



AND & OR[®]

HANDLING YOUR NEEDS

SINCE 1986

AND&OR PLATFORM



Automation of industrial processes since 1986



HANDLE APPLICATORS

20%

10%

45%

40%

QUALITY CONTROL SYSTEMS

INDEX

90%

1. MOTIVE

2. SCOPE

3. AND&OR REMOTE

4. AND&OR PROCESS

5. AND&OR MONITORING

6. AND&OR ACTION

7. CUSTOM-MADE

SOLUTION

PALLETIZER L1

PRODUCTION
EFFICIENCY

MACHINE 1
LINE 1

MACHINE 1
MACHINE 2
LINE 2

MACHINE 1
MACHINE 2
LINE 3

INDUSTRY

4.0

EFFICIENCY

ALARMS

1 MOTIVE

In the current context of industry digitization, AND&OR offers **AND&OR INDUSTRY 4.0** solution , for our customers to **increase** their production lines **efficiency**, resulting in better economic results.

AND&OR, as an engineering machinery manufacturer with more than 36 years of experience, relies on demonstrated capacity for design and programming, start-up, installation and support of INDUSTRY 4.0 solutions, making a connected factory with higher **safety standards** to improve the efficiency in your production processes.

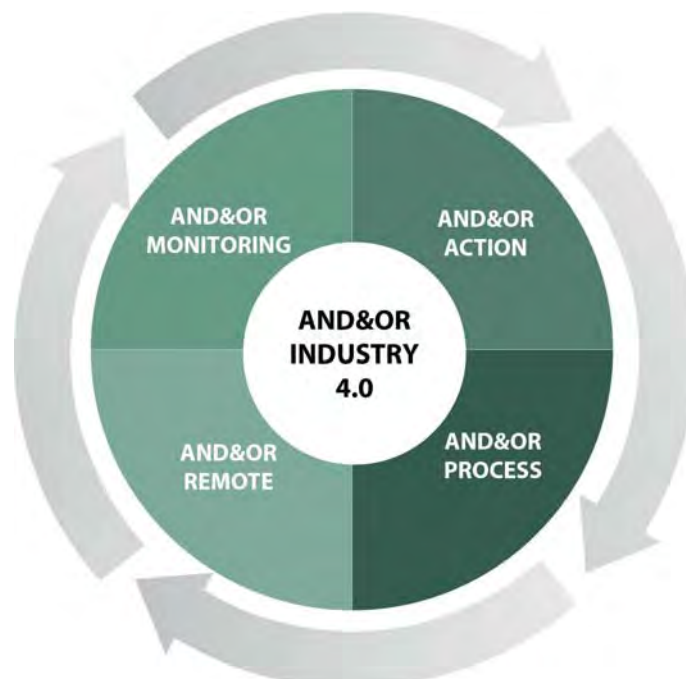
2 SCOPE

AND&OR INDUSTRY 4.0 solution is a technological solution including different services through an **IoT platform and digital tools**, making a connected factory connected factory to increase the efficiency and production.

AND&OR INDUSTRY 4.0 offers the following solutions:

- AND&OR REMOTE
- AND&OR PROCESS
- AND&OR MONITORING
- AND&OR ACTION

The digital tools can be supported by different multi-device: PC, Tablet, Smartphone, Smartwatch or Smart Glasses (free hardware).



3 AND&OR REMOTE

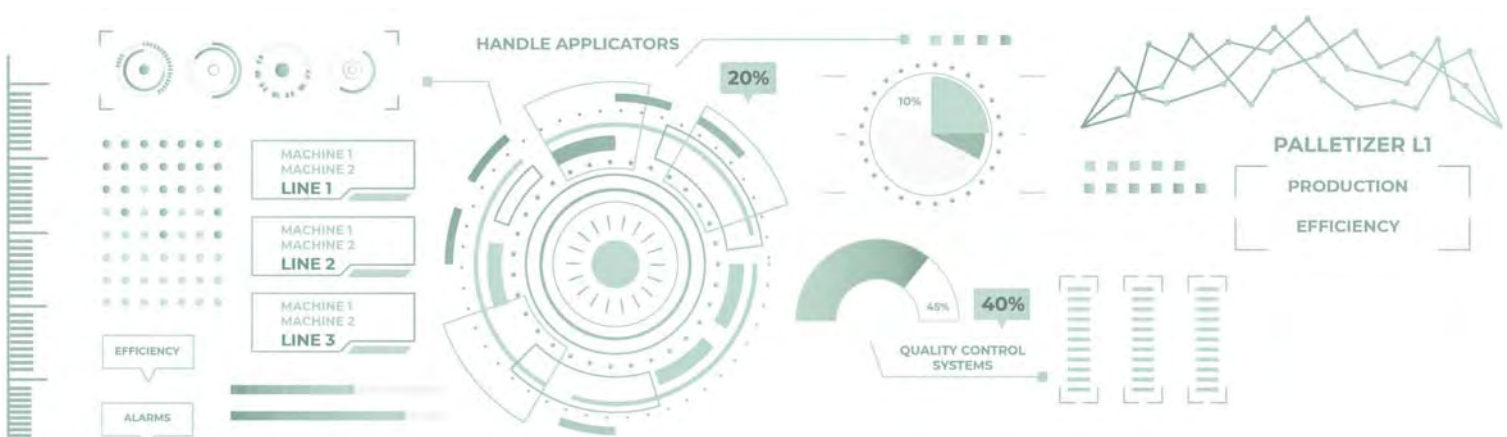
Integral solution for the assistance remote service with the AND&OR expert technical service, sharing in real time video and audio and with numerous tools, thanks to the **Augmented Reality**, makes easier the support and remote activity processes without costs nor displacements, and generating evidences of achieved works.

