



Driving Continuous Improvement

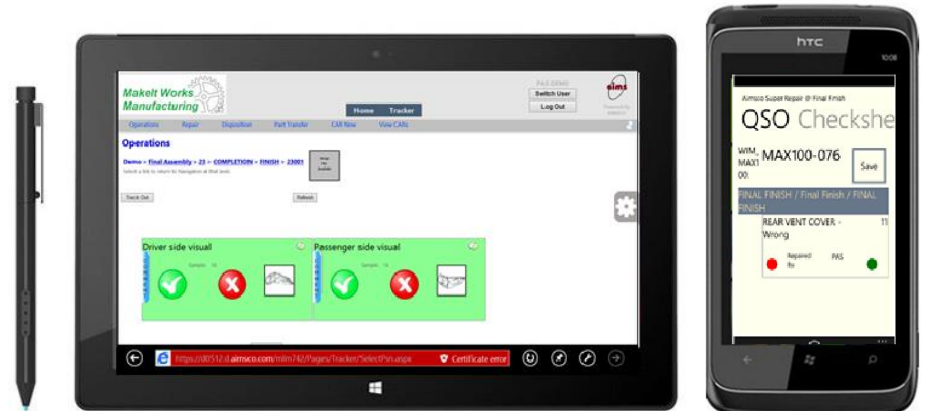
***Managing Billions of Operational Results
With Smarter-Than-Paper™ Data Collection,
Robust Collaboration and Comprehensive Analytics***

Introduction

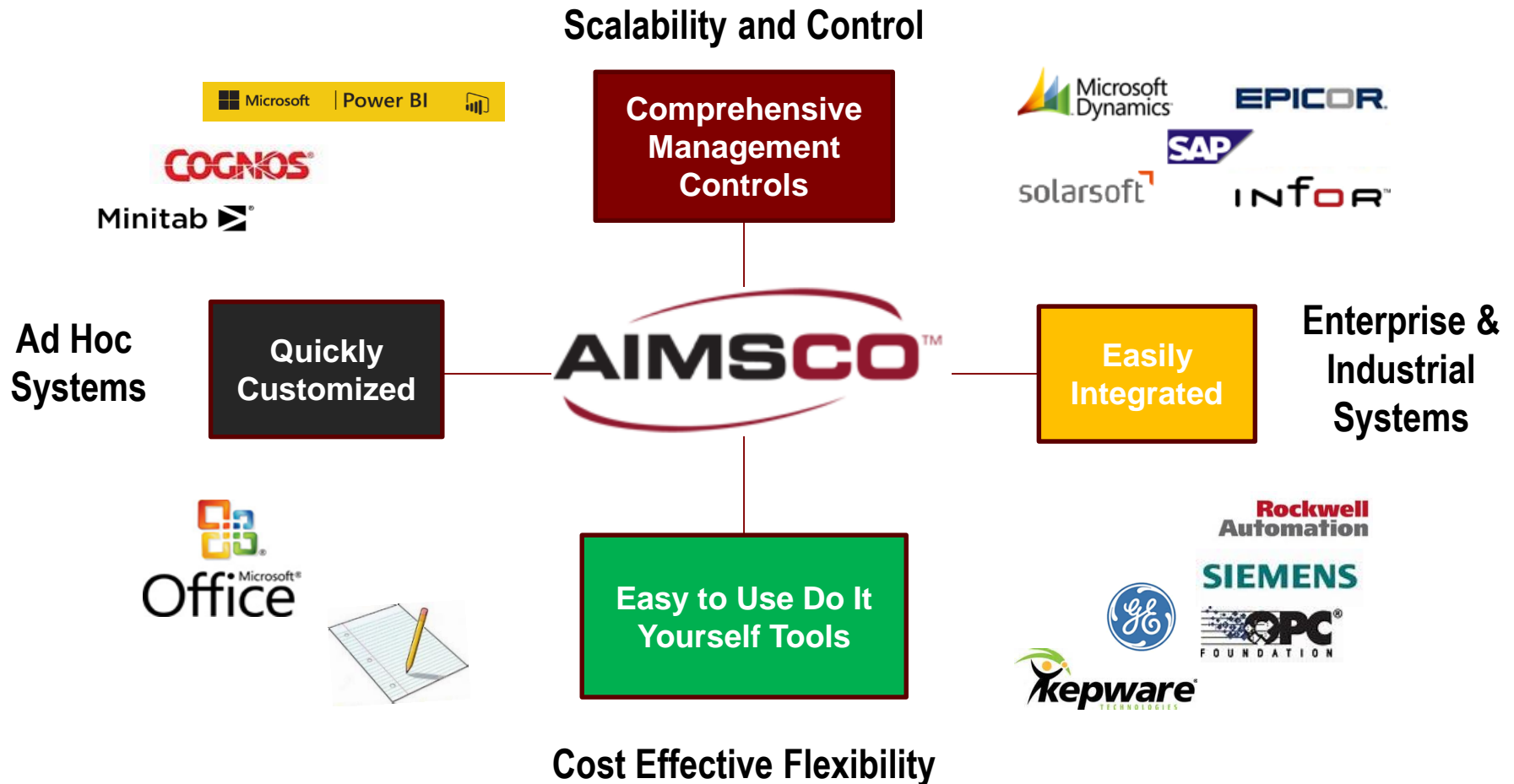
- Mission: Drive continuous improvement through an enterprise scale / integrated DIY MES platform for operations, collaboration & analysis
- Industrial Strength: Proven shop floor user interfaces and integration with Automated / IoT devices and ERP to a cloud-scale repository
- ROI - Driven: Up and running in weeks, average payback in months
- Over 100 years domain expertise within management team ensures ongoing best-practices for our client partnerships
- Trusted global partner to award-winning clients in construction, transportation, environmental and durable goods industries

