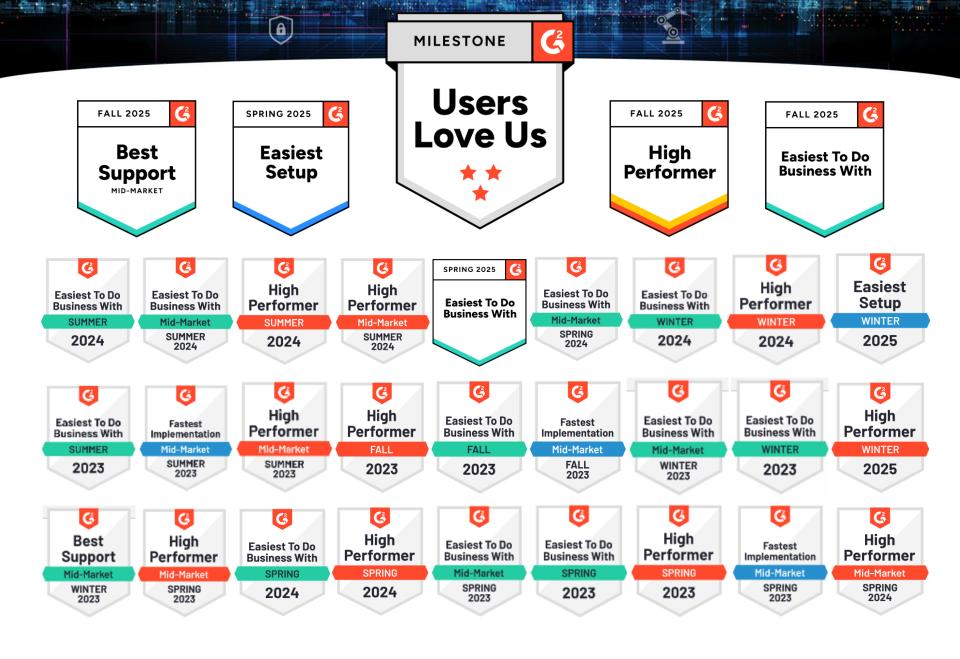


# **Empowering Connected Workers To Drive Continuous Improvement**

With Agile No-Code eChecksheet Web Apps
For Quality Management, Production Tracking, and Supply Chain,
Advanced Analytics, Real-time Alerts
and Comprehensive Integration







### **Company Introduction**

Industry leading manufacturers from custom specialty vehicles to high volume part suppliers rely on AIMSCO's cloud based, no-code platform to build and deploy shop floor quality and production tracking apps with agility, control, and low cost of ownership

**AIMSCO eChecksheets™ (eCS)** no-code apps that provide a familiar data collection method for connected workers, while also taking advantage of enterprise and IoT data sources through AIMSCO Integrator™

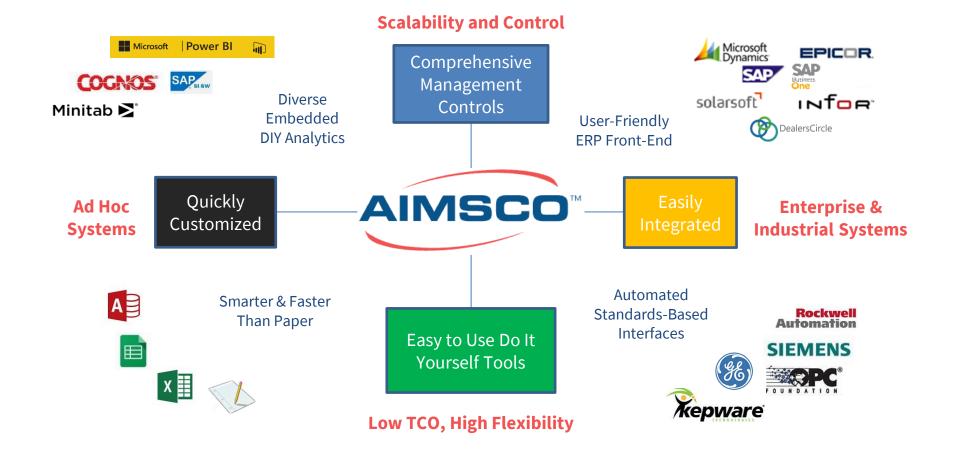
**AIMSCO Power Plant**<sup>™</sup> delivers unparalleled manufacturing intelligence insight with factory-focused features for self-service analytics leveraging our consolidated eCS repository, optimized for Microsoft Power BI



