How to increase work efficiency and optimize operating costs using Industry 4.0 solution EBKF Manager?

EBKF

Who are we?

We are a team that realizes projects in the area of Industry 4.0 and especially IIoT - Industrial Internet of Things. We have been building our competences in this area since 2008, when we created the world's first system for remote management of car washes. On the basis of this experience we have built and developed EBKF Fleet Manager, a universal system for remote monitoring of machines regardless of their age and manufacturer.

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On the following pages I will introduce you to how to increase your work efficiency and optimize your operating costs.

However, I would like to start by asking a few questions.

Do you know **how effective your employees are**, what they do if you don't look?

Do you know **how much time your machines are running** and how much time they are simply turned on?

Are you able to **prevent work stoppages**?

How do you know **if your subcontractors do not overstate costs** and you pay for the time properly worked?

Do you have the **optimal size of your machine park**, maybe you have too many machines?

How fast will you be **informed about critical situations**?

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How to increase productivity?

With a labour market deficit, the introduction of monitoring may raise some concerns. However, if the introduction of work monitoring is connected with the appreciation of valuable employees, the whole organisation will benefit from it and valuable people will stay.

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How to optimize operating costs?

Regroup specialists

Group the men. Don't waste your specialists' time on trivial things. Use less skilled workers to help. In a welding hall, for example, the most expensive is the working hour of the welder, so why waste the welder's time grinding and assembling?

Reduce service and downtime costs

People take care of machines when they are watched and it is easy to combine their work with equipment failure. Perform service inspections after the exact number of man-hours of a given machine component, and not after the date estimated in the calendar. Service machines whose parameters suggest a failure before it occurs.

Check the subcontractor

Verify the actual working time of the subcontractor. This optimization works to the benefit of both parties. Honest subcontractors will have no problems with finding new orders and you are sure what you pay for.

Optimal number of machines

If you do not have an insight into the actual working time of the machines, you do not know whether you do not have too many of them. Maybe instead of more expensive machines you need smaller and cheaper ones, which will be equally efficient. Maybe it's enough to move machines between departments or teams?

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If the solutions of Industry 4.0 are so amazing, why aren't they implemented everywhere?

Price

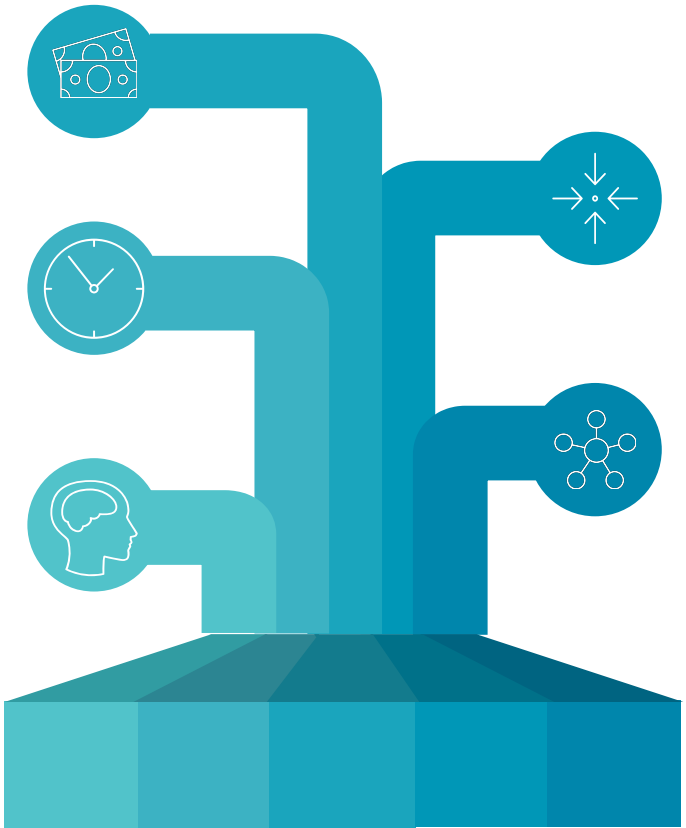
Industry 4.0 solutions are still very expensive. The return on investment can take several years.

Time

Promoted solutions are difficult and time-consuming to implement.

Fear

People are afraid that the digital transformation will show how the organization really works and turn out to be incompetent.



Homogenity

Corporate solutions only work on new machines from one manufacturer.

Complexity

They are complicated to use and require highly qualified specialists, who are not numerous on the labour market.

