Organizing productive excellence

Our History

- **2009** – company founded as a System Integrator of MES solutions for Automotive industry
- **2010** – birth of AGW IP product – integration platform for robust real time complex systems
- **2010** – birth of AGW MES product – MES software for discrete manufacturing
- **2012** – birth of AGW WMS product – Warehouse Management System for manufacturing and logistics facilities
- **2013 – 2014** – extension of OLSOM services to Food Processing, Chemicals and Raw Materials industries
- **2015** – birth of AGW Production Management – software focused on performance visualization and production metrics
- **2015 – 2016** – extension of OLSOM services to Aerospace industry and Automotive OEM's
- **2017 – 2019** – accent on instant visualization of manufacturing KPI's, global enterprise KPI's
- **2018** – foundation of OLSOM affiliate in Poland
- **2020 – 2021** – redesign of AGW WMS module, extension to HVAC and Electronics assembly

Introduction

OLSOM has roots in Manufacturing IT and MES/WMS solutions since 1998

OLSOM
Merging Technologies

Customers around the globe

Offices in Poland, Ukraine and UK

Partner ecosystem

Microsoft
Catalyst Solutions Inc.
innohub
APNET
ARKITE
UNIVERSAL ROBOTS
kepware
FANUC

OLSOM Footprint

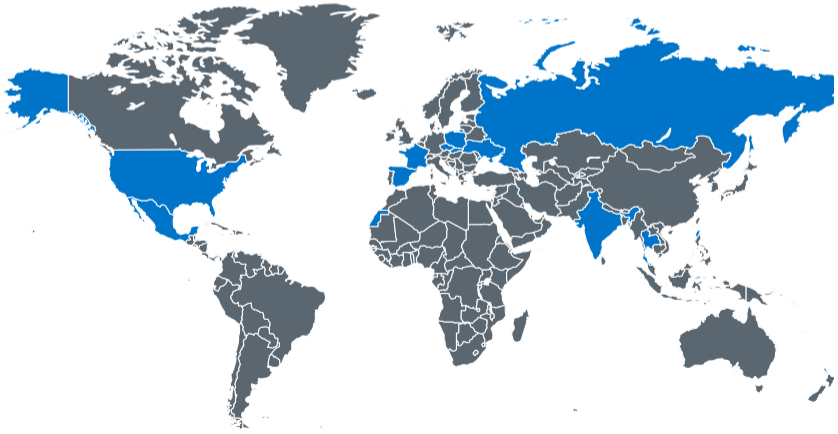
Geography

US MEX MA E F CZ PL

SK UA RU IND TH TW

Industries

Automotive · Aerospace · Food Processing · Chemicals · Raw Materials · Machinery · Electrical equipment · Batch & Continuous production



DETROIT · BOEING · FREIGHTLINER · motherson

HYUNDAI · DAIMLER · HANON SYSTEMS · FICOSA

varroc EXCELLENCE · Cummins · ARGUS · SOLVAY asking more from chemistry® · CONMET · TESLA

Ford · MAGNA · faurecia · BOLZONI · Carrier

Pacorini Silocaf · MARELLI · Huf · STARPACK · BRIGGS&STRATTON · HOTAI

Some Numbers

- Team of 40+ highly skilled professionals
- R&D department
- Service Delivery department
- More than a decade of continues development and implementation of product suite for manufacturing IT
- Product implemented at 50+ manufacturing facilities around the globe
- Direct personalized 24/7 support of 30+ factories around the globe
- 120+ production lines and cells running with our products
- Serve businesses of various industries and scales
- Our clients vary from SME of 50 employees through global corporates with dozens of thousands employees

Product portfolio

Our software covers:

- **Production Management** – everything you can imagine is needed for let's say "plastics production":
  - Injection molding machines and their maintenance, changeover control and process validations
  - Counting parts produced, scrapped, suspected, gathering all kind of KPI's
- **Assembly process management**
  - Poka-Yoke, Interlocking and a lot of fancy stuff that prevents Error Propagation increasing the Quality of production
  - Pick-to-light, build-to-order, process validation, testing, printing of different labels for product and for logistic
  - Traceability as is required by multiple standards in Automotive industry
  - Engineering changes, materials, BOM, and .. too long list of functions
- **Visualization**
  - Dedicated design on station level (that had a few generations – adopting to the Operator' needs)
  - About 30 of different reports for office/production management
  - Dashboards of different kind: per station, per work center, per Area, Facility and
  - Up-to the corporate level, where you can see the world map with facilities on it, with ability to drill-down to the shop floor level – analyzing the most impactful downtime reasons and scrap reasons

AGW Product Suite

The VAI (Visually Aware Intelligence) Platform

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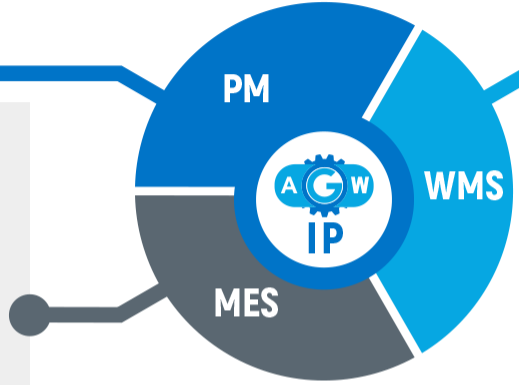
Production Schedule	=	Production Planning
Quality Control	=	Quality Control
Downtime Management	=	Downtime Management
Maintenance	=	Maintenance
Instant Visibility	=	Instant Visibility
Predictive Analytics	=	Predictive Analytics
Labor Management	=	Labor Management
ERP/SCM Integration	=	ERP/SCM Integration
Change Overs	=	Change Overs
		Order Management
		Production Control
		Traceability
		Labeling
		Error Proofing
		Sequencing
		Pack & Dispatch



- Inbound, Dispatch
- Stock -in, -out
- Labor Management
- Picking, Inventory
- Kanban, Replenishment
- (Re-) Packing
- (Re-) Labeling
- EDI & ERP Integration

VAI / AGW Platform

VAI / AGW IP – a flexible and highly-performant real-time integration platform. AGW IP is the core technology of the OLSOM software package. It addresses the challenges of IIOT and BPM business processes.

Low Code Platform for Manufacturing IT

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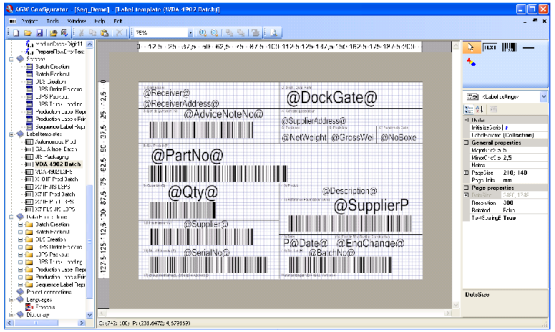

