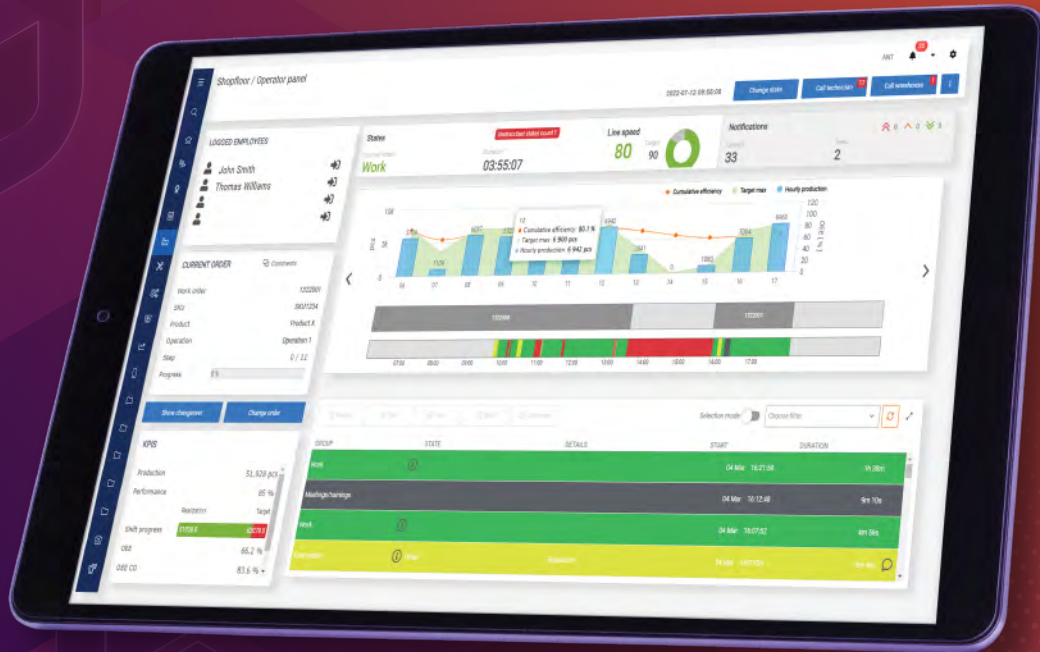


ants ·



# Smart Factory

Software for modern manufacturing

[antsolutions.eu](http://antsolutions.eu)

# ANT Smart Factory

One platform. Plenty of solutions for Manufacturing Operations Management

## OEE

OEE Performance Monitoring

## MES

Manufacturing Execution System

## PDMS

Production Data Management System

## SM

Smart Machine

## CMMS

Computerized Maintenance Management System

## APS

Advanced Planning & Scheduling

## WMS

Shop floor Warehouse Management System

## EMS

Energy Management System

## Add-ons

Empower your solution with multiple extensions



Microstops Monitoring



Machine Control



Paperless Production



Interactive Meetings

FMCG



DANONE

Baklsen



Pharma



Automotive  
& Aviation



Others



[antsolutions.eu](http://antsolutions.eu)

# OEE Performance Monitoring

- Monitor production and OEE in **real-time**
- **Report defects** and analyse them on the **Pareto chart**
- Eliminate paper from the shop floor with **digital documentation**
- Built-in multiple **dashboards & reports** with a user-friendly interface



# Manufacturing Execution System

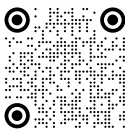
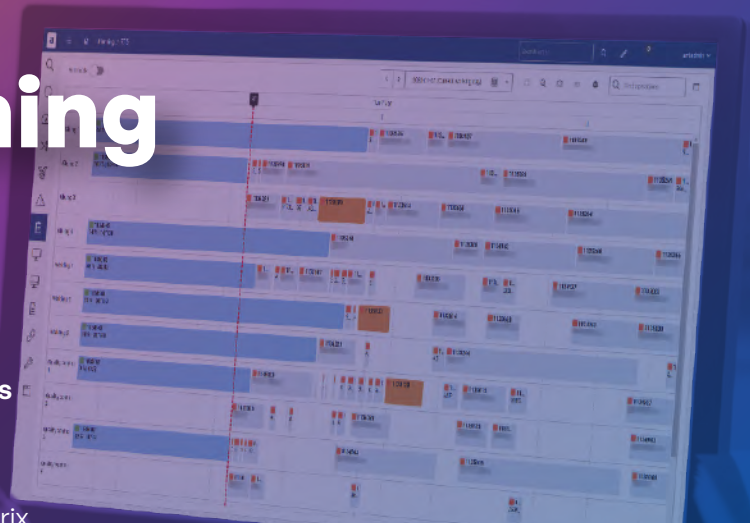
- All features from the **OEE Performance Monitoring suite**
- Create **quality reports** and detailed inspections
- Best in industry AI boosted **microstops monitoring** solution
- **Rework and changeovers** instructions – guide operators step-by-step
- Track your products upstream and downstream with a **traceability** module