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That's why we created the EBKF Fleet Manager

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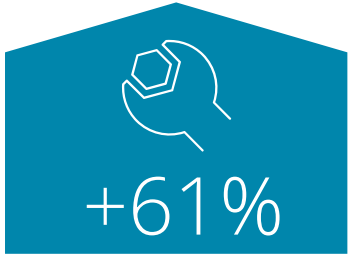
What are the effects of implementing the EBKF solution?

Increasing the productivity of machines and people

Reducing the number of machines



Increasing the lifetime of machines

Reduce subcontractor costs

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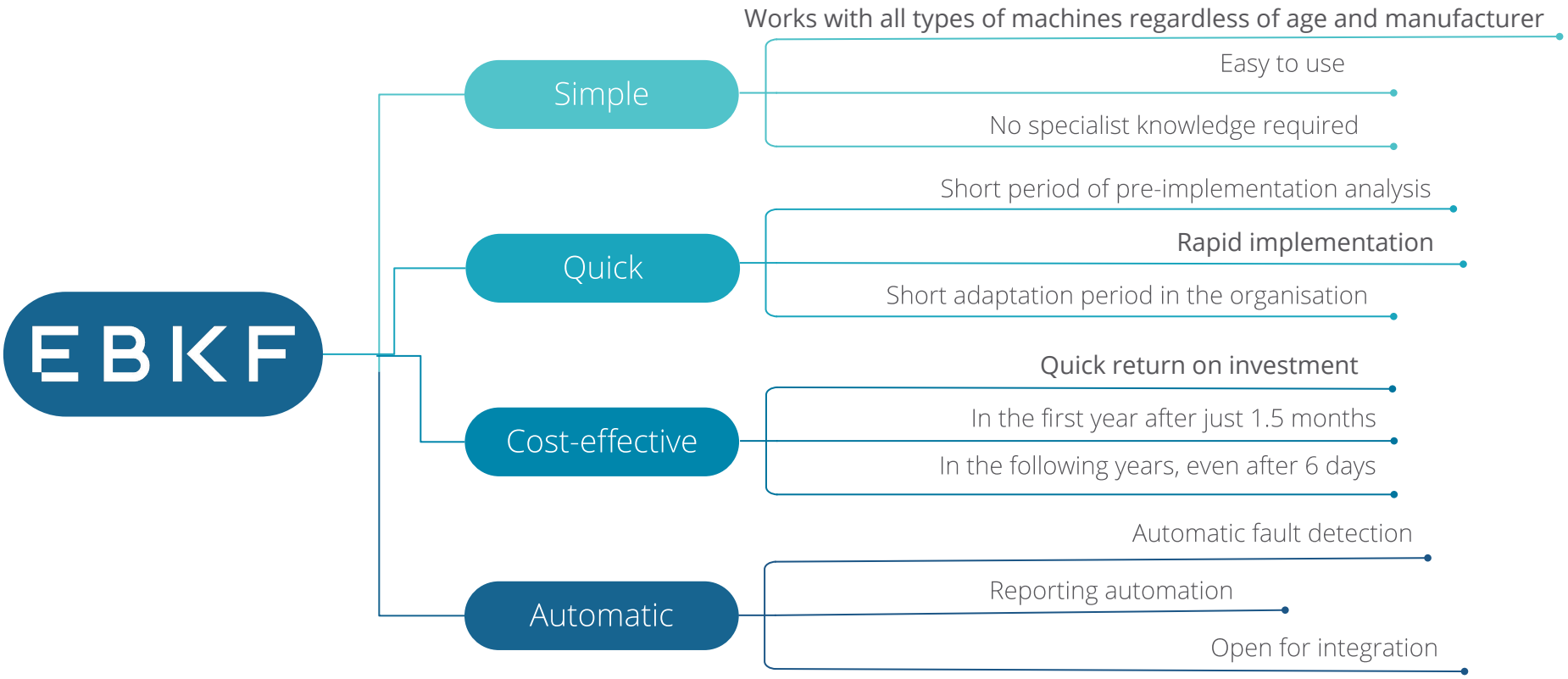
What does EBKF look like?