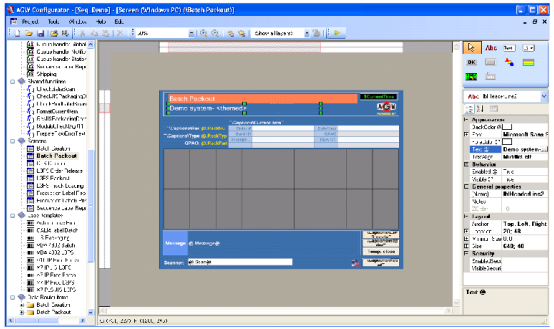

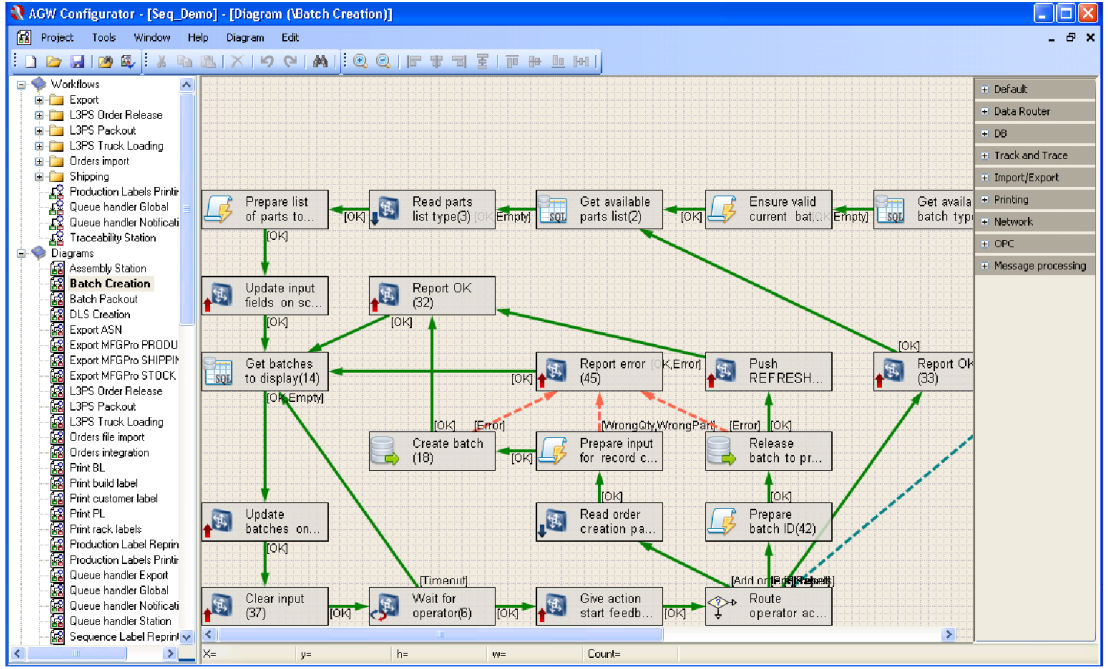

Functions

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Data Exchange

AGW IP exposes a rich library of interfaces for communication with plant floor equipment, databases, ERP systems, and other manufacturing applications. Connect torque guns or any other plant floor equipment in a few clicks. The AGW IP technology allows flexible data processing and dynamic process scripting. This enables you to process, send, and store production data the way you need.

Label Printing

Design and print your production, quantity, and container labels with an embedded WYSIWYG label designer.

HUMAN-MACHINE INTERFACE (HMI)

AGW IP offers a WYSIWYG HMI designer for your operator and equipment screens. Flexible AGW screens are compatible with desktop and mobile.

Workflow Execution

AGW IP introduces two core technologies: AGW Diagram and AGW Workflow. While AGW Diagram represents the process scenario, AGW Workflow invokes the instance of AGW Diagram with the equipment-specific parameters. This design allows you to reuse the same process script (AGW Diagram) for multiple plant floor stations and build sophisticated yet exceedingly efficient solutions.

Features

Flexibility

AGW IP is a truly flexible solution due to its modular core and dynamic workflows. This enables a broad audience of system integrators to modify and customize AGW solutions to meet customer requirements. AGW IP platform implements Microsoft Jscript scripting, which extends AGW solutions flexibility even more.

Scalability

Whether you need a single-PC solution, multi-server network, or a cloud-based system, AGW IP core allows scaling your software solution to a needed extent. AGW software products address the issue of performance, load balancing, availability, and many other metrics.

Support For Multiple Ui Languages

AGW IP provides full support of the UI localization. Save your HMI messages in different languages and switch between them in a single click anytime you need.

Change Management

AGW IP exposes a version management functionality. It enables you to monitor changes, compare configuration revisions, and rollback updates.

Connectivity

PLC's

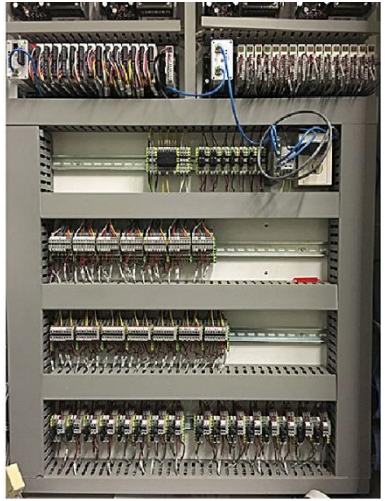
AB ControlLogix
Siemens S7
Schneider/Modicon/Telemecanique
Mitsubishi
Opto22

Remote I/O

Advantech
Moxa

Interfaces

OPC
Modbus
Ethernet/IP
Simatic
TCP/IP
Web Services, REST
Open Protocol



Connected Equipment

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Equipment

Injection Molding Machines
Vibration Welding Machines
Ultrasonic Welding Machines
Foaming Machines
Milling Machines
Laser Scoring Machines
Vision Systems
Various Testing Equipment
Conveyers
RFID Systems
Pick-to-Light Systems
Torque Controllers
Weight Scales
Robots
Automated Guided Vehicle (AGV) Systems
Automated Storage and Retrieval Systems (ASRS)

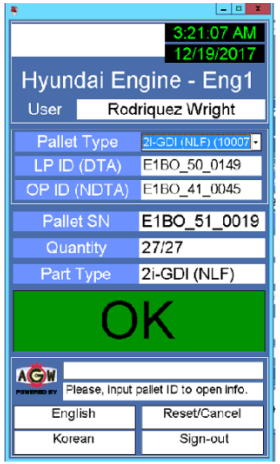
HMI

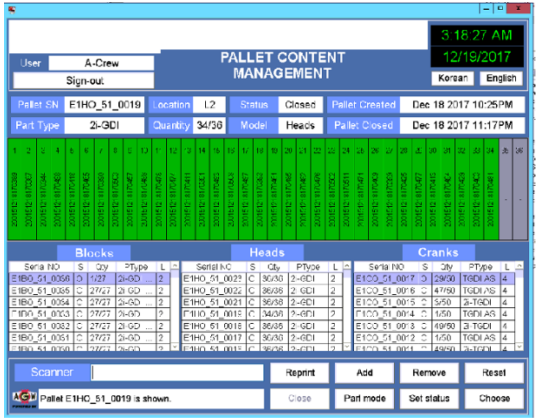
Output

Web browsers:
IE 11 and higher,
Google Chrome,
Firefox,
Safari,
Opera,
etc.
Mobile terminals
Integration with PLC HMI's
Integration with 3rd party HMI software (Iconics, GE Simplicity, etc.)
Stack light, horn, etc.

