



/CASE STUDY

**Connect to your
industrial potential**

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PERFTRAK

A Lean solution



“There is nothing more useless than to do effectively something that should not be done at all.”

Peter F. Drucker, Founder of Modern Management

Lean Manufacturing (or Lean Management), also called “Lean”, is a method applicable in any type of industry to understand and eliminate elements with no added value in order to focus only on those considered important to customers. By capitalizing on this “Lean” philosophy, TEEPTRAK systems can connect to any equipment, line, or control point to measure and identify performance losses.

PerfTrak combines new communication technologies with operator expertise to record, qualify, consolidate and render relevant information. These functionalities contribute to continuous improvement in an intuitive and sustainable way.

PerfTrak systems are compatible with most production situations, enabling it to:

- Monitor operating and stop times (date, duration, and cause)
- Identify causes of performance losses
- Visualize production information through simple analysis tools dedicated to daily use by operators

“Improvement usually means doing something we have never done before.”

Shiego Shingo, world-renowned Lean expert manufacturer at Toyota



Modernization of a large automobile plant producing mechanical parts

A French car manufacturer owns several assembly factories for manufacturing vehicle parts and is a world leader in this field. As competition intensified, the company decided to strengthen its digitalization policy to improve the rate of use of its equipment and **gain competitive advantage**.

In its "mechanical" plants (manufacturing of discrete parts), the company wanted to track its machines, in order to eliminate manual reporting, **monitor performance** more precisely, and better **understand the causes of performance losses**.

Challenges

01. The machine fleet was diverse and the production stages were very different in nature.
02. Many of the machines were older and offered limited connectivity.
03. To minimize solution integration costs and avoid weeks of implementation.
04. The criteria for investment were strict.

Implementation and impact

PerfTrak technology was chosen to respond to the above challenge, enabling 90 machines to be connected within a few weeks to automate the identification of downtime and causes of stoppages. Nearly 40 screens of real-time dashboard performance information were also installed (MoniTrak systems).

Due to the size of the client and the facilities involved, the teams were trained by TEEPTRAK over three days. This training enabled local teams to deploy and configure the rest of the systems in complete autonomy. This implementation has made it possible to save precious time and **reassign staff on improvement actions** rather than on time-consuming reporting tasks.

Daily use of the connected technology has aided in continuous improvement of the factory, which has allowed operators and the company as a whole to conduct its digitalization policy in a healthier and more sustainable environment.



RETURN ON INVESTMENT <1 YEAR

"The PerfTrak systems are already cost-effective given the time freed up for operators, who are now focused on value-added tasks rather than on data collection and report preparation."

Christophe Pasquet, Monozukuri, PRF (Costing), Factory of the Future, PSA Caen

Plastics **industry**

One of the world leaders in rubber processing, a supplier to automotive and aeronautical companies was looking for competitive and intuitive technologies to follow the production of a plant that specialized in surface treatment.

The company's focus on operational excellence has led it to move towards performance monitoring technology that is reliable, efficient and guarantees a rapid return on investment.

Challenges

01. The teams did not have an accurate overview of their equipment's performance.
02. Short-term investment capacity remained limited.
03. The technology had to be reliable, easy to install and used by operators on a daily basis.
04. The technology had to be competitively priced for potential large-scale deployments.

Implementation and impact

Various equipment performance monitoring systems had been identified by the company, but the vast majority of them were expensive, time-consuming to set up, or too complex to use on a day-to-day basis.

By adopting PerfTrak technology, the company has focused on simplicity of installation and use for rapid acceptance by the teams. The installation of a complete PerfTrak system takes place in less than an hour on any type of equipment.