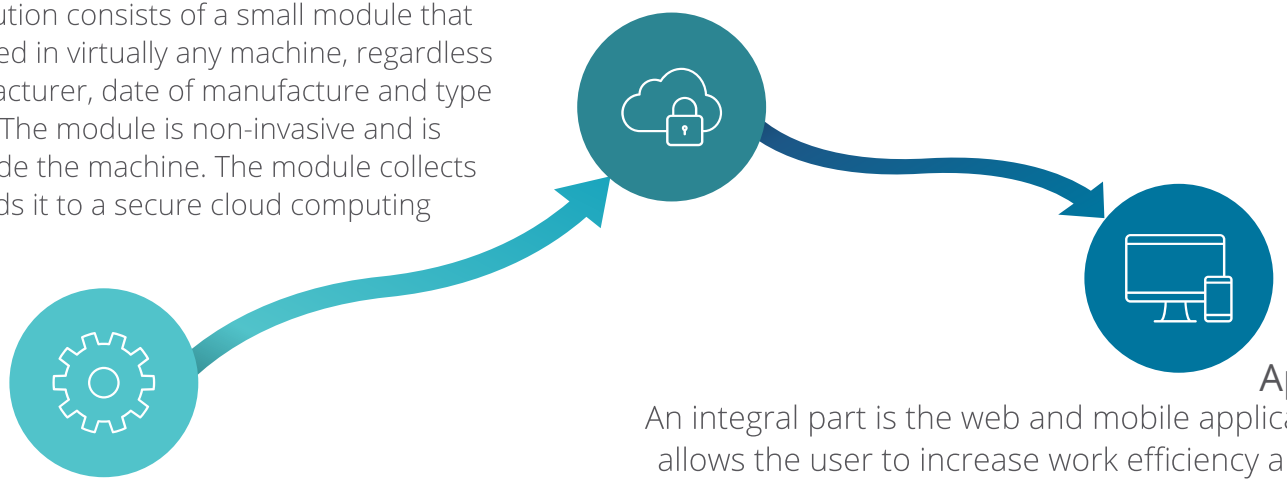
How does the EBKF solution work?

Module

The EBKF solution consists of a small module that can be installed in virtually any machine, regardless of the manufacturer, date of manufacture and type of operation. The module is non-invasive and is mounted inside the machine. The module collects data and sends it to a secure cloud computing environment.

Cloud server

Cloud data is processed to analyse performance and find potential irregularities



Application

An integral part is the web and mobile application, which allows the user to increase work efficiency and optimize operating costs.

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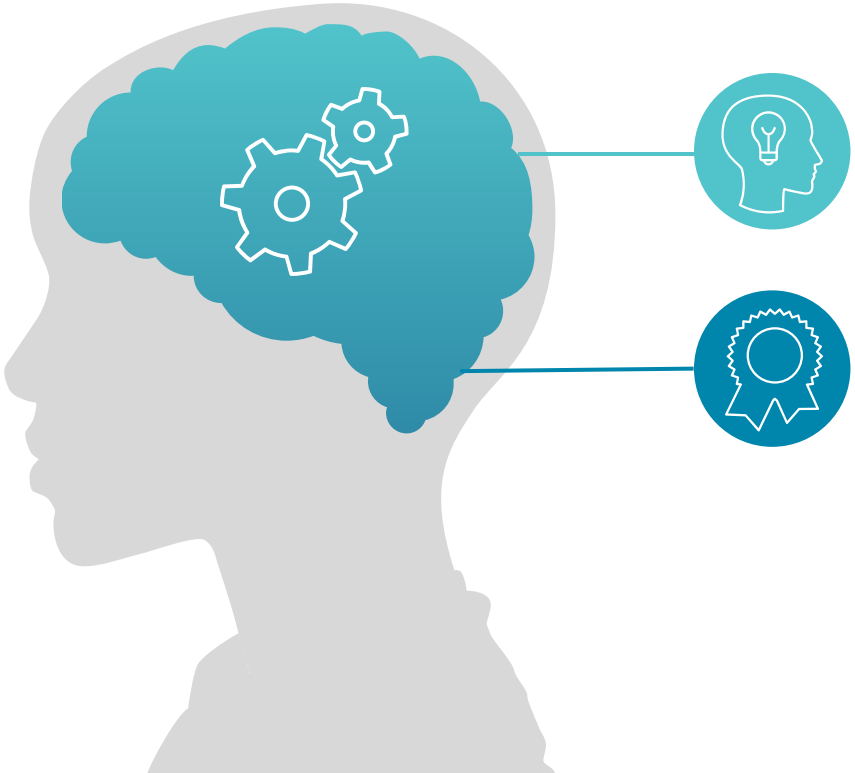
How to increase productivity with EBKF?