Input

Hand held scanners
Fixed scanners
RFID readers
Touch panels
Buttons





Example Screen (Packaging)

Product

Traffic Control

Counters

English
Polish

K0 HDLP
OP29 Final audit and packaging

02-Oct-20
12:25:03 PM

POWERED BY

Produkt: K0 HDLP Citroen HAL
Część: 00197076-05 - K0 HL CIT HAL EU L OEM
Operator: Kronda Vladimir
Zasada pakowania: K0 HDLP CIT HAL 4x4 - K0 Custom
Logowanie
Edytuj

Serial: 00197076052810190004
Version: 00197076-05
Handling Unit Serial: K0_HDLP_HU29092000001
BOX Serial: K0_HDLP_BOX021020001
Last packed SN: 00197076051105200343
Customer SN: 00197076059808567780000A00C8I02290920171813001O
Version: 00197076-05

Station	Result
OP21 Assembly of gimp, nut to housing	Pass
OP22 Screwing pivot & high voltage cable to h...	Pass
OP24 Pressing reflector & projector, bulbs DRL...	Pass
OP25 Screwing TI & screwing balast	Pass
OP26 Plasma + Glueing	Pass
OP27 EOL + Leak test	Pass
OP28 Ventings assembly	Pass

PASSED

1 00197076051105200368	2 00207219032605200305	3 00207219032605200247	4 00207219032605200241
5 00207219032605200220	6 00207219032605200202	7 00207219032605200186	8 00207219032605200174
9 00197076052104200168	10 00207219032605200255	11 00197076051105200352	12 00197076051105200343
13 00197076052810190004	14	15	16

Wyczyść liczniki
OK 122346
NOK 0

Dodruk | Odłożenie na bok | Wysyłka nie pełna | Wyślij ponownie do SAP | Pomiń SAP | OK | NOK | Wypakuj paletę | Wypakuj box | Wypakuj lampę

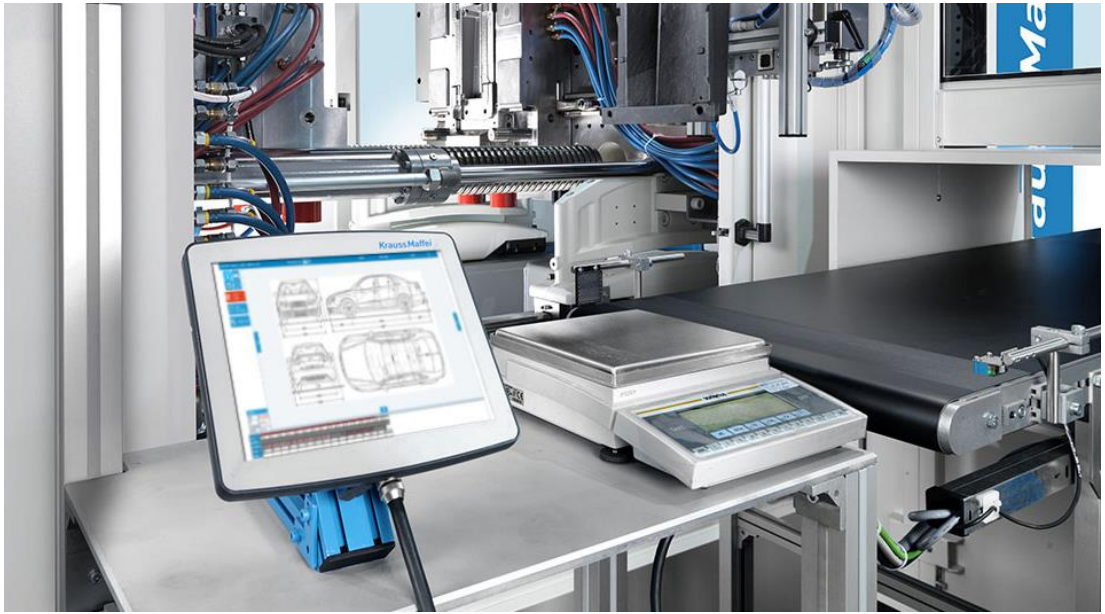
Zeskanuj barcode z lampy, którą chcesz pakować.
Skaner:
RESET

VAI / AGW Production Management

OLSOM offers an out-of-the-bot software for production control and visualization. Here are the edges of our ready-made software solution:

- Intuitive manufacturing KPI visualization;
- KPI analysis;
- Highly integratable modular core.

AGW PM is the perfect solution for businesses seeking explicit KPI visualization without other MES features.



VAI / AGW Production Management Station

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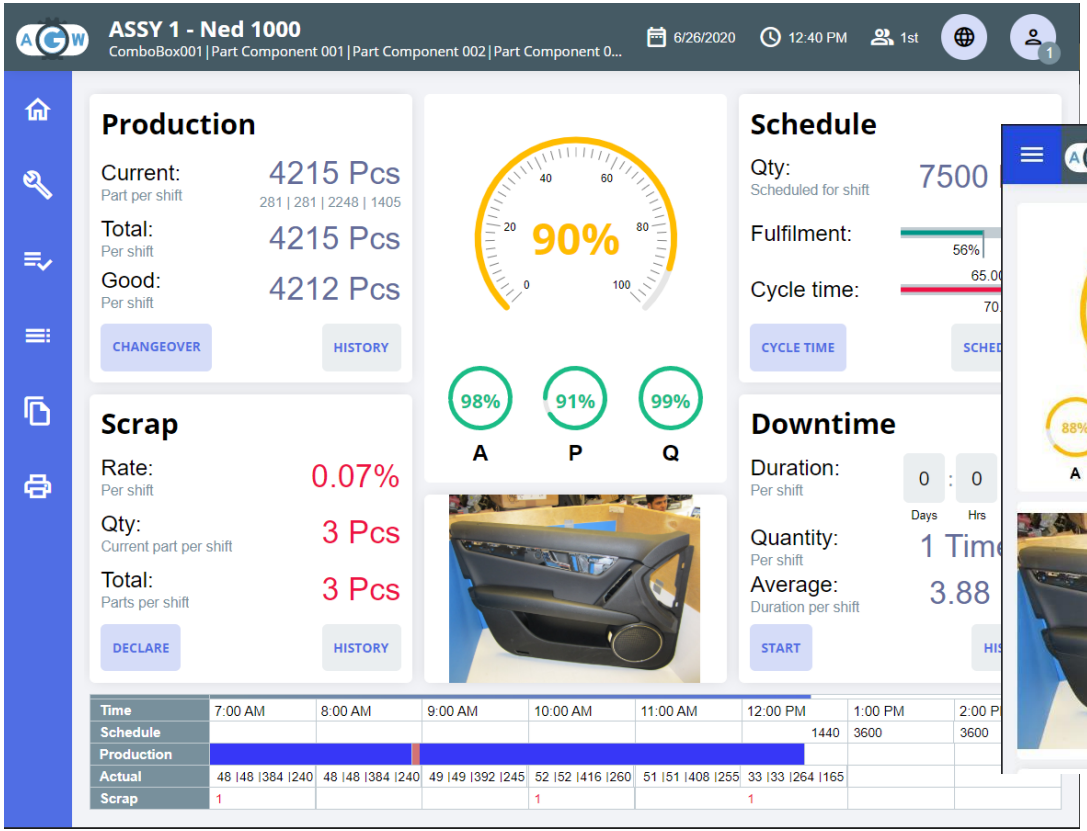

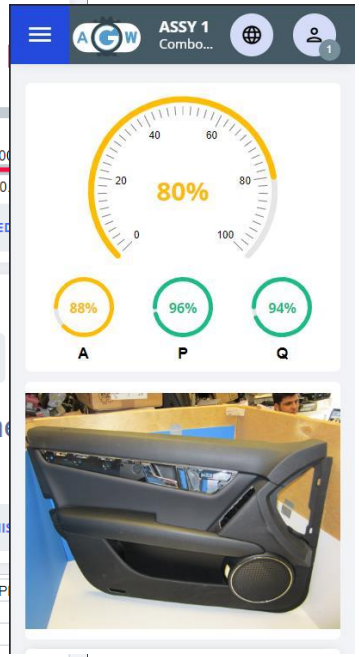

Runs in web browsers

Optimized for touch panels

Multilingual

Features

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Real-time Visibility

Monitor your factory processes in real-time. View the critical production indicators on AGW OEE Dashboards. Receive instant alerts on manufacturing issues via email or paging messaging systems along with dashboard notifications.

Reporting System

AGW OEE exposes a broad range of customizable reports. You can order custom AGW report development from our system integration specialists or set up your reports with AGW Report Designer.

Built-in Software Interfaces

With AGW OEE interfaces, you can establish a robust communication between MES and your plant floor equipment, ERP systems, quality systems, and other manufacturing applications and technologies.