To monitor machine performance in real-time, PerfTrak provides analysis tools that stand out from the cumbersome statistical tools offered by competition. Operators benefit from particularly simple and intuitive interfaces that capture and visualize the causes of stoppages to **quickly identify blocking processes and implement the right improvement plans.**

Over a three month period, understanding the major performance losses has allowed the plant to make **PerfTrak profitable by increasing the overall equipment effectiveness (OEE) from 47% to 72%.**



RETURN ON INVESTMENT <1 MONTH

Ophthalmic lens industry

A French manufacturer, currently the world leader in corrective lenses, has been operating in China for several years. **The increase in operator expertise has led the company to increase wages**, directing it to adopt new technological processes to improve its equipment productivity and reduce waste.

In the anti-reflective coating production workshops, production has been carried out for years without a clear understanding of format changeover times, maintenance times and the impact of various tests (duration, frequency, etc.).

Challenges

01. Get more visual references on equipment performance
02. Obtain more complete production information and report it on a more regular basis
03. Improve the speed and frequency of data consolidation

Implementation and impact

By installing an entirely external solution, **the factory was able to equip its entire machine fleet homogeneously, without any equipment connectivity constraints**. Thanks to TEEPTRAK, complex and costly integration was avoided.

By automating the monitoring of machine usage, PerfTrak has enabled the factory to visualize its main causes of performance loss in real time and on a daily basis. Due to the new data collected, the factory's teams detected organizational problems which they were able to correct thanks to PerfTrak recovery tools such as the Losses Pareto and automatic reporting.

Via a dedicated interface, format changeover times are now timed, significantly reducing this source of inefficiency. In the course of a few weeks, **PerfTrak technology has increased OEE by 10 percent (from 75% to 85%) on average per equipment**. Our solution is now deployed in several of the company's factories.



RETURN ON INVESTMENT <1 MONTH



Wire crimping machine

As part of the launch of the new manually operated **crimping machines**, our customer wished to **identify and quantify all the performance losses incurred**. Achieving the full utilization potential of the means but also defining the standards of nominal output had become a critical and urgent challenge.

Many months of use and running in accompanied by numerous in-house improvement projects had not led to satisfaction. The objective remained unmet due to the low reliability of the data reported and the lack of internal resources to process them properly.

Challenges

01. Reliably measure and quantify performance losses
02. Adjusting rates for which the optimum value is not known
03. Eliminate working with paper and make up for the lack of means to process performance data

Implementation and impact

Installed within an hour, our PerfTrak system was able to **accurately and automatically** retrieve the required data. The automatic retrieval and processing of data made it possible to overcome the lack of human resources for this time-consuming and non-value-added task.

This data could be used precisely thanks to **the reliability of the collection of downtime**, the standardization of the types of losses to be entered and a better appropriation of the collection tool by the operators. After only one afternoon of team training, the operators were completely autonomous in the use, configuration, and maintenance of the solution.

Moreover, through Big Data, it was easy to **find the average speeds of the machines and their evolutions**. As a result of the actions taken following the use of the data, **the plant experienced a 29% improvement in production** volume per hour between the periods before and after the installation of PerfTrak (4 months each).

The little extra: the transition from paper tools to tablets, as well as the improved ergonomics of the workplace (screens at eye level and within easy reach), has enabled the operators to gain ease of use, which has reduced the downtime to inform stops.



RETURN ON INVESTMENT <1 YEAR

“We noted a 29% increase in production volume of pieces per hour after installing PerfTrak on a single machine. This represents a turnover of more than 19k € per year on this item.”

C.M. Ropiot, Production & Maintenance Manager

TEEPTRAK helps Nutriset to fight against malnutrition since 2016

Nutriset has been developing unique expertise in the fight against malnutrition for more than 30 years. Bringing together 10 partners and operating in 10 countries, the group focuses its activities on 3 main sectors: research, production and distribution of therapeutic foods to offer renewed and adapted solutions to vulnerable populations.

The company has decided to accelerate its digitization policy and eliminate working with paper to improve its performance and refocus its teams on value-added tasks.