The Master's eye fattens the horse



Psychology

We sell psychology, thanks to EBKF every minute of work is recorded and reported. Thanks to this, employees know that they cannot allow themselves to be slowed down.

Gamification

All people like to win and be appreciated. Thanks to EBKF Manager you know which employees work efficiently and you can reward them for their effective work. This will make the rest of the crew want to catch up with the effective employees.

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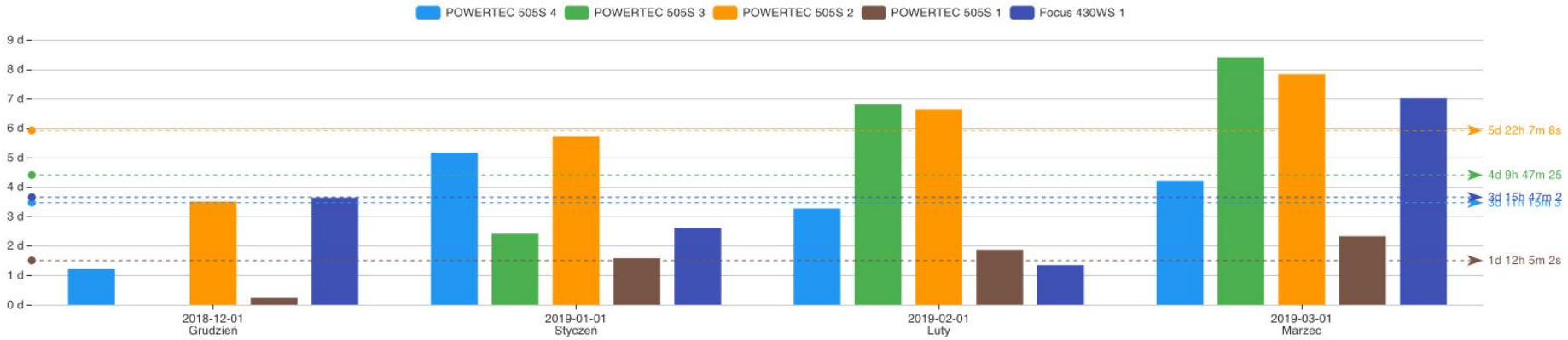
Case study: Increase average welding performance by more than 70%.

Company producing steel structures for the automotive industry

The implementation of the monitoring system combined with an additional bonus for efficient people increased the average welding performance by more than 70% in just 3 months.



How to optimize operating costs with EBKF Manager?

Reduce maintenance costs

People take care of the equipment as manager know when, who and how worked on machine. Furthermore, we can plan our inspections after a specific number of working hours and also predict on the basis of working parameters the incoming breakdowns before they occur.

Optimal size of the machine park

Thanks to the precise information how the machines are loaded with work, we are able to quickly diagnose do we have too many machines. Often employees complain about the lack of machines, but in fact it turns out that they are simply not optimally used and instead of buying new ones, it is enough to better plan the work. It also happens that employees take equipment out of the company, EBKF Manager can detect it.

Verification of subcontractors' costs

Subcontractors often issue invoices for working time. Thanks to EBKF Manager you are able to verify whether they actually worked as much time as they issued an invoice.

Quick verification of changes

In order to survive on the market, every organization has to change and improve its processes. With EBKF Manager, you don't have to wait long months to verify your changes. Thanks to the immediate view of work efficiency, just a few days are enough.