AIMSCO Platform Overview

- Intuitive, browser-based, multi-language operations interface
- Cloud-based, hybrid and on-premise deployment options
- Multi-site, multi-plant, and mobile ready; globally deployed
- Consolidated repository of diverse quality & operations data
 - Data acquisition from automated, ERP, IoT, and manual sources
 - Fully integrated with standard industrial API's
 - Compliance, progress, utilization, materials and process tracking
- DIY analytics: dashboards, scorecards, notification

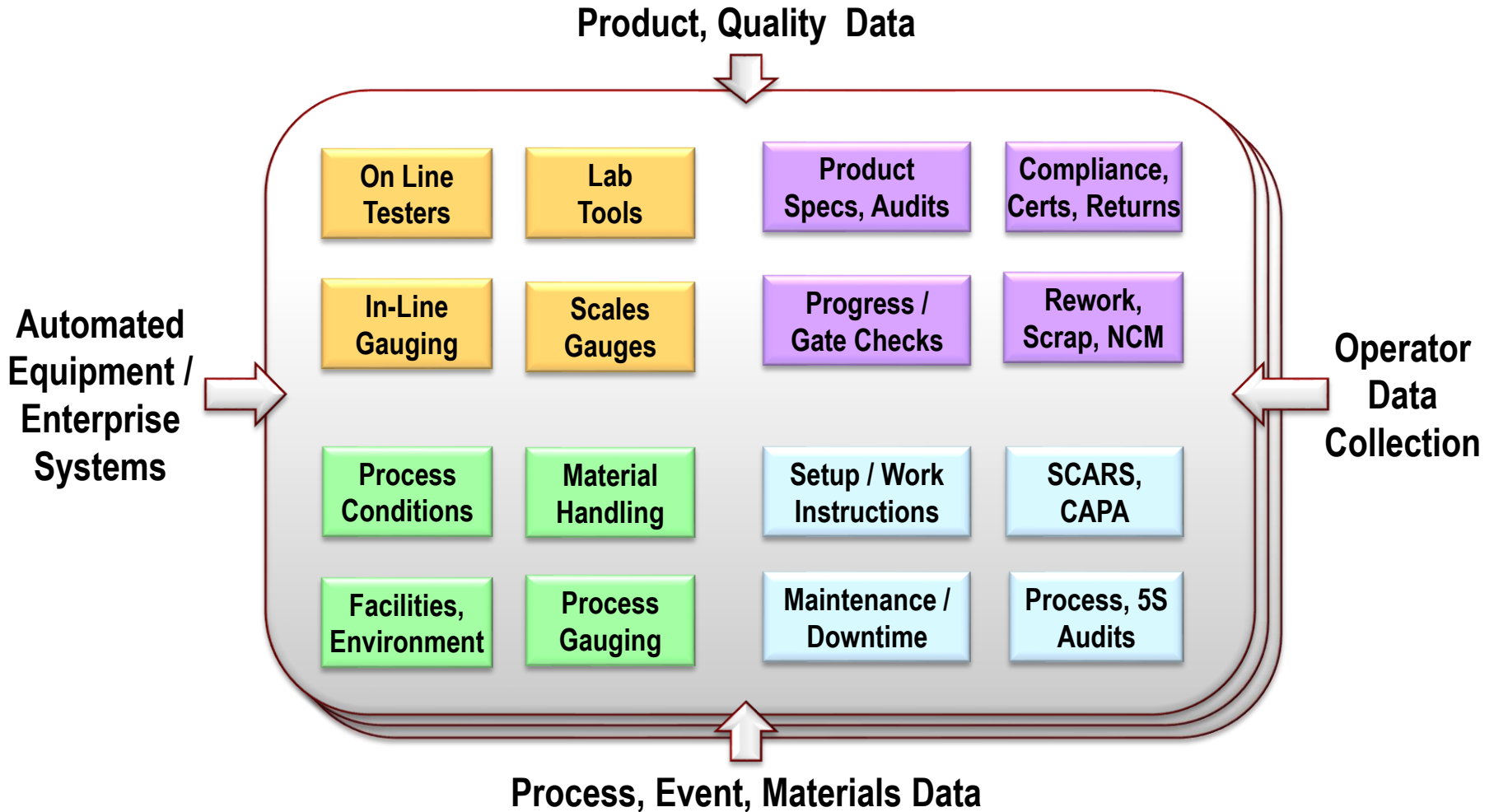


AIMSCO Combines Enterprise Strength with DIY, Ad-Hoc Agility



End-to-end Traceable Data Collection

Common Tools & Repository Unify Operating Silos, Cross-Enterprise



Comprehensive Industrial Operations Framework

Powers Lean, Six Sigma, 5S, World Class Manufacturing

PRODUCTION OPERATIONS

- ✓ Progress Tracking
- ✓ Online Work Instructions
- ✓ On / Offline / Hold