Web-based Solution

AGW OEE is compatible with on-premises servers and cloud hosting. Select a suitable platform and access AGW OEE via modern web browsers.

Flexibility

Here at OLSOM, we understand how crucial solution customization is. This is why we made AGW OEE core configurable. Customize object properties and names, change UI layout, and perform many other changes without touching the code. Integrate AGW OEE with other MES modules to build a holistic manufacturing ecosystem.

Functions

OLSOM
Merging Technologies

Personnel Management

Monitor your employee activity and make sure they are qualified to work on your equipment.

Production Scheduling

Plan your production in advance. Schedule specific products to be produced on the specific manufacturing equipment on your assembly lines.

Production Metrics

Improve your manufacturing KPIs with AGW OEE. Our solution provides both runtime visibility and historical production data.

Defect Analysis

Increase your quality metrics by discovering and eliminating the most common defect causes.

Downtime Analysis

Reduce your unplanned downtime duration by discovering and eliminating the most common downtime causes.

Maintenance Management

Organize your maintenance and alert your employees about upcoming maintenance. Isolate the maintenance-related items (technical jobs and etalons) from regular production.

Tooling

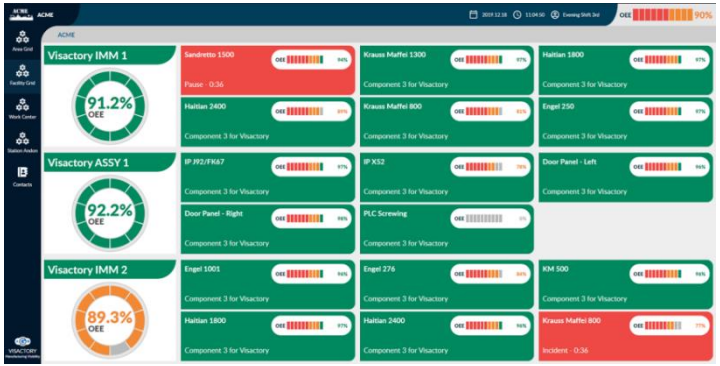
Implement the checklist functionality to study the equipment setup and to gather statistics on OK/NOK settings.

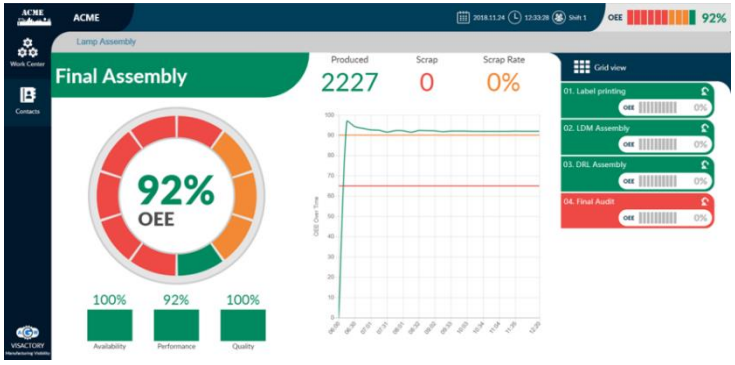
Documentation Management

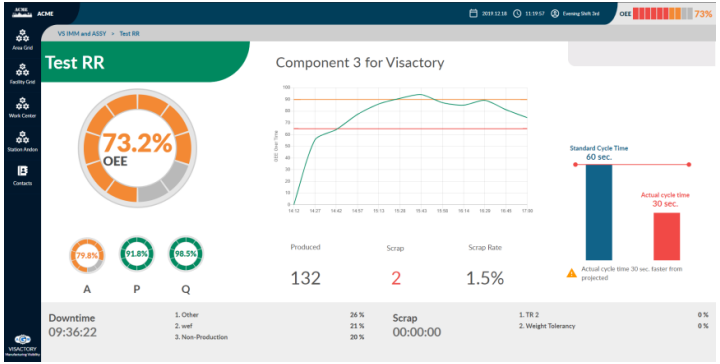
Put your operator guidelines and training on track with AGW OEE. OLSOM software enables you to manage your equipment and process documentation.

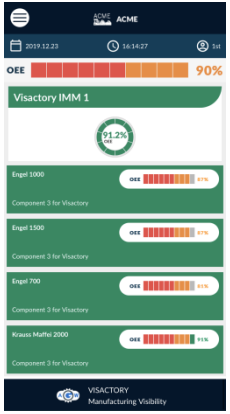
Real-time Visibility

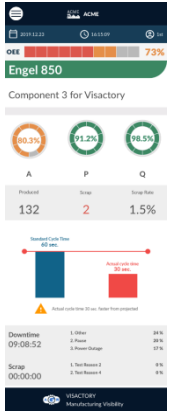
- **Available anywhere**
- **Data mobility**
- **Plant dashboards**
- **Management visibility**
- **Connection with enterprise**
- **Fully configurable**











Corporate Visualization And Analytics

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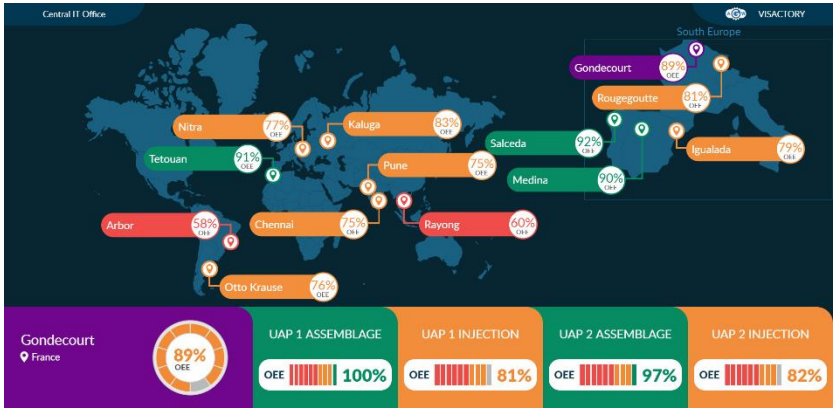

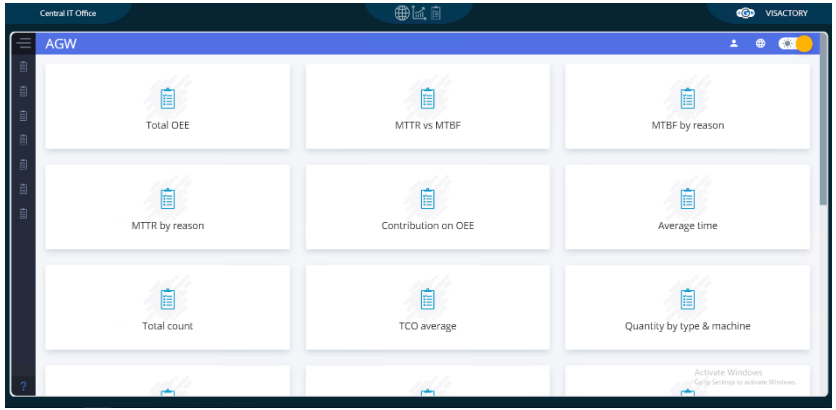

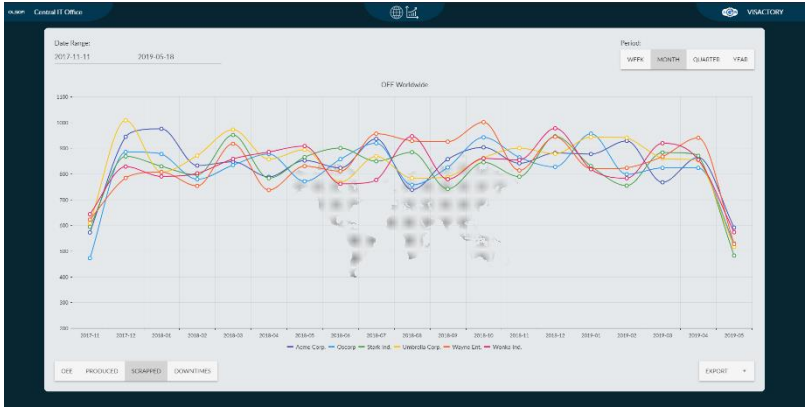

VAI / AGW MES

AGW MES - web platform for optimizing manufacturing operations. It is ISA95-compliant, flexible, and scalable. With AGW MES, you can manage an entire build process, providing your plant floor operators with exhausting instructions. What is more crucial, you can monitor their activity and plan implementation.