# APS

## Advanced Planning & Scheduling

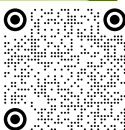
- **Real-time production** plan based on **history learning**
- The best production plan thanks to **optimization algorithms**
- Alternative **planning scenarios** with collisions prevention
- Feedback of plan execution, combined with changeovers matrix, **machine states**



# EMS

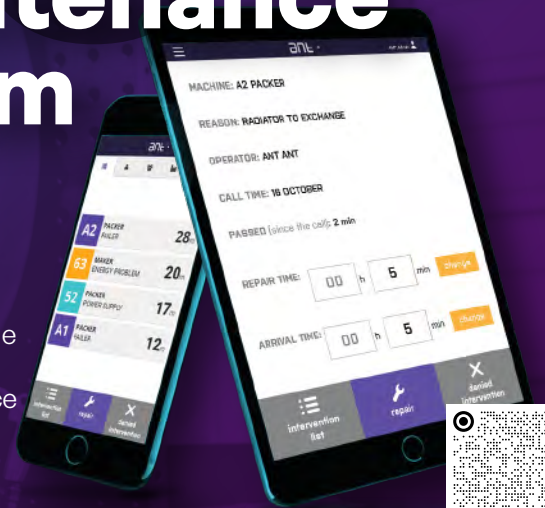
## Energy Management System

- **Forecast** energy **usage** and production cost
- **Avoid** financial **penalties** thanks to the Power Guard module
- Lower factory energy consumption, with ease **identify leaks** and anomalies
- **Measure all utilities in real-time** with ease, electricity, gas, water, steam, compressed air and more



# Computerized Maintenance Management System

- Be **up-to-date** with a **daily schedule** and get notifications
- **Access** to the current **tool** consumption, **status** and location
- **Schedule maintenance** according to the actual working time of the machine
- **Automatic** to-do list and **reminders** for upcoming and overdue maintenance



# Shop floor Warehouse Management System

- **WIP** data tracking in **real-time**
- Manage, **create** and **customize labels** in the system
- **Track** shop floor **stocks** and cover logistics process from admission to shipment
- Define **your own warehouse structure** with its levels: racks, locations and positions

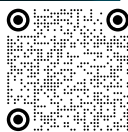
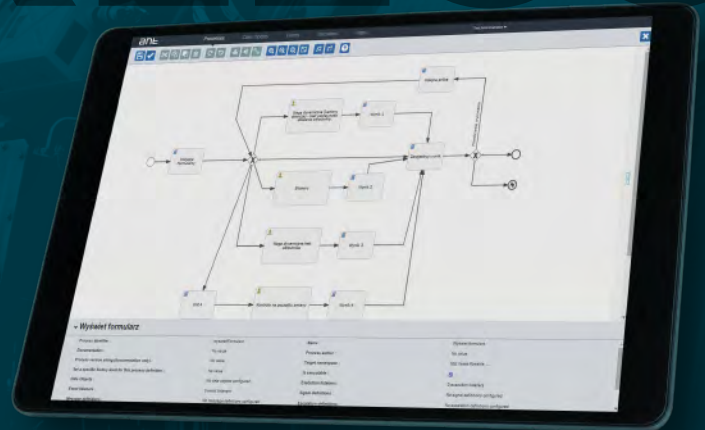


# PAPERLESS

## Paperless

(Factory forms & workflow)