Functions:

- Drawings and text on snapshot and video
- Augmented reality pointers
- Recording of evidence (video, audio and photo)
- Zoom and flashlight with remote control
- Remote control of fixed cameras
- Real-time translation (chat and voice)
- Shared screen
- Multi-user sessions
- Multi-device
- Multi-session
- Sessions with external users by invitation
- Selectable audio / video sources
- Secondary "slave" camera
- Mosaic view of connected videos
- Drop-down Cloud and OnPremises
- Encrypted communications
- Integrable with customer systems
- LDAP integration
- History of sessions and evidence
- Instant messaging
- Multi-screen

Advantages:

- Reduction of response times
- Reduction of travel and costs
- Greater traceability and work monitoring
- Evidence generation
- Remote validations
- Premium customer service
- Support and training
- Productivity increase
- Improved quality and reduced errors
- Collaborative work - knowledge sharing
- Paper removal
- Fast answer



4 AND&OR PROCESS

Integral solution for design and execution of all interventions and AND&OR machine maintenance, with **step-by-step digital instructions** and **real-time monitoring** of active processes.

All the information at your service in your connected factory when you need.

AND&OR PROCESS allows the design and step-by-step instructions follow-up, in complex processes with conditional logic or repetitive tasks, improving standardization and quality, as well as reducing execution times by more than 15%.



For all your processes

Step-by-step instructions in the tasks execution in multiple areas of the organization: maintenance, quality checks, employment security, line changes, etc.



Support and homogeneity

It includes documents in video, photo, plans, etc., to carry out the work safely, efficiently and to facilitate homogeneity in the execution. Dynamically update processes when needed.



Collaborative work

It improves collaborative work in processes including various employee roles that must act in a coordinated way.

- Productivity improvement
- Support and training
- Quality improvement and error reduction
- Access to IT-OT information
- Real-time process information

- Standardization of processes
- Evidence generation
- Collaborative work
- Better information analytics
- Paper removal
- Traceability and audit

15%

**Execution time
reduction**

20%

**Efficiency
improvement**

100%

**Compliance and
traceability**



5 AND&OR MONITORING

Solution based on IoT platform integrating the data generated in the machinery, as well as key indicators (OEE, performance, availability, quality...) for monitoring, real time production control and historical data consultation.

The platform provides messages and alarms in real time to detect states and anomalies of machines and production lines, as well as power and pneumatic consumption to make a factory as sustainable as possible.

The capture of reliable and relevant data is the basis for a correct analysis of production.

Versions:

- **Version LITE:** for one machine or several isolated machines.
- **Version PLUS:** for one or several production lines.

The great advantage of the **AND&OR MONITORING** solution is the possibility to connect with each machine belonging to your company's production network, regardless of the communication protocol used, allowing to capture, process and present all the relevant information on your production and access in a simple and robust way to the production last detail.

This versatility allows us to communicate with the main latest-generation industrial communication standards and protocols, providing universal connectivity and great compatibility with future evolutions thanks to the scalability of our platform.

The platform is based on a local solution (with remote access) and is delivered on an **industrial PC** (measured according to the application), incorporating everything necessary to capture reliable and relevant data in real time, as well as a correct monitoring of the variables and production analysis through a series of dashboards and KPIs.