Challenges

01. Eliminate working with paper and make up for the lack of means to process performance data
02. Acquire an external solution that can be quickly installed without halting production
03. Simplify supervision and increase field team responsiveness with visuals on workshop's key indicators
04. Improve well-being at work

Implementation and impact

By adopting PerfTrak and MoniTrak technology, **Nutriset has replaced manual reporting with an adapted and easy-to-use solution** that allows both operators and managers to access information in real-time. Its teams quickly integrated these solutions, which have helped them in their daily tasks and to improve working conditions.

The ROI was 1 month and this deployment has considerably improved productivity and stabilized costs to offer Nutriset products to as many people as possible.

Today, the Malaunay site is equipped with 22 PerfTrak solutions as well as 7 MoniTrak (real-time performance dashboards on a large screen) deployed throughout the factory. This transformation involves field teams in the continuous improvement process and provides them with reliable and truly useful information on their state of production.



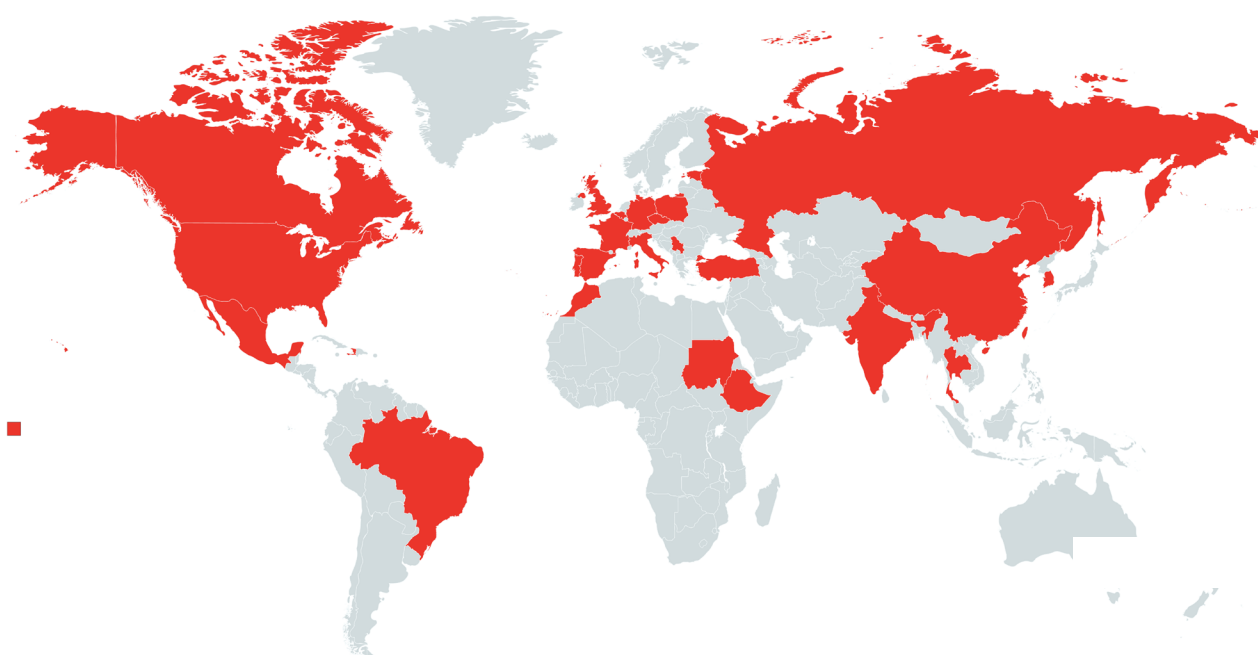
RETURN ON INVESTMENT <1 MONTH

"The return on investment at Nutriset has been very rapid because we have been able to eliminate a maximum of what we call "irritants", i.e. small downtimes of 3-4 seconds, but which occur about fifty or a hundred times per quarter of a production day".

Sylvain Clause, Maintenance and Automation Service, Nutriset

Around the world

Since 2016, PerfTrak has been implemented in more than 150 plants of all sizes and different industrial sectors.



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