

What if machines could talk ?

Turn industrial data into connected maintenance services in the factory

Poor maintenance strategies can reduce a plant's overall productive capacity between by

5 to 20%

Unplanned downtime costs industrial manufacturers an estimated

\$50 billion each year

Inadequate maintenance severely impacts industrial performance...

...but shifting to smart connected maintenance can really help

To increase equipment uptime and availability by

10 to 20%

To reduce overall maintenance costs by

5 to 10%

Source : Deloitte

Machines can now say where they are in pain

Maintenance operations are triggered according to the real use of the machine



ROBOT ARM - KP 377

40 hours maintenance needs to be performed 10 hours from now. If you have any observations please insert them into the "comment" field.

3 minutes ago

0 Like

3 Comments

The workforce is guided to the best action to reduce the time to restart



ROBOT ARM - KP 377

The alert '51 74' is probably caused by the recurrent errors of drillers. Here are the instructions to resolve the problem quickly.

12 minutes ago

3 Likes

8 Comments

Upcoming failures are prevented and unplanned stoppages avoided



ROBOT ARM - KP 377

The precision of my arm is deviating. I suggest to change the Variable Speed Drive at the next planned stop in 12 hours.

27 seconds ago

2 Likes

1 Comment

InUse connected services portfolio

Overall Equipment Efficiency P.5

Preventive Maintenance P.6

Curative Maintenance P.7

Predictive Maintenance P.8

Anomaly Detection P.9

Accelerate your continuous development

◆ THE ISSUE ◆

Relying on complex calculation methods, OEE (Overall Equipment Effectiveness) monitoring is difficult to achieve. Still, it is a prerequisite to continuously improve machine and factory performance. This is even more difficult when machines are not connected.

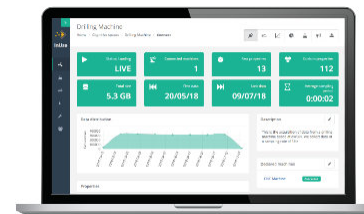


◆ INUSE SOLUTION ◆

Custom OEE calculation rules are integrated within the Studio.

Industrial operators are natively embedded: MTBF, MTTR, Pareto analysis,..

Production reports are available within the Share



◆ BUSINESS VALUE ◆

Production performance is shared in real-time

Managers time is freed up with automatic & digitized production reports

The production team can focus on continuous improvement



PREVENTIVE MAINTENANCE

Maintain only when your machines need it

◆ THE ISSUE ◆

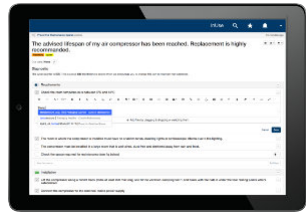
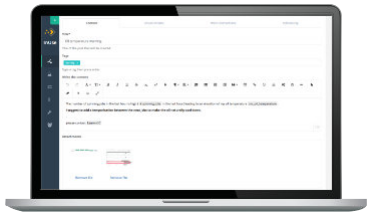
Mostly performed on a calendar basis, standard preventive maintenance operations have shown their limits. As they are not performed according to the real usage of the machines, maintenance teams are sometimes dispatched on the field and machines stopped unnecessarily.

◆ INUSE SOLUTION ◆

Maintenance plans & work instructions are digitized within the Studio

Contextualized maintenance operations are predefined according to production cycles

Digitized maintenance reports embeds real-time IoT data within the Share



◆ BUSINESS VALUE ◆

Planned maintenance stops are reduced while keeping the asset operational

Asset management and traceability are now fully digital

Resource assignment is optimized according to the real needs of the machines



CURATIVE MAINTENANCE

Solve production breakdowns faster

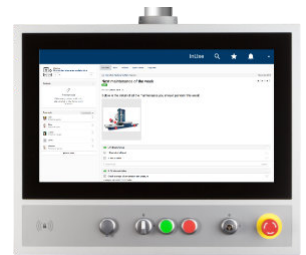
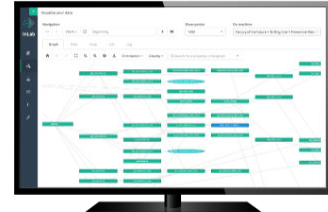
◆ THE ISSUE ◆

As the expertise required is not always correctly communicated, distributed or available on the shopfloor when a breakdown occurs, remote experts need to be called upon and breakdown solving lengthened.