Feature:

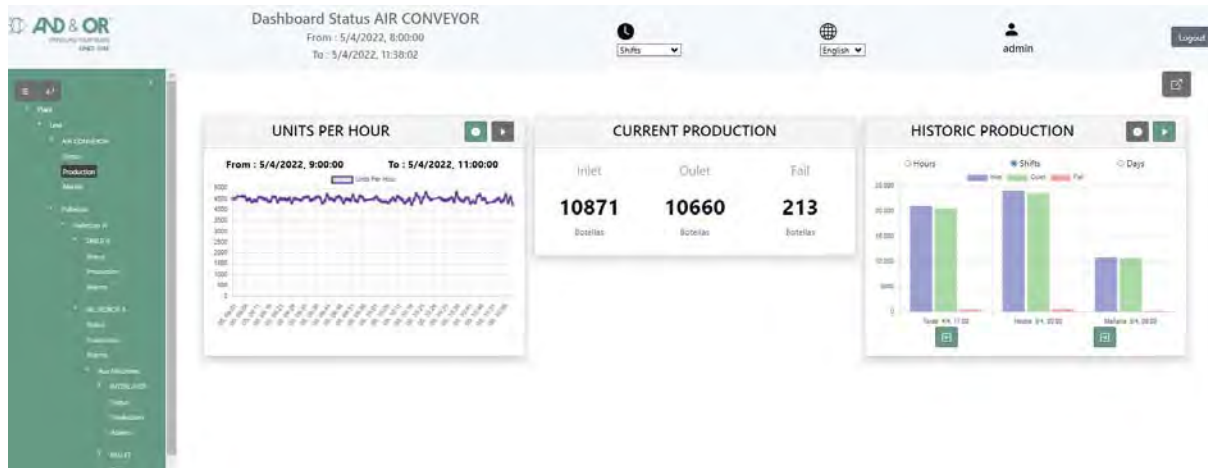
A) Machine, line and plant monitoring:

- States
- Alarms
- Production
- Power and pneumatic consumption



B) Connection with ERP/MES: work orders monitoring

C) Reporting: production reports generation



Advantages:

- Access to reliable data and KPIs in real time, as well as consultation of historical information.
- Better understanding of the production process and the most frequent anomalies.
- Greater productivity and flexibility.
- Improve production planning.
- Optimization of resources and cost savings.
- Improve the machinery maintenance and useful life.
- Improve the factory sustainability.



6 AND&OR ACTION

Solution including data generated by the machinery and employees, to detect events and its actions in real time. Based on this data and the application of configurable rules, they unleash actions in response to these input events, involving employees, machinery and information systems.

Use cases:



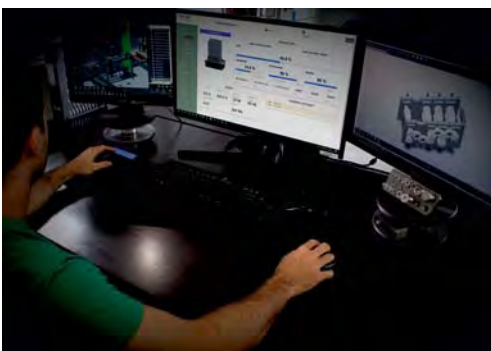
Manufacturing

AND&OR ACTION allows the detection of recurring events that can lead to manufacturing waste of time, unleashing actions, to avoid unnecessary stops in the plant and increase the operational availability of the machinery. This involves an improvement in the plant's OEE.



Maintenance

AND&OR ACTION allows, in case of certain predefined events, to unleash actions automatically, improving preventive maintenance: notification to a plant technician or AND&OR technical service, scheduled reviews, part changes...



Quality

AND&OR ACTION makes easier the data analysis in real time, which allows deviations identifications, generating alerts and corrections to avoid significant production losses due to quality problems.



Safety

AND&OR ACTION unleashes corrective actions automatically facing events detection (entry into restricted areas, mandatory PPE...) and the control of parameters and safety values, which suppose a risk to workers and the factory itself if uncontrolled.





After-sales service

AND&OR ACTION enables, in case of certain predefined events, notification to the AND&OR after-sales service for the spare parts sale and stock, minimizing waiting times.



CONNECTS all assets and integrate all IT, OT and employee data on a single platform



DEFINES key events in your process requiring an automatic response of the system



CONFIGURES easily the system responses to those events in the *AND&OR ACTION* rule engine



ANALYZES both historical and real-time data for a correct decision making



MANAGES by establishing priorities that optimize team work and resource efficiency



Advantages:



-  Improvements in work safety
-  Reduction of incident resolution time
-  Best service and customer support
-  Reduction of production costs
-  Monitoring and control of resources and assets

-  Productivity improvement
-  Quality improvement and error reduction
-  Paper removal
-  Real time information
-  Better information analytics

7 CUSTOM-MADE SOLUTION

Our **AND&OR INDUSTRY 4.0** solution is open to customization according to customer requirements, new variables and KPIs, new reports and notifications.

At the same time, it allows the connection with the ERP and MES customers management systems.





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With more of 36 years' experience in processes automation, **AND&OR** keeps working to offer equipment and solutions adapted to your real needs, always seeking to **improve the efficiency in production processes.**



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