AGW MES is a comprehensive Manufacturing Execution System that can bring your manufacturing to a new level, regardless of business size and industry.

Features

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Monitor your factory processes in real-time. View the critical production indicators on AGW MES Dashboards. Receive instant alert on manufacturing issues via email or paging messaging systems along with dashboard notifications.

Real-Time Visibility

AGW MES is compatible with on-premises servers and cloud hosting. Select a suitable platform and access AGW MES via modern web browsers.

Web-Based Solution

AGW MES exposes a brand range of customizable reports. You can order custom AGW report development from our system integration specialists or set up your reports with AGW Report Designer. Run your reports right in AGW UI or export data to MS Excell files.

Reporting System

Flexibility

Here at OLSOM, we understand how crucial solution customization is. Customize object properties and names, change UI layout, and perform many other changes without touching the code.
Integrate AGW MES with other MES modules to build a holistic manufacturing ecosystem.

Built-In Software Interfaces

With AGW MES interfaces, you can establish a robust communication between MES and your RFID, ERP systems, quality systems, and other manufacturing applications and technologies.

Cross-Platform Software

Run MES HMI on PCs, tablets, and other mobile devices like barcode scanners your operators and forklift drivers use.

Functions

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Production Scheduling

AGW MES exposes the interface for planning your production in advance, both manual and automated. You can select among numerous production scenarios, such as Build-To-Batch, Build-To-Schedule, Build-To-Sequence, or Build-To-Order scenario.

Product Labeling

Manage your label printing for production, containers, customers, and many others with AGW MES. Serialize your parts and containers.

Production Sequencing

AGW MES is integratable with numerous EDI formats. Upload your customer orders in EDIFACT, VDA, plain text, XML, and other formats. Use production scenarios like Build-To-Sequence or Pick-To-Sequence to plan the sequenced production with your production lines, subassemblies, and containers.

Traceability

We understand the vital importance of logging all production-related events. This is why AGW MES tracks and records every single event for your items, so you can always receive a history of item operations (what, where, when was done, and who performed the action).

Quality And Error Proofing

AGW MES eliminates the human factor by providing instructions and verifying operator actions. Moreover, the software product introduces defect management (defects reporting and analysis, scrap management).

Downtime Management

AGW MES tracks production downtimes and provides you with insights into your equipment availability. Optimize the processes and minimize losses with AGW MES.

Order Management

Full-cycle customer order management made easy with AGW MES. Track every stage of customer order fulfillment: from raw materials posting to the order delivery. The software product automatically resolves and assigns your production jobs to customer orders.

Production Control

AGW MES enables you to divide the manufacturing process into separate stages, provide exhaustive operator instructions and monitor their execution.

Packaging And Dispatch

With AGW MES, you can select from different packaging models, whether batch or sequenced one. Organize accurate and timely customer order shipments and eliminate the human element with AGW MES.

Labor Management

Manage operator activity, monitor their qualifications, organize operator training for specific equipment. AGW MES visualizes operator performance, so you can study and reduce personnel-related losses.

Real-Time Scheduling

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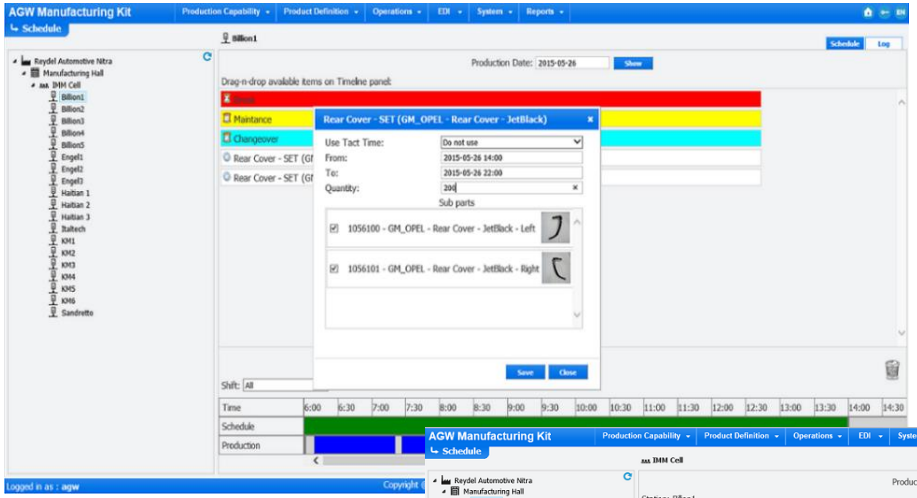
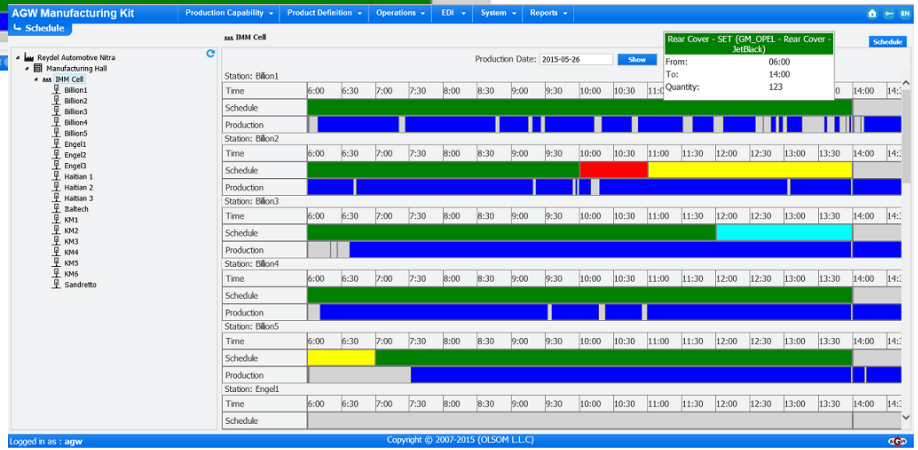
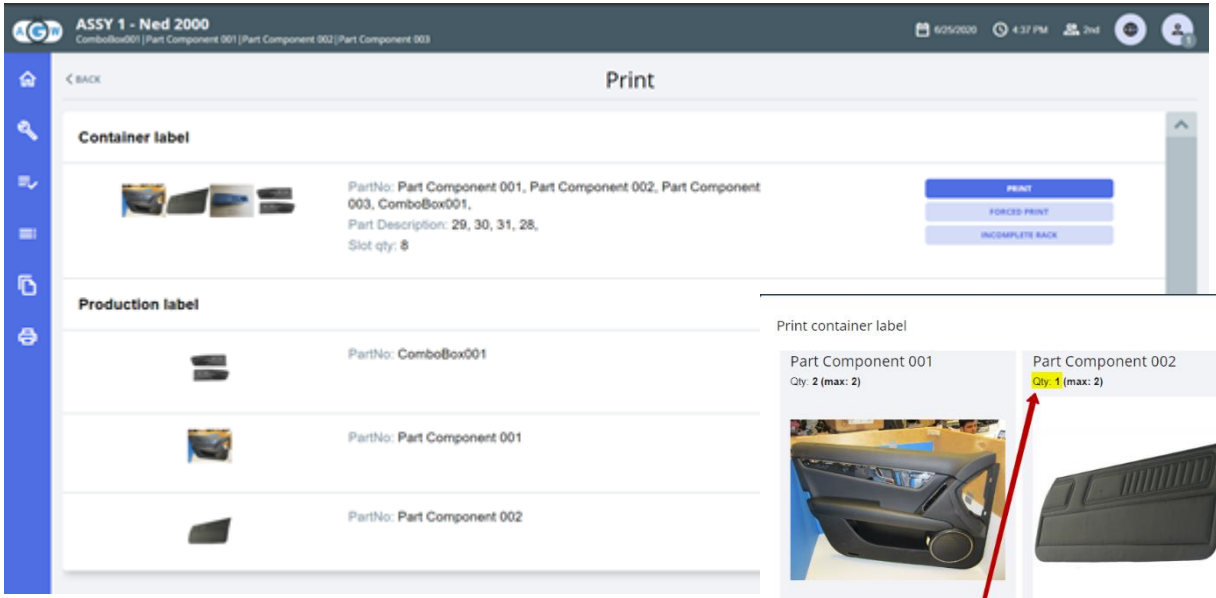
Merging Technologies