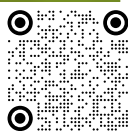
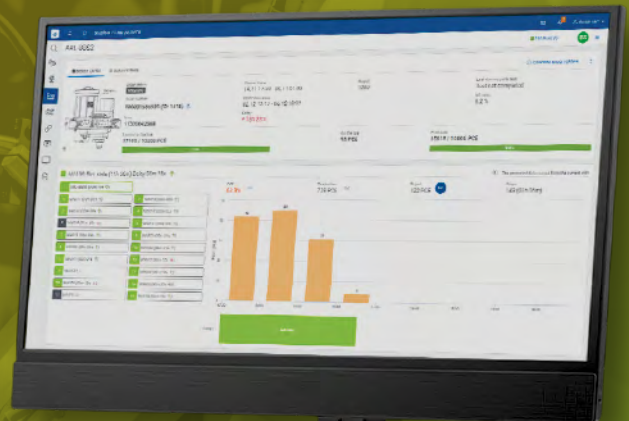
- Monitor team's tasks and their progress (**audit trail**)
- **Fetch** real data **automatically** to documents from MES system
- **Map** employees and customer **activities** directly into process models
- **Convert paper reports** to electronic versions with an easy drag&drop tool



# SMM

## Smart Machine

- **Automate changeovers** on the fly with advanced line control of all WPCs in automated assembly lines
- **Manage your recipes** with a built-in recipe manager
- **Effectively collect**, visualise and analyse data across your entire supply chain
- **Reduce waste** thanks to bottleneck detection and SPC analysis

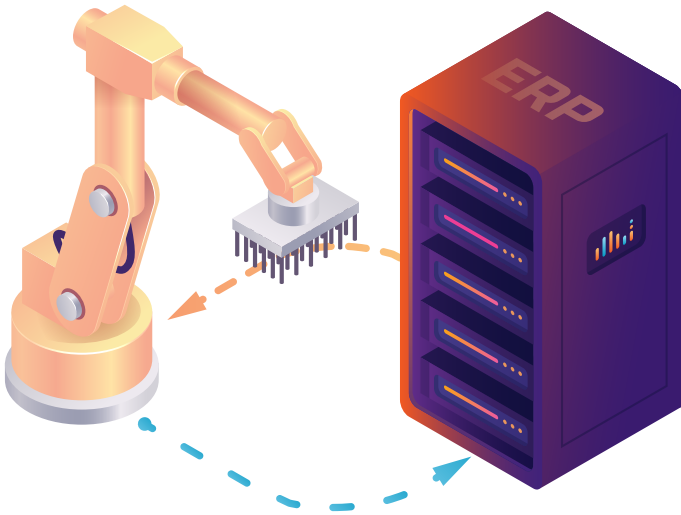


# ERP Integration

- Download production and technology from your **ERP system**
- Upload production **reports and statuses** to your ERP system
- **Deep integration** ANT MES with external systems like WMS, APS, DMS, PLM

## Benefits:

- Production reporting **time reduction**
- **No need** for double production reporting in both ERP and MES
- Automated data synchronization to keep data integrity and management only in one, main system

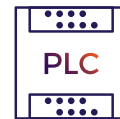


# IIoT machines connectivity

- Connection with **new and old lines & machines**
- **Standard** machine communication **protocols**
- Various **machine connection methods** (PLC, OPC, sensors, I/O modules, cameras)

## Benefits:

- **All machines** data acquisition in one system
- Low risk: **one partner** responsibility
- **Automated and precise** real-time OEE: Availability measurement