AIMSCO eChecksheets™, AIMSCO Power Plant™ and AIMSCO Integrator™ are trademarks of AIMSCO. Any other product or company names given are for identification purposes only and may be trademarks of their respective owners.



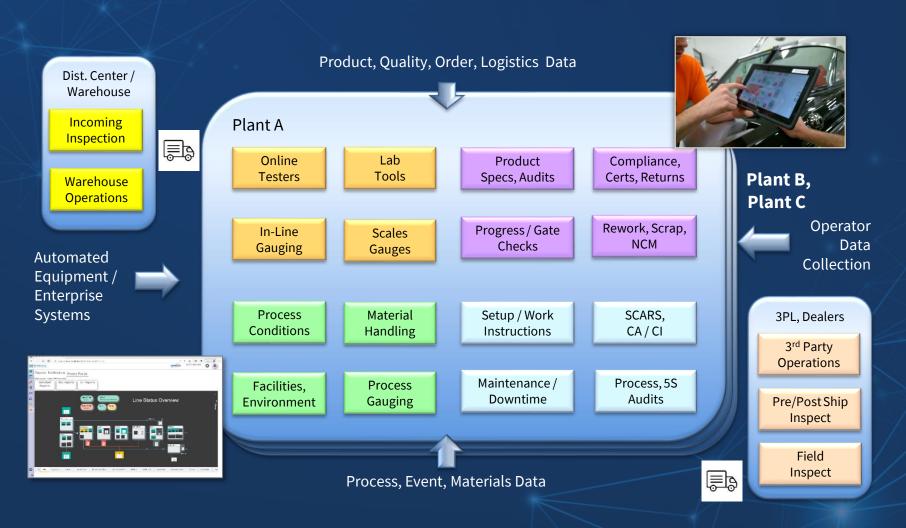
## AIMSCO Combines Enterprise Strength with DIY, Ad-Hoc Agility





### **Example Applications of eChecksheets**

Consolidate Paper-Based and Siloed Apps With a Comprehensive Operations Data Repository





### The eChecksheet Advantage

- AIMSCO eCS are the leading digitized version of the industry standard method to collect a variety of production, quality, visual and process data in real time at point-of-use, eliminating paper and providing instant visibility
- Built with an expanding library of eCheckitems™
   (eCl), eCS are authored and maintained by client
   key users to drive continuous improvement with
   agility
- eCS Managed Models easily maintain standard structures across multiple similar products
- eCI can be automatically populated by equipment interface (IoT) or enterprise / third party systems through standard web service interfaces
- eCS can be quickly deployed at a single site or across multiple plants, languages
- As a Microsoft FastTrack ISV Partner, AIMSCO eCS are optimized for Azure and integrate seamlessly with Microsoft Power BI® to drive advanced embedded analytics









### Typical Shop Floor eChecksheet Applications

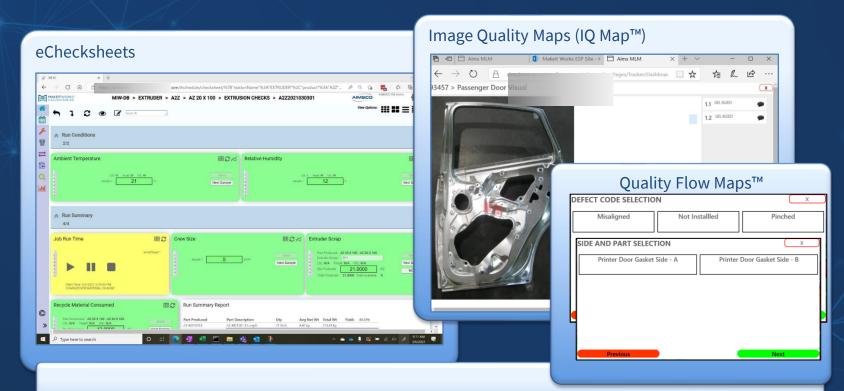
- In-Process Quality with Visual Heatmaps for Lamination, Gel-Coat
- Repair / Rework Sign-off Management
- Visual Production Schedule Display / Management
- Build Book Traceability
- Process Parameters, Performance Test Results
- Work Instructions with Document Management Integration
- Order / Option-aware Inspections,
   Work Instructions
- Automatic ERP move transactions