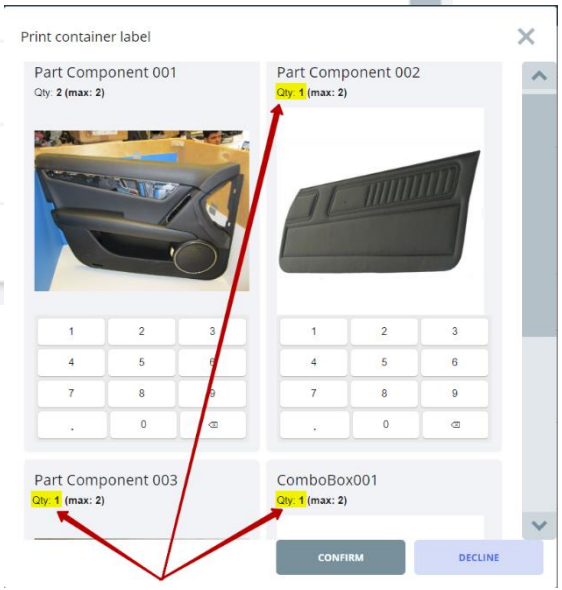




- **Tact time Respected during scheduling**
- **Ability to schedule alternate resources**
- **Scheduling of multi-cavity tools**
- **Scheduling of breaks and maintenance**
- **Capability of loading plan from ERP or Excel sheet**

Labeling





Product and packaging label printing

Auto and manual modes

Capability of reprint

Sequencing

OLSOM
Merging Technologies

OEM

Invoicing

-36 Forecast — Body Shop — -24 Changes — Wending Shop — -16 Call Off — Paint Shop — -10 Syncro — Assembly — 0 In Time Delivery — Final Assembly — 8 Delete

Information Impulses

Error Proofing and Safety Data

RF Base Station

RF Scanner · Torque Gun · RF Base Station · StackLight

Tier 1 Time Line

Start — **Assembly** — Finish

Tier 2

Pull from Tier 2

Incoming Goods

Store in Bulk Storage

1 Validate Materials

Pull from Bulk Storage

2 Prepare Production Specific Information
- Production Time
- Assembly Tags
- Work Place
- Picking List

3 Picking Area Material Movement

4 Shop Floor
- Pick-to-Light
- Torque Gun
- Interlock
- USW

Pull from Working Place

5 Quality Test
- Vision Control

6 PPS
- Post Production Storage
- Sequecing
- Assing to Buggie / Truck
- Transit / Marriage

SILS Center

7 Dispatch
- Load Truck
- Notify Delivery
- Departure

Push from SILS

Traceability

Traceability

Labeling
Identification of individual items, batches, containers, etc.
Serialization.
On-demand labeling.

Production Control
Robust routing of jobs and batches thru operations. Supply of build instructions to machinery and personnel.

Batch Traceability
Isolation of batches with production defect.
Avoid value add with defect batches.

Error Proofing
Provide poka-yoke between operations as well as between individual step of an operation. Avoid value add to items isolated due to quality.

Item Traceability
Trace birth history and genealogy of certain item.
Isolate items with defects avoiding value add.

Process Traceability
Analysis of process parameters in time.
Isolate defective conditions SPS.

Instant Visibility

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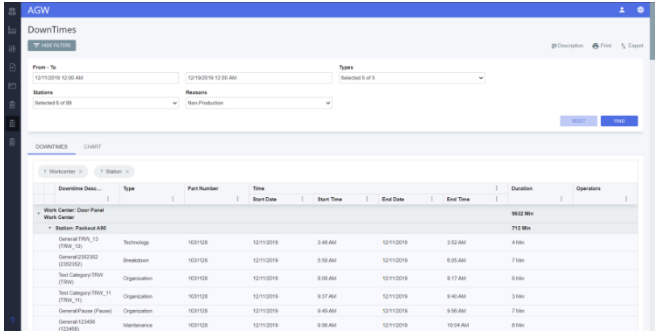
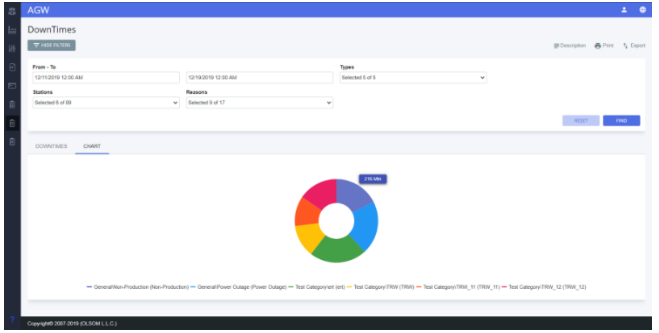
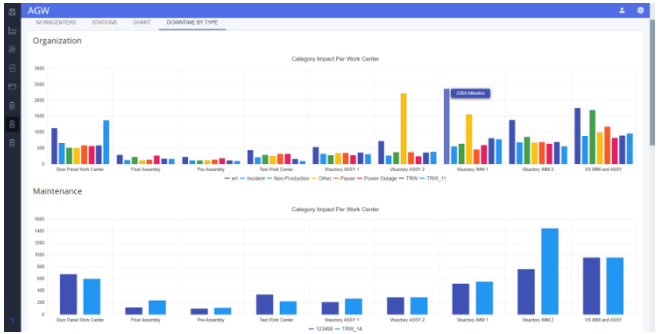
Advanced Analytics

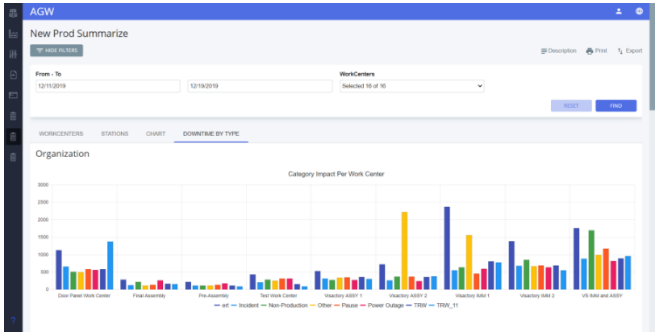
OLSOM
Merging Technologies

- **In-built data historian**
- **Dozens of categorized standard table and chart reports**
- **Integration with Microsoft SSRS and Sharepoint**









VAI / AGW WMS

AGW WMS is a sophisticated software product for your inventory visibility. It enables you to monitor and optimize your inventory item movement: from the posting to the time when finished products leave your facility.

