

YOUR DIGITAL WORKFLOW

Production Automation

INDUSTRY
4.0

DIGITAL

INDUSTRY 4.0

WE MAKE YOUR WORLD A BIT MORE PRODUCTIVE

Do you want to be competitive and optimally positioned for the future? Produce more efficiently and offer your customers products with unique selling points?

The digitization of production and its processes is a key factor in this process. After all, it provides you with cross-company information with which you can manage changes and react quickly and effectively.

In short by integrating machines and systems, you can ensure that you are making the best possible decisions. In short: all relevant information from a wide range of sources is always and immediately available.

Find out how you can do this safely with solutions from Messer Cutting Systems and MesserSoft, systems and machines that are connected with each other to provide information in real time.

Digitize your production

- + You gather all production information in digital form.
- + Share this information with everyone involved in production.
- + Review all currently running processes and their status at a glance.
- + Track your production orders completely and consistently.
- + Test and simulate changes in your production virtually.
- + Implement improvements faster.
- + Discover potential errors and misplanning.
- + Work more efficiently, reduce costs, and save resources.

Across the entire value chain, this makes you

- + More productive and increases your scalability.
- + Cost-effective efficient.
- + Open for new ways of operating, which you would not have seen before.
- + Free to turn to new future-oriented projects.

simply better and stronger -

OUR SOLUTION COMPETENCE IN THE VALUE CHAIN

Only when you are aware of what is really taking place in your company, can you make the right improvements „raw material“ for obtaining context-related information. We support you in this:



ORDER MANAGEMENT

„How do I save manual steps in order processing?“



WORK PREPARATION

„How can I optimally nest my jobs to save material and time?“



PRODUCTION PLANNING

„Is my production running as planned or are there problems?“



MACHINE OPERATIONS

„How can I process jobs on the machine according to priority and report back deviations from the planning?“



BUSINESS ANALYSIS

„How high is the utilization of my machines and what are the reasons for a standstill?“



Ensure maximum transparency in operations management, production planning and control with our automation solutions.



ORDER MANAGEMENT

„How do I save manual steps in order processing?“

„I process customer orders and maintain order data and other customer requirements in the ERP system. Much of this data must be available throughout production. That is why I print out the order, which I pass on to the production planning department. We have to pay close attention, especially when changing the order with short notice. When production is finished, I receive back the paperwork with the recorded production data from the machine operators. I then enter this data into the customer order to carry out actual costing.“

OmniFab ERP Connect

Saves time. Completely automatic.

OmniFab ERP Connect receives your order data as well as data on plates and components from your ERP system and maintains them in the OmniWin nesting software.

The production results are reported back to the ERP system to perform post-calculation and update inventories. OmniFab ERP Connect, like all MesserSoft solutions, can be implemented quickly and without problems.

YOUR ADVANTAGES



- + You save time through automatic transfer.
- + The exchange of data is error free and is never lost.
- + All your systems are always up to date even if there are subsequent change.
- + You have permanent access to all data in all systems and process steps.



WORK PREPARATION

„How can I optimally nest my jobs to save material and time?“

„I receive the part information from customers in a wide variety of formats. Sometimes I even have to redesign the parts. I take the printed job papers from the job management system so I know which parts need to be nested next. After nesting, I print out the production papers to pass them on to production.“

OmniWin & OmniBevel

Perfect plate utilization.

Our OmniWin and OmniBevel solutions integrate seamlessly into your workflow by transferring all job details automatically via ERP Connect. Additional geometries can also be read in, corrected or completely redesigned. OmniWin's strength is job preparation, while OmniBevel impresses as a flexible tool for demanding bevel cutting.

You can calculate the best plate utilization with automatic nesting - or you can use the numerous tools for manual nesting. Finished nesting plans with all important information are digitally transferred to OmniFab. Production waste is automatically displayed in OmniWin as part of the nesting list as soon as it is reported in OmniFab PDC.

YOUR ADVANTAGES



- + You use digital integration throughout the entire process, including paperless working.
- + Calculate the most efficient use of remaining plates through automatic nesting.
- + Easily perform the most demanding bevel cutting tasks.



PRODUCTION PLANNING

„Is my production running as planned or are there problems?“

„I distribute the nesting orders from the work preparation to the machines. To do this, I have to know and take into account the availability of materials and machines. Then I print out the paperwork for the machine operators.“

OmniFab Job Management

Everything at a glance.

With OmniFab Job Management, you always have an overview of all jobs. The software ensures the jobs are done on the right machines and with the best utilization, whether you are scheduling manually or automatically.

Feedback from the running operation comes in real-time from the machine operators via OmniFab PDC. You can use this information to react quickly to unforeseen events and make the right decisions.