IN-PROCESS QUALITY

- ✓ Variable, Attributes, SPC
- ✓ Rework / Repair / Contain
- ✓ Visual Quality, Sampling

SUPPLIER / FIELD QUALITY

- ✓ Incoming Inspection
- ✓ Corrective Actions
- ✓ Scorecards, Portal

EQUIPMENT INTERFACE

- ✓ Collectors / Controllers
- ✓ Process / Test / Alarm
- ✓ Integration Tools / APIs

MATERIAL TRACK & TRACE

- ✓ Material Used vs. Standard
- ✓ Lot / Serial Control
- ✓ Non-conforming Material
- ✓ Feeder / Supplier Flows

OEE / LEAN UTILIZATION

- ✓ Downtime / Cause Tracking
- ✓ Run Rate vs. Standard
- ✓ Daily Checks, Maintenance
- ✓ 5S, Process Audits, CAPA

ENTERPRISE INTEGRATION

- ✓ ERP / PLM / Warranty
- ✓ Connectors / Interfaces
- ✓ Data Import / Export
- ✓ Integration Tools / APIs

REPORTS & NOTIFICATION

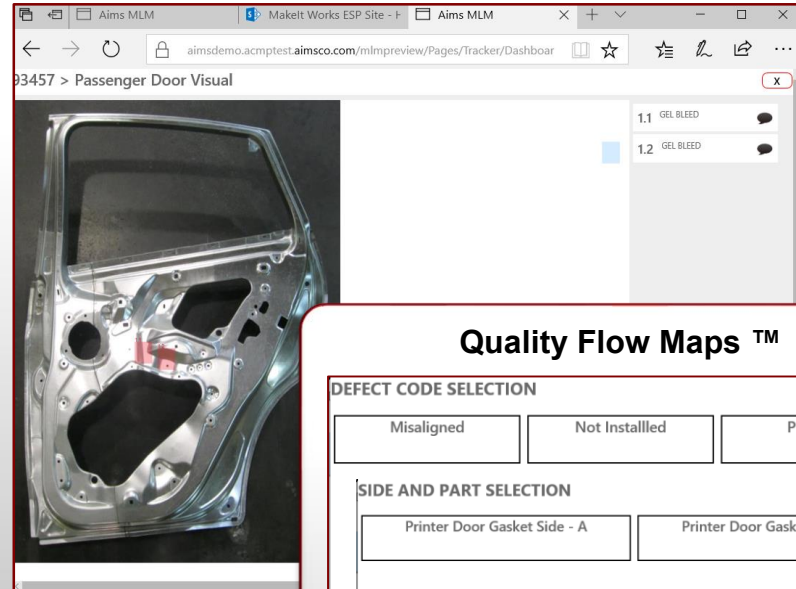
- ✓ Standard / Ad Hoc Analytics
- ✓ Export / Email / Schedule
- ✓ Real-Time / Dashboard
- ✓ Per Line / Plant / Global