◆ INUSE SOLUTION ◆

Workforce technical expertise is digitized within the Studio: breakdown contexts, stoppage root causes, solving procedures, and more

Real-time recommendations are provided to the operators through the Share to perform the most appropriate action when a stoppage occurs



◆ BUSINESS VALUE ◆

Machine time to restart is significantly shortened

Workforce skills are multiplied thanks to predefined solving solutions

Workforce training cost is significantly reduced



No more machine failure

◆ THE ISSUE ◆

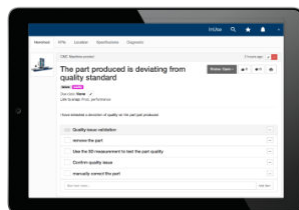
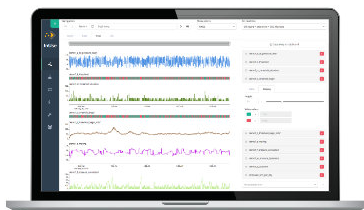
Avoiding unexpected machine stoppage is probably the most challenging issue faced by manufacturers as it requires a clever monitoring of each machine's critical parts. It also implies their regular substitution, a source of significant costs.

◆ INUSE SOLUTION ◆

Critical parts' physical behaviour are modelled within the Studio

Real-time deviation is detected at each sub part level early enough before the failure

Detailed procedures are given to the operators who can report the operation within the Share digitally



◆ BUSINESS VALUE ◆

Future machines failures are identified before they occur, increasing the OEE

Spare parts are substituted according to their real wear, reducing cost of ownership

Defective parts are substituted only during forecasted maintenance operations

Solve production issues with machine learning

◆ THE ISSUE ◆

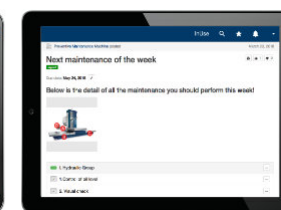
Production systems are increasingly complex. Detecting the root cause of production anomalies can imply the analysis of many types of variables, hard to achieve without adequate modeling.

◆ INUSE SOLUTION ◆

Feature engineering is performed on data in the Studio

A virtual modelling of the production system is created through machine learning algorithms

Created models are integrated and operated in real-time within InUse



◆ BUSINESS VALUE ◆

Created models speeds up the identification of anomalies

Failures that were difficult to detect before can now be solved easily

The know-how of the production is extended



A unique end-to-end value from data to action



We give industrial experts the ability to transform data easily



Knowledge of code is not a prerequisite



Users remain in control of the intelligence created



Industrial operators embedded: Cpk, MTBF, anomaly detection,...



We enable machines to react in real-time



Real time data interpretation



Only necessary tags are collected with appropriate sampling



Highly available infrastructure: minimum of 99.6%



We multiply the skills of the workforce on the shop floor



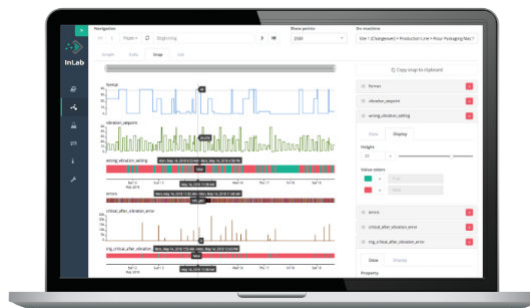
Collective intelligence embedded into the machines



Concrete & documented work instructions are given to the workforce



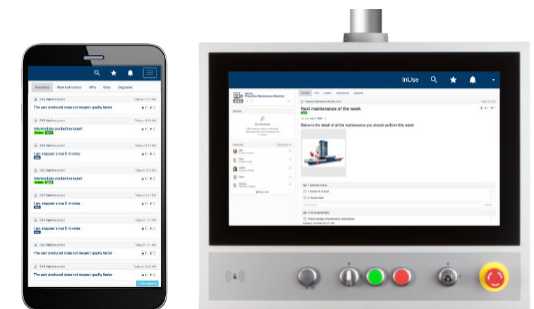
Shop floor feedback improves maintenance predictions



Visualization of time series



Highly customizable dashboards



Left : Messages from the machines
Right : Work instructions for the workforce

They trust us



They support us



About InUse

Founded in 2015, InUse transforms data from connected machines into concrete recommendations for operators on the shop floor.

Designed to deliver connected maintenance services in factories, InUse empowers the workforce with a collective intelligence to significantly improve industrial performance.

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