PLC drivers



Communication protocols



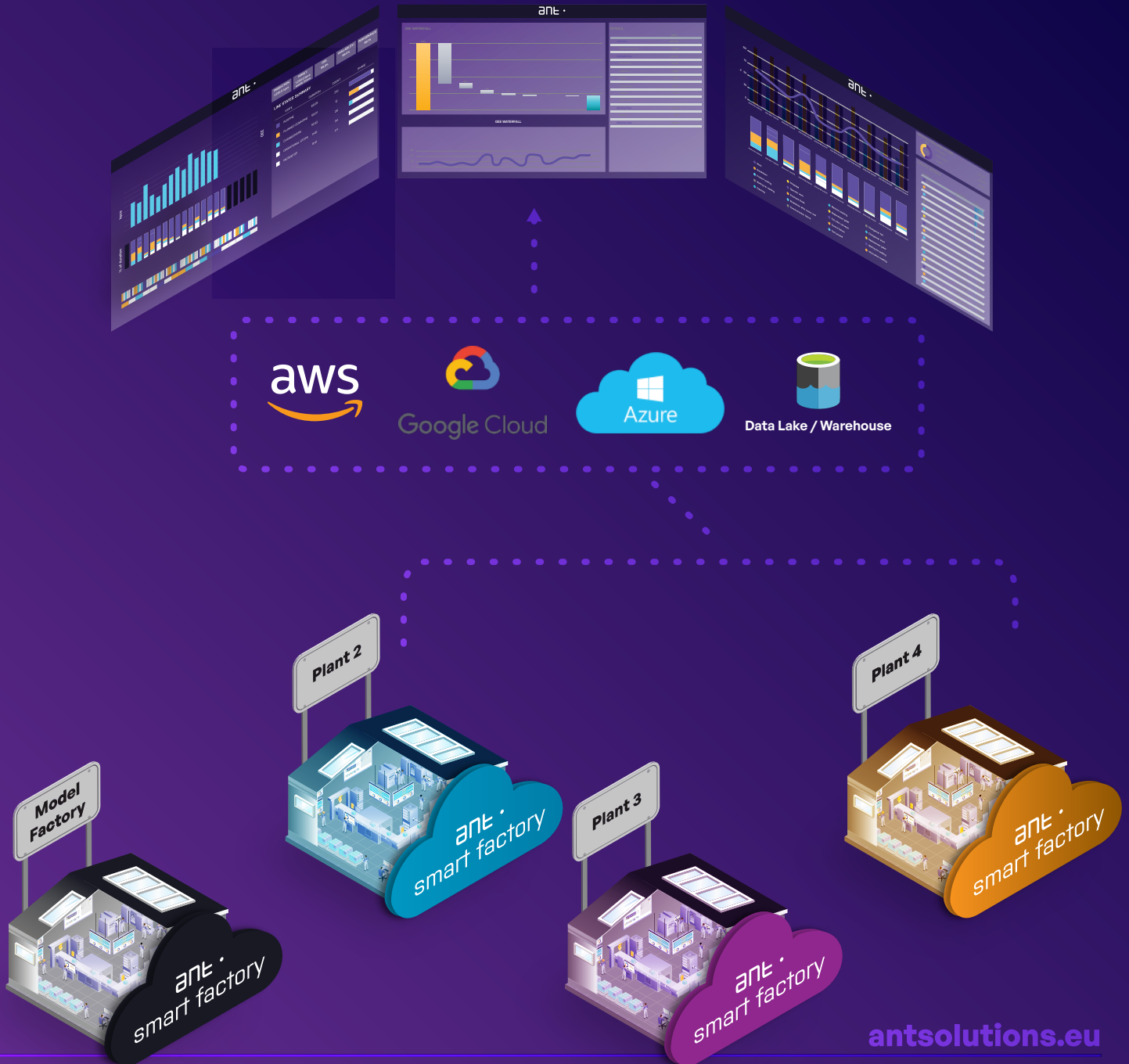
Data acquisition modules



Sensors



# Cloud-Native modern architecture



# WHY ANT

**Independent** Software Vendor

Agility & **flexibility** & modifications

**Quick** implementation

Various products in a single **scalable platform**

**Integration** with all existing systems

**Connectivity** to all machines

Business know-how and **technical knowledge**

# Quick implementation



**Start  
small**



Out-of-the-box solution  
available **in the Cloud**



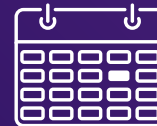
On-site analysis and  
concept **in 3 days**



Proof of Concept with  
machine connectivity  
**in 3 weeks**



Model solution  
based on **client's  
requirements**

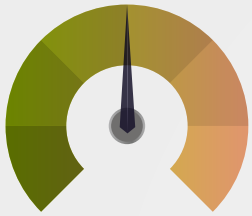


Rollout  
readiness  
**in 3 months**



**Scale  
fast**

# Roadmap example

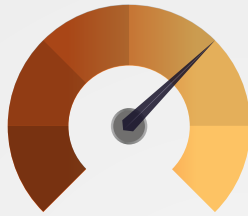


## 1st phase Monitor OEE

OEE Performance  
Monitoring

Machine Data  
Acquisition

Microstops



## 2nd phase Monitor production & quality

MES

Traceability  
& Quality

Shop floor  
WMS



## 3rd phase Optimize production

APS

Paperless  
(Forms & Workflow)

CMMS



## 4th phase Continuous improvements

EMS

Machine  
Control

Interactive  
Meetings

ant • part of group



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