AGW WMS provides up-to-the-minute information on the inventory item quantity, location, status, and event history, whether it's raw materials, work-in-progress product, or the finished one.

Features

OLSOM
Merging Technologies

Real-time Visibility

Monitor your factory processes in real-time. View the critical production indicators on AGW WMS Dashboards. Receive instant alerts on manufacturing issues via email or paging messaging systems along with dashboard notifications.

Reporting System

AGW WMS exposes a broad range of customizable reports. You can order custom AGW report development from our system integration specialists or set up your reports with AGW Report Designer. Run your reports right in AGW UI or export data to MS Excel files.

Built-in Software Interfaces

With AGW WMS interfaces, you can establish a robust communication between WMS and your RFID, ERP systems, quality systems, and other manufacturing applications and technologies.

Web-based Solution

AGW WMS is compatible with on-premises servers and cloud hosting. Select a suitable platform and access AGW WMS via modern web browsers.

Flexibility

Here at OLSOM, we understand how crucial solution customization is. This is why we made AGW WMS core configurable. Customize object properties and names, change UI layout, and perform many other changes without touching the code. Integrate AGW WMS with other MES modules to build a holistic manufacturing ecosystem.

Cross-platform Software

Run WMS HMI on PCs, tablets, and other mobile devices like barcode scanners your operators and forklift drivers use.

Functions

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Tracking And Tracing

With AGW WMS, you can track your items on every stage of the manufacturing process. Monitor your inventory by WIP status, serial numbers, SKU attributes, and locations. Set the minimum/maximum stock balance to receive notifications when the actual stock reaches the limit. Moreover, AGW WMS provides a comprehensive reporting system for your inventory history/activity.

Posting

Posting inventory items on a part, container, or pallet level made easy with AGW WMS. The system automatically gathers posting data (shipment number, trailer number, pallet/container/SKU numbers, quantities, attributes, etc) for further tracking and tracing. Manage the incoming product routing to a specific stock location with AGW WMS.

Stock Replenishment

Replenish your inventory stock conveniently with AGW WMS. Just scan the barcode of part, container, or pallet, enter a location, and the system will record your stock replenishment. AGW WMS also shows operators the location of the needed inventory item and where they can transfer it to.

Shipping

Manage your shipment processes and monitor the loading of pallets and containers to trucks. AGW WMS supports both sequenced and batch shipments.

Selecting Items For Production

Integrate AGW WMS with AGW MES to schedule the inventory items use. Just scan a part number or a serial number of items to confirm the scheduling. AGW WMS supports FIFO, LIFO, FEFO selection algorithms. Monitor your item packing (into containers and pallets) with the packing model you need (chaos, batch, sequenced).

Stock Adjustments

Correct your stock balance on the location level and split your inventory items on the pallet or part level.

Inventory Management

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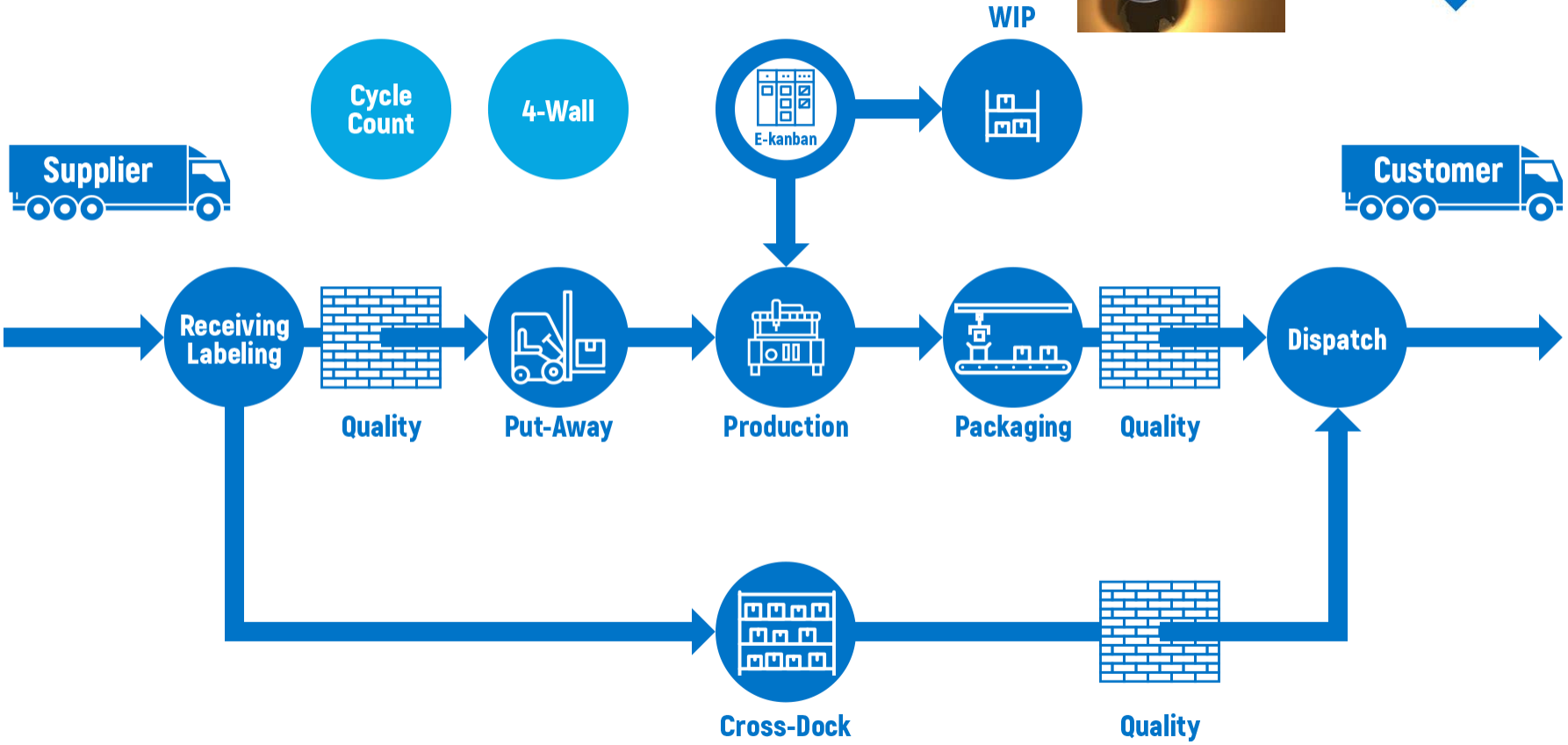
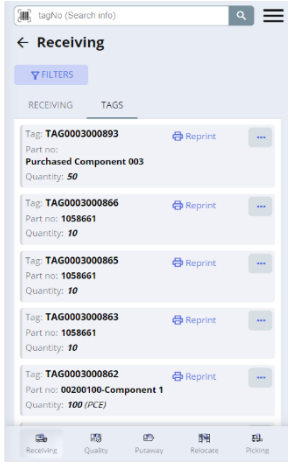
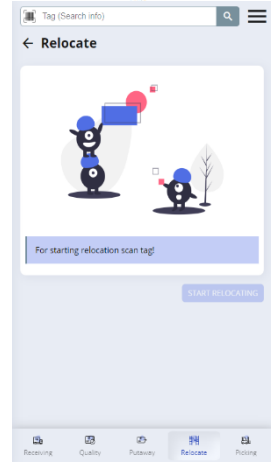
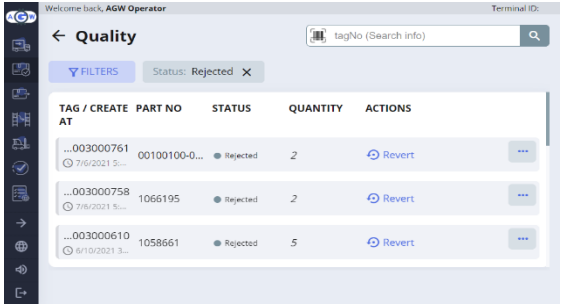