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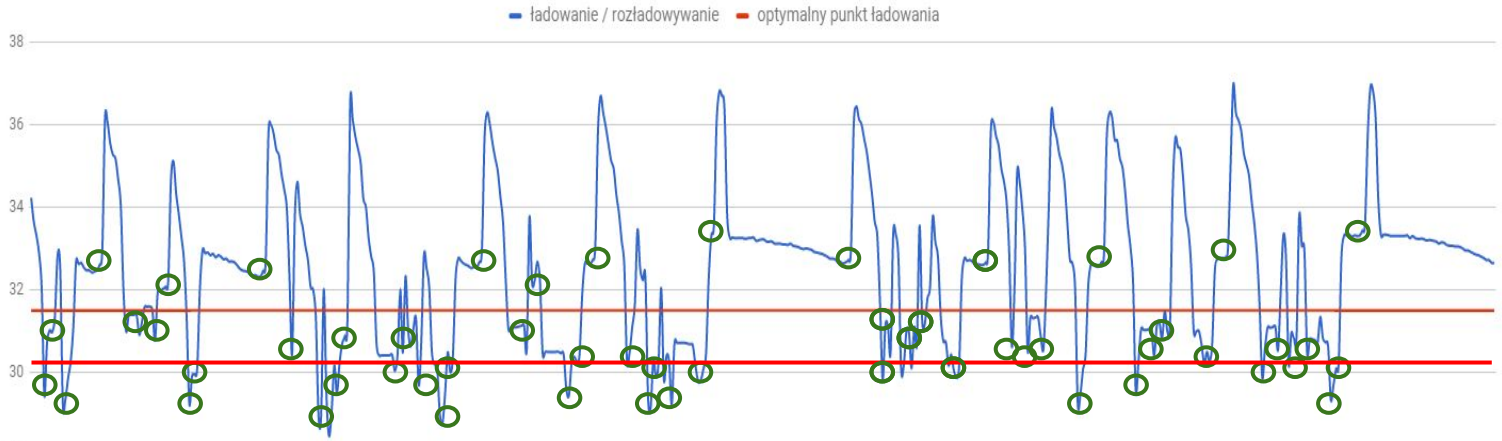
Case study: Reduction of service costs by more than 60%

Cleaning machines

One of the most expensive elements of cleaning machines are batteries, which cost from 300€ to 4000 €. Batteries have a specific culture of work and the number of charge cycles. If the batteries are recharged too often and too shortly instead of serving 3 years as planned, they have to be replaced after a year. Thanks to EBKF Manager we are able to verify that the batteries are properly charged.



Battery cost	Lifetime
300€-4000€	800 cycle

Optimal usage	Presentes real usage
20-22 cycle a month	56 cycel a month
battery lifetime 3 years	battery lifetime below 15 months

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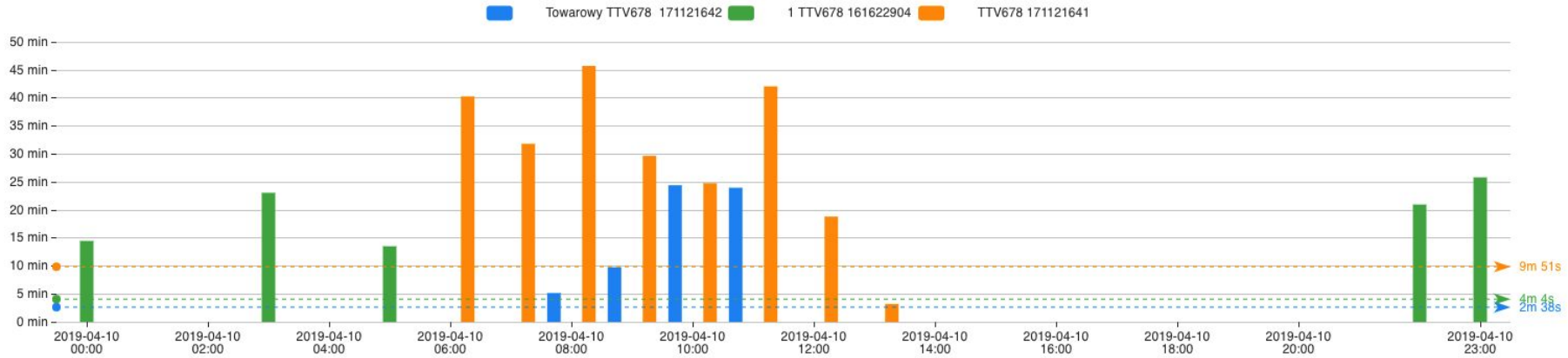
Case study: Reduction in the number of machines by 30%