Faster-Than-Paper™ Operations

e-Checksheets

The screenshot shows a web browser window with the URL `aimsdemo.acmptest.aimsco.com/mlmpreview/Pages/Tracker/Dashboar`. The page header includes the 'Makelt Works Manufacturing' logo and navigation tabs: 'Schedule', 'Repair', 'Disposition', 'Part Transfer', 'CAPA', and 'Review++'. The main content area displays a checklist for 'Passenger Door Visual' inspection. It includes a 'Select Line Number' dropdown set to 'LINE 1', a 'Sample: 1 Value' field, and a 'Next Sample' button. The checklist items are: 'Confirm Date Code correct, readable' (Sample No: 1) with a green checkmark icon, 'No splits or voids in incoming material' (Sample No: 1) with a green checkmark icon, and 'Passenger Door Visual' (Sample No: 1) with a red 'X' icon. A 'Next Sample' button is also present.

Image Quality Maps (IQ Map™)



Quality Flow Maps™

The screenshot shows a web browser window with the URL `aimsdemo.acmptest.aimsco.com/mlmpreview/Pages/Tracker/Dashboar`. The page header includes the 'Makelt Works Manufacturing' logo and navigation tabs: 'Schedule', 'Repair', 'Disposition', 'Part Transfer', 'CAPA', and 'Review++'. The main content area displays a 'DEFECT CODE SELECTION' section with buttons for 'Misaligned', 'Not Installed', and 'Pinched'. Below this is a 'SIDE AND PART SELECTION' section with buttons for 'Printer Door Gasket Side - A' and 'Printer Door Gasket Side - B'. At the bottom, there are 'Previous' and 'Next' buttons.

Automated, Standards-Based Interfaces

ERP, Equipment, PLCs, Testers, Gauges, DCS, Material Handling, Scanners,...

Extensive Checksheet Capabilities

“e-Checksheets™ are Legos for Production and Quality Operations”

- **e-Checksheets group related data collection at point-of-entry through customer-defined use of configurable check items**
- **Diverse, re-usable library of check item types:**
 - *Pass / Fail:* Defect Codes / Visual / Repair / Sign-Off
 - *Variables / Traceability:* Numeric / Picklist / Free Form Alpha
 - *Run Timer / Player:* Start / Stop / Hold Codes
 - *Material Tracking:* Produce / Consume / NCM / Disposition
 - *Specifications:* Display-only check item with rich text contents, graphics, links
 - *Comments:* Free form input with ability to attach photo, files
 - *Date:* Select a date from calendar
 - *User Picker:* Select a user from a group
 - *Report:* Display a user-definable report