YOUR ADVANTAGES



- + You have a complete overview of all production orders.
- + Plan your jobs more effectively by displaying the planned shift workload.
- + Take into account loading and unloading times of the machine.
- + Receive paperless feedback from production.



MACHINE OPERATIONS



„How can I process jobs on the machine according to priority and report back deviations from the planning?“

„As a machine operator, I use the printed shop papers to get an overview of the parts to be produced. Information on processes, plates and production times can also be found in the working papers. I record the number of parts produced and the actual plate usage on the working paper. Then I give this information to production planning in the evening.“

OmniFab Production Data Capture (PDC)

Always up-to-date, digital job information.

OmniFab PDC provides your machine operators with all the necessary and, above all, the most up-to-date information on every job in digital form at the machine.

Missing parts, deviations of the planned plate usage, deviations from the planned residual plate geometry as well as other real-time feedback are recorded easily and intuitively via OmniFab PDC. For optimal planning in the future, you can record and evaluate loading and unloading times.

YOUR ADVANTAGES



- + Your digital working papers contain the latest information.
- + You receive feedback on production results including residual plate geometry.
- + Your production planning receives direct feedback.



BUSINESS ANALYSIS



„How high is the utilization of my machines and what are the reasons for a standstill?“

„Many decisions today are made based on the gut feeling or experience of machine operators and managers. In day-to-day operations, such information often proves to be good enough for us. However, in order to achieve measurably more efficient results, I need an exact overview of the status of the machines and, most importantly, the reasons for downtime. From this, I can then make the more informed decisions to improve production efficiency.“

OmniFab Machine Insight

The running operation transparent at a glance.

OmniFab Machine Insight provides you with important information about your machines during operation. In addition to information about the job or shift currently being produced, you can see a graphical representation of machine utilization and the number and type of errors that have occurred on the machines. This allows you to identify the errors as early as possible and take appropriate action.

The powerful reporting app in Machine Insight generates meaningful reports on a configurable time basis such as shifts, weeks, months. These reports support you in creating and achieving your key business figures. In addition, the most important information is also available to you via a mobile app, giving you an overview of production from anywhere and at any time.

YOUR ADVANTAGES



- + You gain real-time data of your machines.
- + Recognize the actual workload and sources of error.
- + Use configurable, meaningful reports.

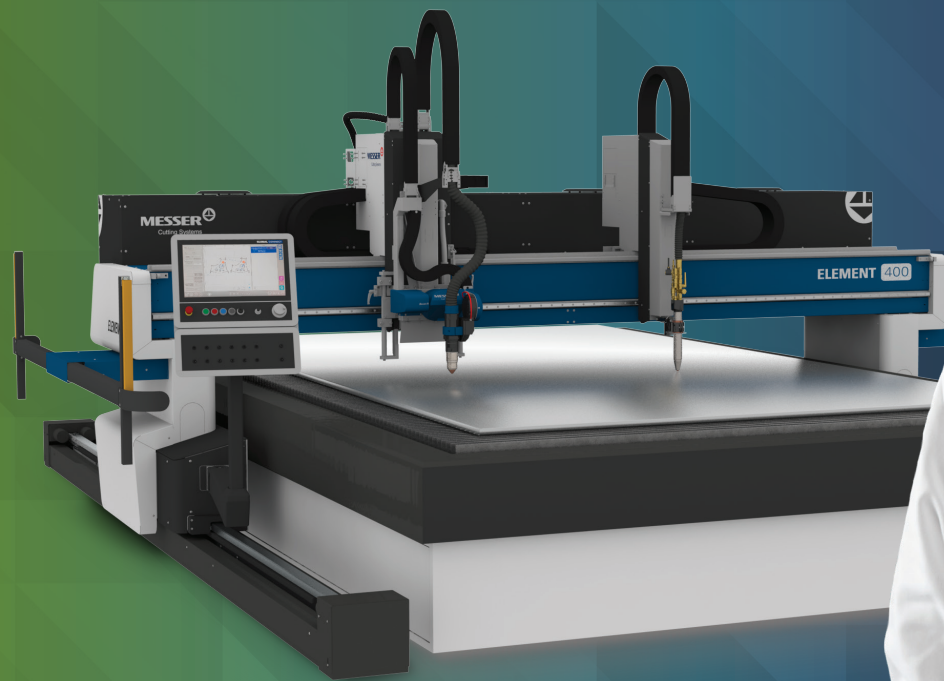
DIGITALIZATION WITH MESSERSOFT

In Industry 4.0, production interlocks with the most modern information and communication technology. Messer machines and software from a single source ensure maximum utilization of existing resources.

Complete integration of your cutting machines

Our modular software portfolio integrates your cutting machines into your business and production processes in the best possible way and supports the key functions throughout the entire workflow.