- Mold Maintenance based on usage, defect rates, powered by Heat Map
- Spray / Weld Gun Maintenance
- Quality Alerts / ECN
- Corrective and Preventive Actions / Continuous Improvement
- Incoming Materials Inspection
- Pre-Ship / Pre-Delivery / Post-Delivery Inspection
- Safety, Process, Product,
   Compliance Audits
- Equipment Integration (Torque Wrench, Gauges, Scales, Ovens,...)



### eChecksheets: Faster-Than-Paper

SUPPORT LEAN DATA COLLECTION

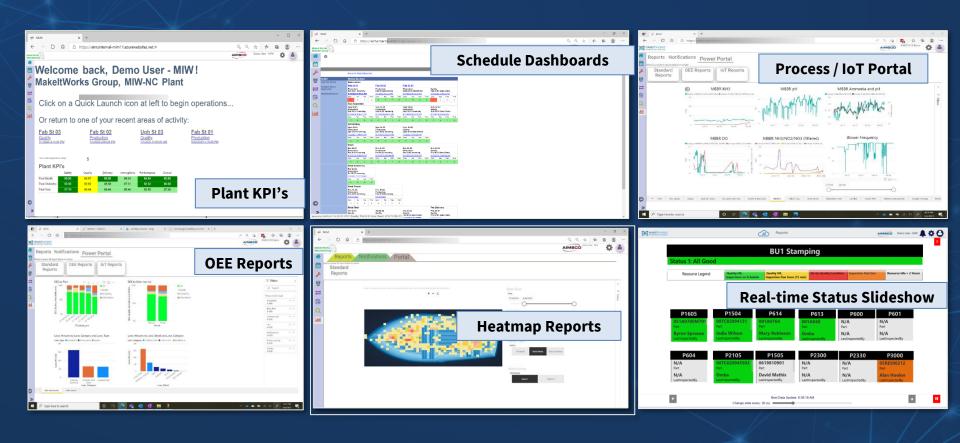


Automated, Standards-Based Interfaces ERP, Equipment, PLCs, Testers, Gauges, Material Handling, Scanners,...



#### **Comprehensive Analytics**

STANDARD, CUSTOM AND SELF-SERVE REPORTS, DASHBOARDS, SCORECARDS, PORTALS, AND SLIDESHOWS





### AIMSCO eChecksheets Bring IT & OT Together

ENTERPRISE GRADE INFORMATION AND OPERATIONS MANAGEMENT RESOURCES

#### **Secure Microsoft Azure cloud-based platform**

- Secure user access (Azure Active Directory / Office 365 SSO available)
- Dedicated database instances, application sites (production and test)
- Real-time network security monitoring and audits (Azure Security Center)
- High system availability (99.9% cloud, 99.999% cloud / edge hybrid)
- Edge (hybrid) / on-premise deployment and VPN tunnel options available
- Microsoft Azure FastTrack ISV partner, Azure Marketplace supplier

#### **User Management / Support**

- Enterprise portals Power BI Embedded, On-line Enterprise Support Portal (ESP)
- Email / phone / online support; 24x7 option available
- User / group managed roles and permissions

#### **Available Integration Options**

- IoT / OPC / SCADA / Equipment / AutoID: Integration API's, connectors
- Reporting: SSRS / Power BI / Office (Excel, Word, PDF) / 3<sup>rd</sup> Party BI / Data Lakes
- ERP: Integration API's, Azure Data Factory, connectors, data lakes / warehouses



#### CASE STUDY - SPECIALTY VEHICLE OEM

**Scenario**: Home-grown quality management using Oracle and paper forms. Manual transcription from paper into Access / Excel. High operator overhead. Labor-intensive repair work-off, containment and traceability procedures. Each major issue required a new project, one-off data collection approach without uniform controls. No historical data in a common, correlatable format.