Core Check Item Capabilities

All check items provide a common core set of capabilities

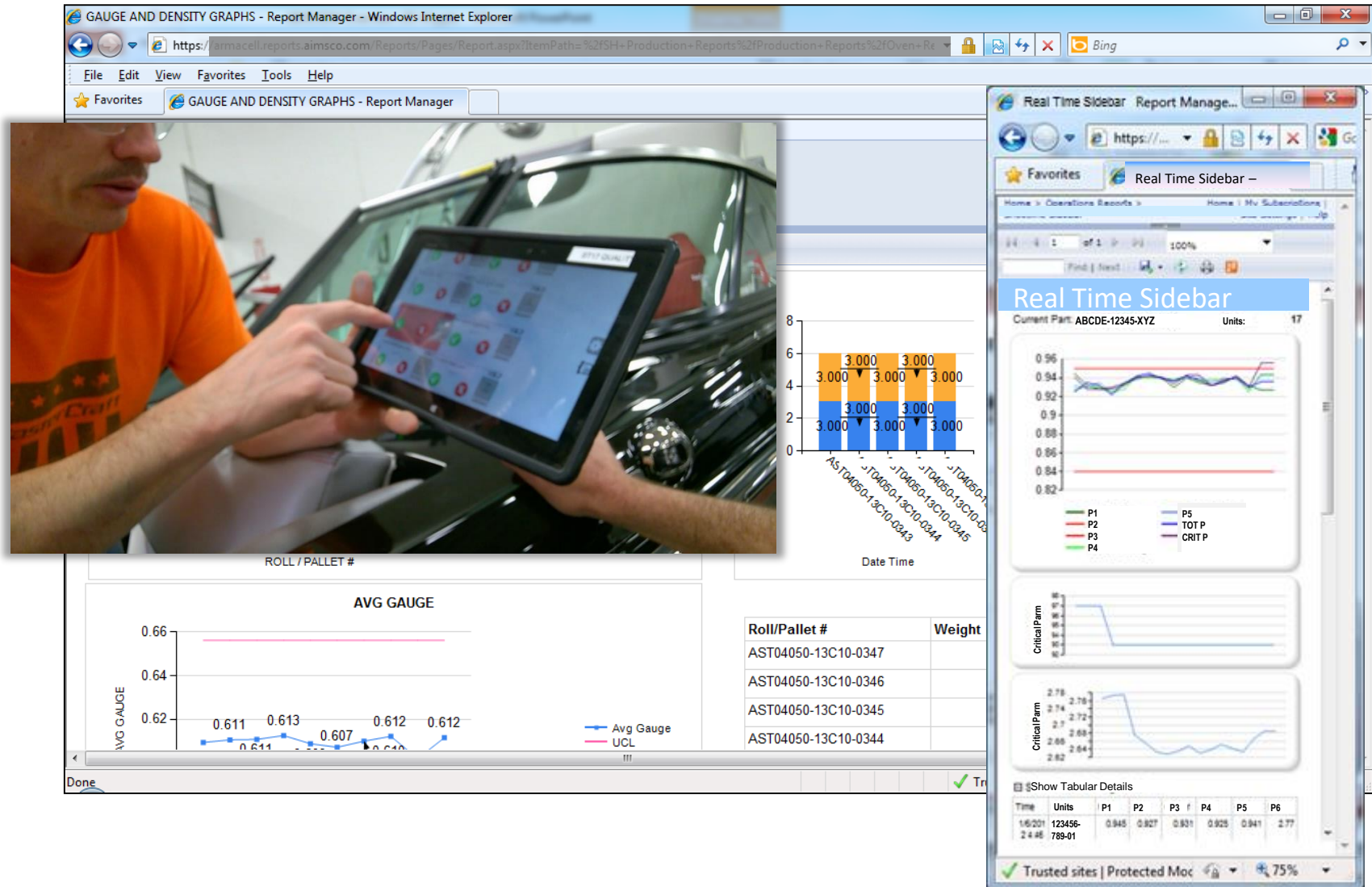
- Transactions user & timestamped with privileged audit-traced edits
- Multilevel tracking with configurable serialization options
- Comments / photos / attachments
- Rich text work instructions
- Reference images with links to online documents, videos
- Internal grouping / optional display
- Manual input and automated equipment / ERP interface options
- Configurable options for defaults / prefills / multiple samples
- Local language descriptions / prompts / coding

Better Than Paper™

An Intelligent Innovation Platform

- Reusable check sheets and check items
 - High efficiency, rapid targeted changes and adaptation
- BI driven alerts and notifications
 - Embedded analytics visible to operator at point of action
 - Targeted email subscriptions deliver to right person, right time
- Intelligent, adaptive interfaces
 - User interfaces
 - Validated inputs => eliminate bad data
 - Fixed sampling => adaptive sampling (result-based)
 - Automated data collection
 - Variable machine sampling frequency, tolerance, scope
- Intelligent optimization workflow
 - Combine user & automated inputs, product & process data
 - By order, product, material, over time
 - CAPA / 8D => Predict & optimize in real time

Real-Time / Dashboard / Mobile Reports



AIMSCO Enterprise Services Portal (ESP)

The screenshot displays the SharePoint interface for the 'Makelt Works ESP Site'. The top navigation bar is blue with 'Office 365' and 'SharePoint' labels. The left sidebar contains a 'Home' button and a list of navigation links: Notebook, Documents, Pages, Recent, Useful Links, Site contents, and Recycle Bin. The main content area features a 'Welcome to the AIMSCO Enterprise Services Portal' message, a 'Newsfeed' section with a post by Perry Smith, and a 'Documents' section with a table of files. A 'Useful Links' section on the right lists various interfaces and reports.

Office 365 | SharePoint

Makelt Works ESP EDIT LINKS

Makelt Works ESP Site

Search this site

Home

- Notebook
- Documents
- Pages
- Recent
- Useful Links
- Site contents
- Recycle Bin

EDIT LINKS

Welcome to the AIMSCO Enterprise Services Portal

Your single site for AIMSCO implementation support resources at the MakeIT Works Demo Facility!

Newsfeed

Start a conversation

Perry Smith
New version of MLM with support for enhanced IQMAP visual data collection is due next week!
Thursday, August 3, 2017 Like Reply ...

Documents

New Upload Sync Share More

✓	Name	Modified	Modified By
✓	Downloads	... August 3, 2017	□ Perry Smith

Useful Links

+ new item or edit this list

✓	Title	Link
✓	Demo Production Interface	... Makelt Works MLM
✓	Demo Control Center Interface	... Makelt Works Control Center
✓	Demo Reports	... Makelt Works Report Portal