A common entry into digitization is made with job preparation: jobs, CAD/CAM, nesting and program generation. OmniWin and OmniBevel provide the tools to achieve this and become a holistic part of your process for operators, production managers, process analysts and service technicians. Messer machines and software thus guarantee the perfect introduction to digitalization.



Digital support for your processes



Digital

From the machine to operation control

OmniFab, OmniWin, and OmniBevel are perfectly matched to the cutting machines thanks to the close cooperation within the Messer Cutting Systems Group. OmniWin and OmniBevel are very „machine-oriented“ and tailored to the operators. OmniFab provides the relevant information to those responsible in work preparation, on the control console, in production planning and in plant management.

Less idle time, higher productivity

- + Higher machine utilization and efficiency (OEE).
- + Detect and reduce errors.
- + Minimize downtime.

IDEAL FOR WORK PREPARATION

OmniWin is a powerful, easy to use designing and nesting software that saves time, material and costs.

OmniWin

Is the ideal tool for work preparation in oxyfuel, plasma, and laser cutting with CNC machines. It takes over all cutting tasks for order-based production with CNC thermal cutting machines.

OmniWin is both effective and economical for small productions as well as for just-in-time manufacturing with changing quantities in custom cutting operations.



THE TOOL FOR BEVEL CUTTING

OmniBevel is the software for dimensionally accurate parts and the leading product for bevel cutting.

OmniBevel

Has enormous flexibility. It can be used for straight cuts, cylindrical holes, exact bevel angles, and parts with absolute dimensional accuracy. Almost all possible technology parameters and operation details are adjustable. Since the program is based on technology databases, manual intervention is usually unnecessary.

OmniBevel is a post-processor module with a graphical and, therefore, an easy to use interface that delivers optimal cutting results.



THE PERFECT SUITE FOR BUSINESS PROCESSES

OmniFab is a software suite that integrates Messer Cutting Systems' mechanical engineering technology into commercial processes in a holistic and process-oriented manner.



4 Solutions – One Software Suite.

OmniFab

ERP Connect

Automatically takes all relevant data from the ERP system and transfers it to OmniWin for further processing.

OmniFab

Job Management

Ensures that jobs with their nesting information are available at the right time at the right machine. All-important information is available in the job in digital form.

Filter the jobs by delivery date, material or other important attributes. Sort and schedule the jobs on your machines with drag & drop in real time. Rescheduling and automated planning, using various criteria, works just as easily.

Define your shifts so that you have a direct overview of the planned jobs and the current shift utilization. This includes information on preliminary costing and planning and data that helps the machine operator to work more effectively.

OmniFab

Production Data Capture (PDC)

Records operating data: While the operator is working on a job at the machine, OmniFab PDC captures current information about the status of the operation or material in use. This enriched production data contains all information about material consumption, production times, missing parts and other relevant key figures. When the job is finished, this information is available in your ERP system.

OmniFab

Machine Insight

Provides clearly arranged information about your cutting machines during operation including machine monitoring, machine utilization, cutting orders and much more.

The real-time machine monitoring informs you about the current cutting program as well as the current shift. The graphic display of the utilization shows you all relevant information at a glance. Times spent on the processes and optionally also the reasons for downtime are clearly displayed. „Cutting jobs“ are shown in a tabular form with information about when a job has started and finished and compares target and actual times.

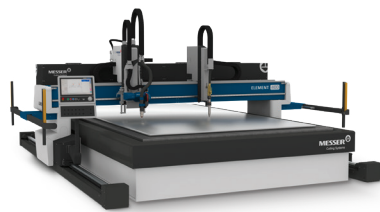
Thanks to the compact graphic display, the reports give you a quick overview of the performance of the thermal cutting systems, even with a large number of machines.

CREATING SOLUTIONS

Messer Cutting Systems recognized the importance of digitalization in the areas of work preparation, production planning and control. The digital solutions perfectly complement the holistic range of products, automation, services, and know-how.

PRODUCT

Feel concentrated competence for your cutting process from the entry-level machine to the ultra-high-performance machine. Machine engineering solutions made in the United States.



AUTOMATION

Maximize your machine utilization and improve productivity with our modular automation solutions.



SERVICES

Experience 360° services and ensure maximum availability: for and around the entire machine life cycle.



DIGITAL

Discover the possibilities that digitizing your processes offers you.