Cleaning company

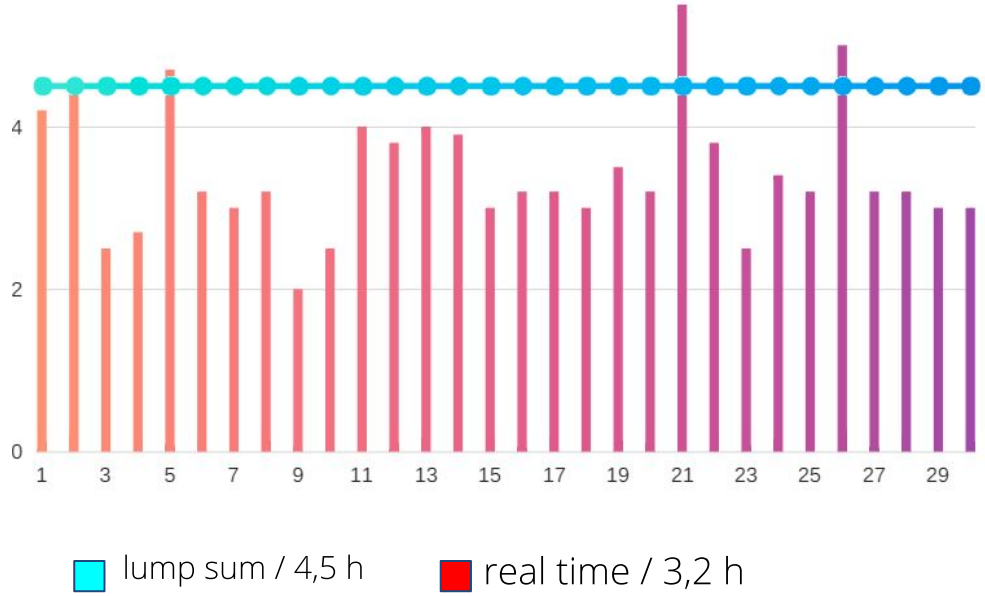
One of our customers has an average of three cleaning machines in one every facility. With the implementation of EBKF Manager, it has been observed that two machines on single facility will be enough. In the diagram below, there is no need for a green machine. The blue machine can take over the responsibilities of a green machine.



Case study: Detection of overpayment by 31%

Steel structure welding company

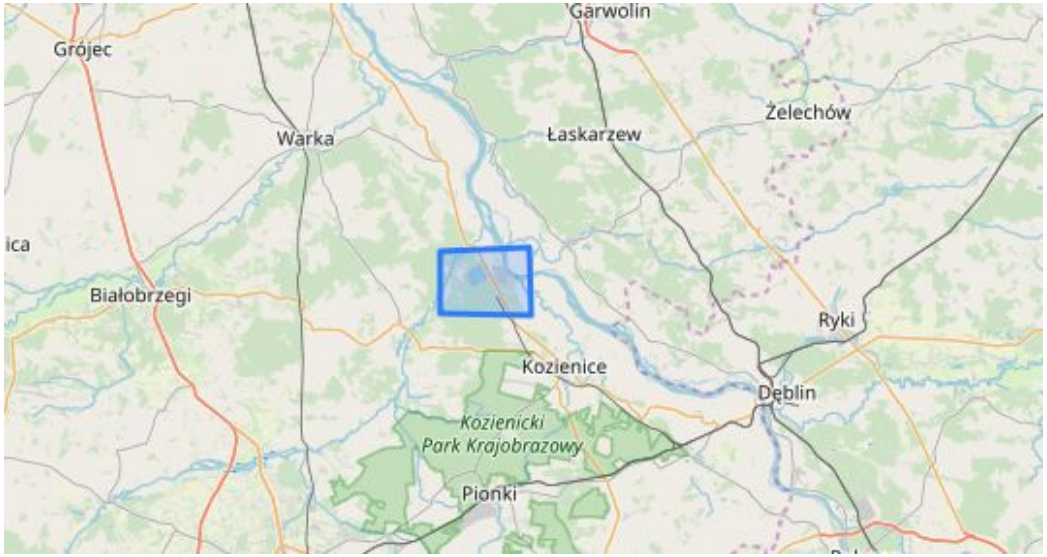
The company producing steel constructions on the basis of orders employed a subcontractor company. According to the contract, the ordering company paid a lump sum for 4.5 hours of welding per day with one welding machine. Thanks to the installation of the EBKF Manager it was detected that the real average was 3.2 hours. The customer overpayed the subcontractor by 31%.



Case study: Detection of machine operation outside the designated area

Steel structure welding company

Thanks to EBKF Manager, a welding company on power plant construction sites has detected that after the scheduled operating hours the welders switch on the welding machines and their GPS position is outside the power plant site, and during operating hours they again report the GPS position on the construction site. It turned out that the welders were taking away the welders from the construction site and after hours they were making their own jobs with the company's equipment.



Offer

I would like to offer a completely free consultancy on the possibilities of increasing work efficiency and optimizing operating costs in your company.

I would like you to find out, as well as all our customers, that an investment in EBKF Manager is an investment that pays off.

Feel free to contact me.

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