**Goal:** Improve quality and visibility, improve change management, reduce manual inputs, replace homegrown systems with flexible DIY platform with equipment and ERP integration. Strengthen internal support for rapid response to new issues and self-service reporting.

**Solution:** Implement AIMSCO eChecksheet platform for quality management

- **Team and Process:** On main production lines, reduced paper-based inspection data entry by 90%, eliminated multiple inconsistent inspection plans and formats.
- Plant and Equipment: Identified critical part for redesign, eliminating a high visibility issue across multiple customers with major warranty cost savings
- Market Position: Received top auditor recognition, market leader in vehicle category
- **Self Service**: Advanced no-code reporting capability with Power BI and SSRS provides DIY ad-hoc and scheduled reports distributed automatically, driving rapid response to critical issues
- Integration: Order / option download per vehicle from SAP connector.
- Third Party Access: Supplier Portal for Corrective Action Response, Dealer portal for PDI

Payback: 9 months



#### **CASE STUDY - TIER 1 AUTOMOTIVE SUPPLIER**

Scenario: Hand-written quality management using Access and Excel-based forms. Books of paper records, impossible to analyze. High overhead.

Goal: Improve quality levels, reduce inspection overhead, eliminate paper

Solution: Implement AIMSCO eChecksheets apps for improved quality and production operations:

- Team and Process: Enabled an enhanced and enforceable quality management process through online workflow; provided electronic access to all inspection records
- Plant and Equipment: Implemented key test results trend monitoring to ensure compliance with critical customer and industry safety and process requirements
- **Work Instructions:** Customer implemented and integrated all work instructions into eChecksheets, expanding use from quality only to production and maintenance staff, increasing awareness & reducing scrap
- Market Position: Customer reduced chargebacks and received top industry quality certification TS 16949, leveraging built-quality compliance available through managed secure online QMS implementation
- **Self Service:** Quality engineers (non-programmers) maintain / enhance system part-time
- IT: On-premise migrating to hybrid cloud / on-premise, minimizing IT overhead, providing HA

Continuous Improvement: AIMSCO Power BI-based reporting tools help customer continuously monitor quality in real-time; validate conformance with client-specific requirements; eliminate Excel-based inspection instructions

Payback: 12 months



#### **CASE STUDY – MARINE OEM**

**Scenario:** Hand-written quality management using Excel-based forms. Stacks of finished good history records. High overhead for inspectors, data entry clerk and quality manager, slow report turnaround. Resulted in slow new model introductions with high warranty costs.

**Goal:** Improve quality levels, reduce paperwork overhead, get real-time reports, modernize process

**Solution:** Implement AIMSCO eChecksheets apps for quality and maintenance management

- Warranty: Reduced warranty costs by up to 50%
- **Process:** Reduced inspection / rework overhead in all areas by 25%, patch area by 75%
- Reporting: Provided online real-time access to all inspection records and reports, unit progress through the floor including gig work-off
- Responsiveness: Alerts about active issues are delivered directly to operators on the shop floor.
   Email / text notification of critical issues sent to management, with tiered escalation
- **Plant and Equipment:** Identified previously unknown equipment-based root cause of highest rework category and instituted ongoing equipment maintenance with AIMSCO, reducing rework
- Market Position: Customer received top industry recognition, reduced warranty claims by 50%
- Self Service: Quality technician (non-programmer) maintains / enhances system part-time
   No IT overhead due to cloud deployment customer has no dedicated IT staff
- Continuous Improvement: No-code Power BI reporting tools help customer drive quality to next level, measure conformance with industry standards, involve suppliers, and link with field service / warranty

Payback: 4 months