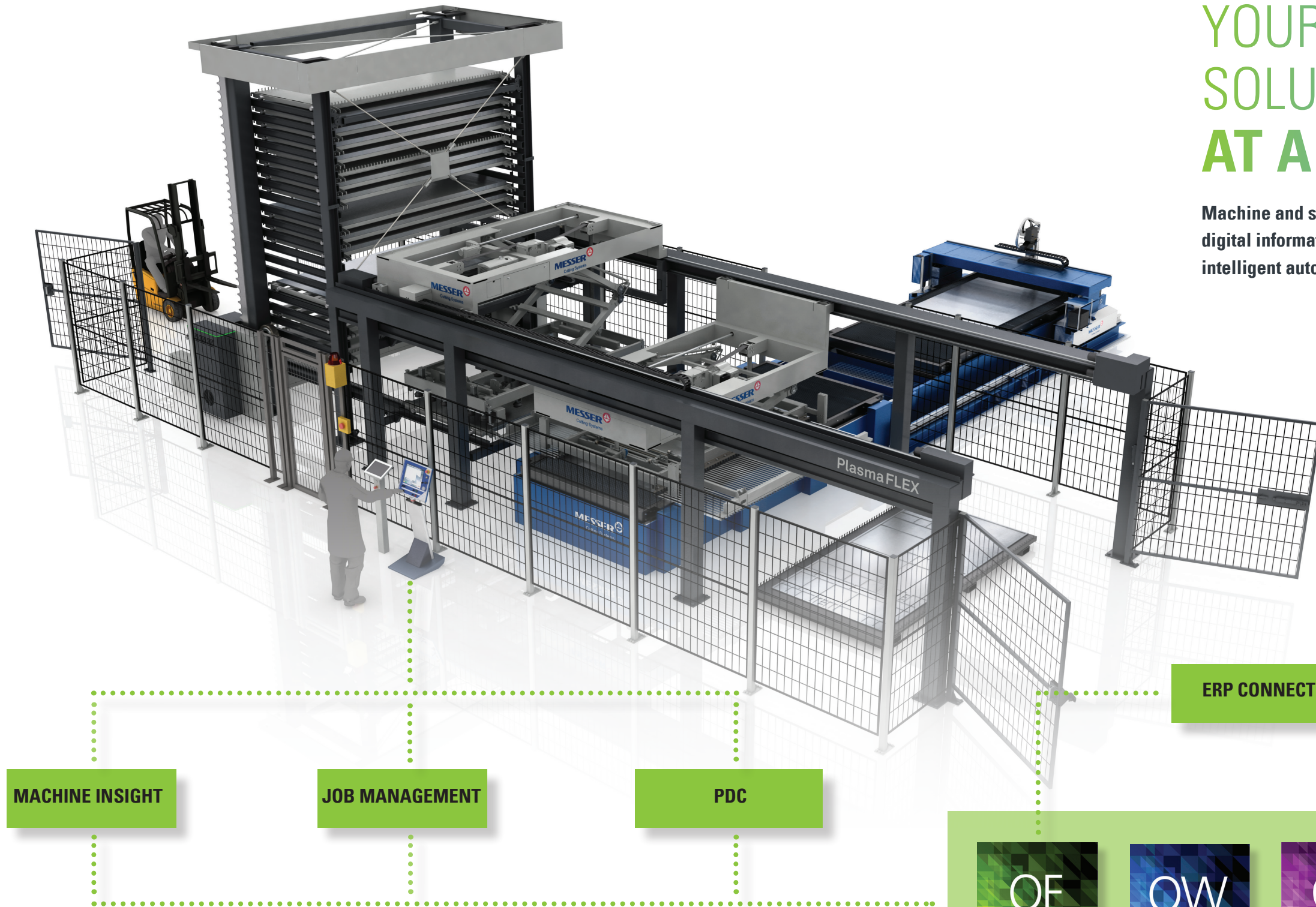
KNOW HOW


Profit from our experience, our successfully realized projects and our knowledge, through practical training and consulting.



YOUR AUTOMATION SOLUTION AT A GLANCE

Machine and software from a single source: Discover our digital information and process technologies combined with intelligent automation solutions.





DIGITAL INFORMATION AND PROCESS TECHNOLOGIES **FROM MESSERSOFT**

Software innovations since 2008

MesserSoft is a wholly owned subsidiary of Messer Cutting Systems and its portfolio combines all the software products of the group under one roof. Its core competence is the integration of Messer machines into the business processes of our customers.

State-of-the-art digitalization

MesserSoft offers optimal software solutions for new machines as well as for existing customers of Messer Cutting Systems worldwide. As a well-established team of experts with high IT and cutting competence, we are closely networked with the global resources and the competence centers of Messer Cutting Systems.

Digitalization and Automation from A to Z

At every stage, from the preparation of an offer to after-sales service, you will receive a solution from us precisely tailored to your needs with regards to machine, control and production technology. Machine, software and service are provided to you as an integrated total solution.

Thanks to the close cooperation between Messer Cutting Systems and MesserSoft, we can react quickly and precisely to your needs. With us, you will always find the best solution for your production to improve the efficiency of your operations.

Discuss with us your ideas for the production of the future!

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