Inventory Management



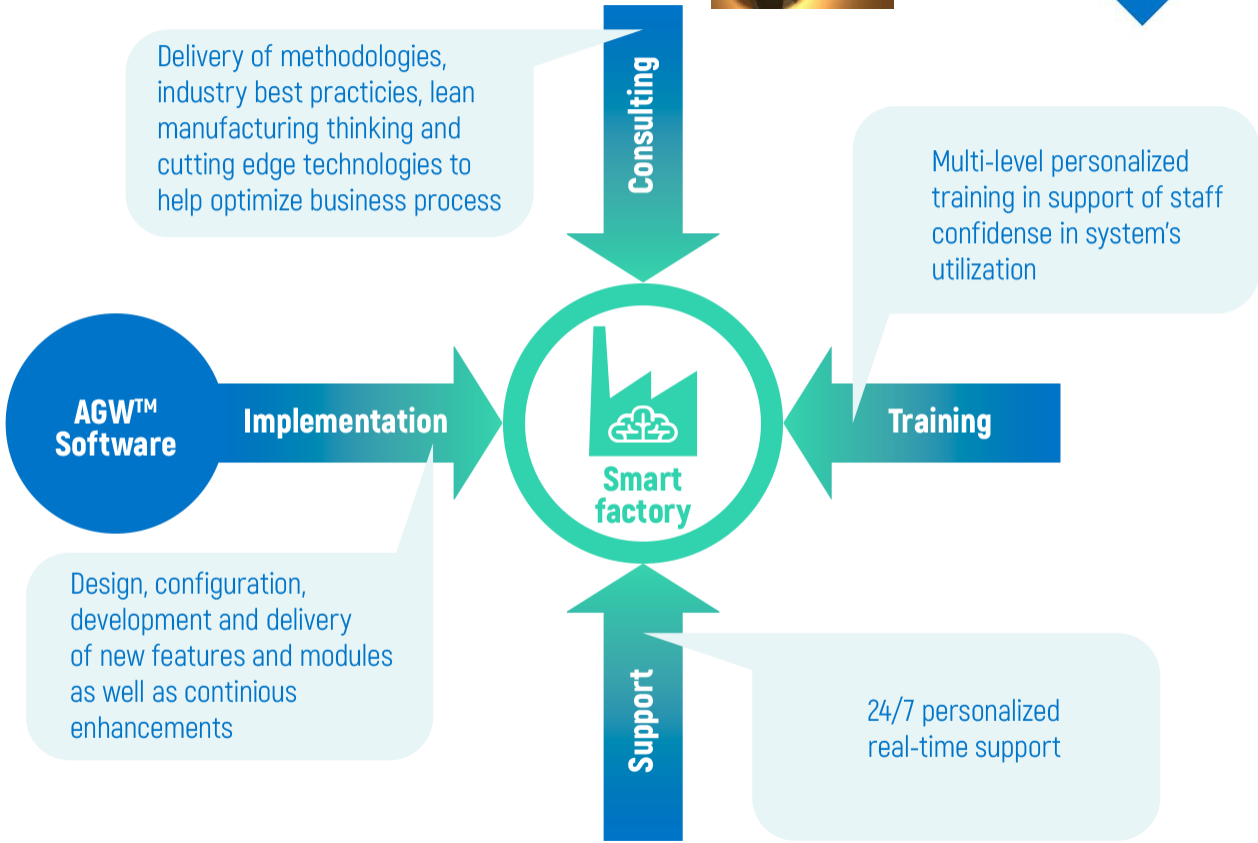




How Do We Work?

OLSOM is a RELIABLE PARTNER in transition of your enterprise to INDUSTRY 4.0

Investing in Industry 4.0 solutions, with small one-off expenditures, gives the company an immediate cost reduction while ensuring a long-term increase in the profitability of production.



More Than A Supplier – PARTNER 4.0

Consulting

We offer technology consulting services for building manufacturing excellence strategies. Here's how we achieve this:

- Year of experience. OLSOM has been delivering reliable and scalable software solutions since 2009;
- Best practices. Our IT-consultants utilize best practices for improving your business processes;
- Lean manufacturing thinking. OSLOM consulting experts trim the fat off your manufacturing;
- Profound knowledge of manufacturing IT-technologies. We know the right tools for enhancing your industrial processes.

More Than A Supplier – PARTNER 4.0

System Integration

OLSOM offers a set of services for integrating of AGW-related software solutions. Our integration team will install and integrate the software you need.

More Than A Supplier – PARTNER 4.0

Support

OLSOM provides customers with 24/7 technical support in real-time. Our support specialists identify the core of an issue and fix the problem in minutes.

We also introduce a toolset for regular system health checks and software performance monitoring. Lean towards OLSOM support services, detect and eliminate threats before they start impacting your business processes.

More Than A Supplier – PARTNER 4.0

Training

OLSOM offers several levels of training programs for customers and partners. Each level addresses the specific industrial needs and target audience.

OLSOM Methodology For Project Delivery

OLSOM
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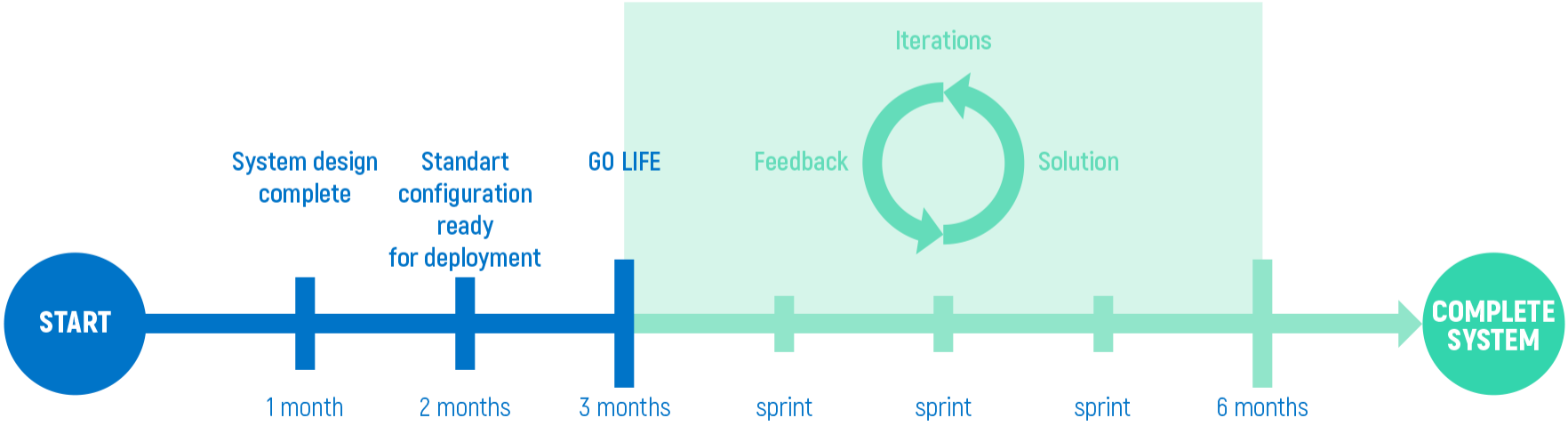
SCRUM – secures continious contact with the client aimed to tailor solution satisfying very personal client needs



Thank You!

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