YOUR DIGITAL WORKFLOW
Production Automation and Digitization

INDUSTRY
4.0

DIGITAL

INDUSTRY
4.0

MAKE YOUR WORLD
A BIT MORE PRODUCTIVE

Be competitive and future-proof. With more efficient production and unique products for your customers. Digitization is crucial.

Connect machines and systems with our digital solutions. You get instant access to all relevant information. Respond quickly and effectively to changes. Make decisions based on real-time information. You get all the relevant information from a wide variety of sources, always and immediately available.

Digitize your production:

+ You gain all production information digitally,
+ 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,
+ cheaper and faster,
+ 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 -
the Messer Experience.

OUR SOLUTION COMPETENCE
IN THE VALUE CHAIN

If you know exactly how things are going in your company at any given time, you can make the appropriate adjustments. Captured data is your most important "raw material" for obtaining context-related information. We support you in this:

SALES QUOTES

"How do I quickly and reliably create the right offers for our customers?"

WORK PREPARATION

"How can I reach optimum nesting of my jobs to save material and time?"

PRODUCTION PLANNING

"Is my production running as planned or are there problems?"

MATERIAL HANDLING

"How do I get my plates to the machine at exactly the right time and unload them again quickly?"

MACHINE OPERATIONS

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

MACHINE CONTROL

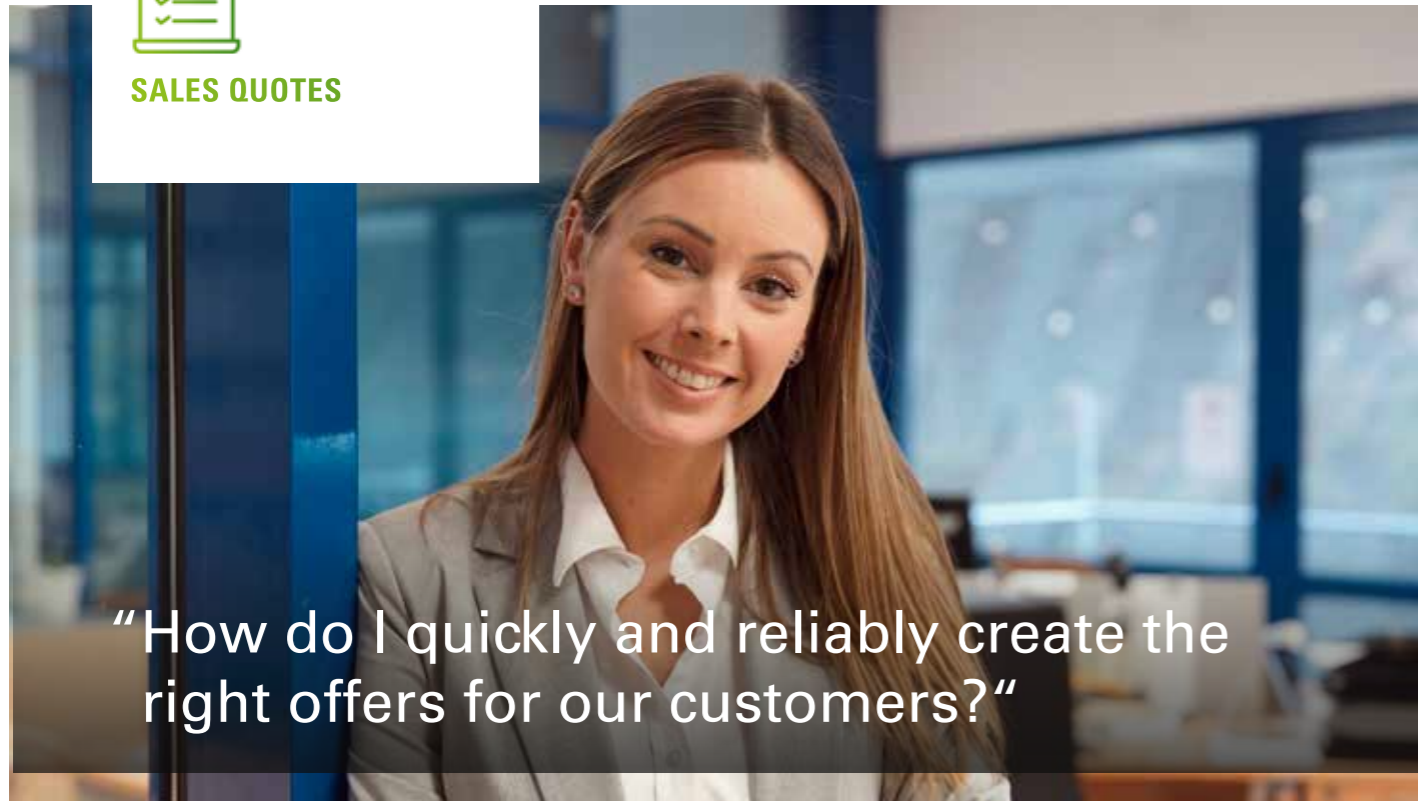"How do I save manual steps in order processing?"

BUSINESS ANALYSIS

"How high is the utilization of my machines and what are the causes of idle time?"

OmniFab Sales Quotes   **OmniWin**   **OmniFab Job Management**   **OmniFab Material Flow**   **OmniFab PDC**   **OmniFab ERP Connect**   **OmniFab Machine Insight**

"How do I quickly and reliably create the right offers for our customers?"

"Sometimes things have to be done very quickly. The customer calls and wants to know immediately how much his order will cost and when we can deliver. And that often with completely new requirements or complicated orders. Then I have to gather all the information and try to calculate the right price and delivery date. The quick and reliable creation of offers is one of the biggest difficulties and time wasters in order-related production."

OmniFab Sales Quotes
Safe offers. Correct delivery times.

OmniFab Sales Quotes supports your sales department in creating offers and recording all parts and work steps. Your team selects existing components or creates new ones using quick and easy component templates. Including this in the offer. The module calculates production times, material consumption and weights for the cut parts.

Assign further work steps and additional production parameters as required. All information is shared with your ERP or CRM system to create the complete quote with costing and tracking the status from quote to produced part.
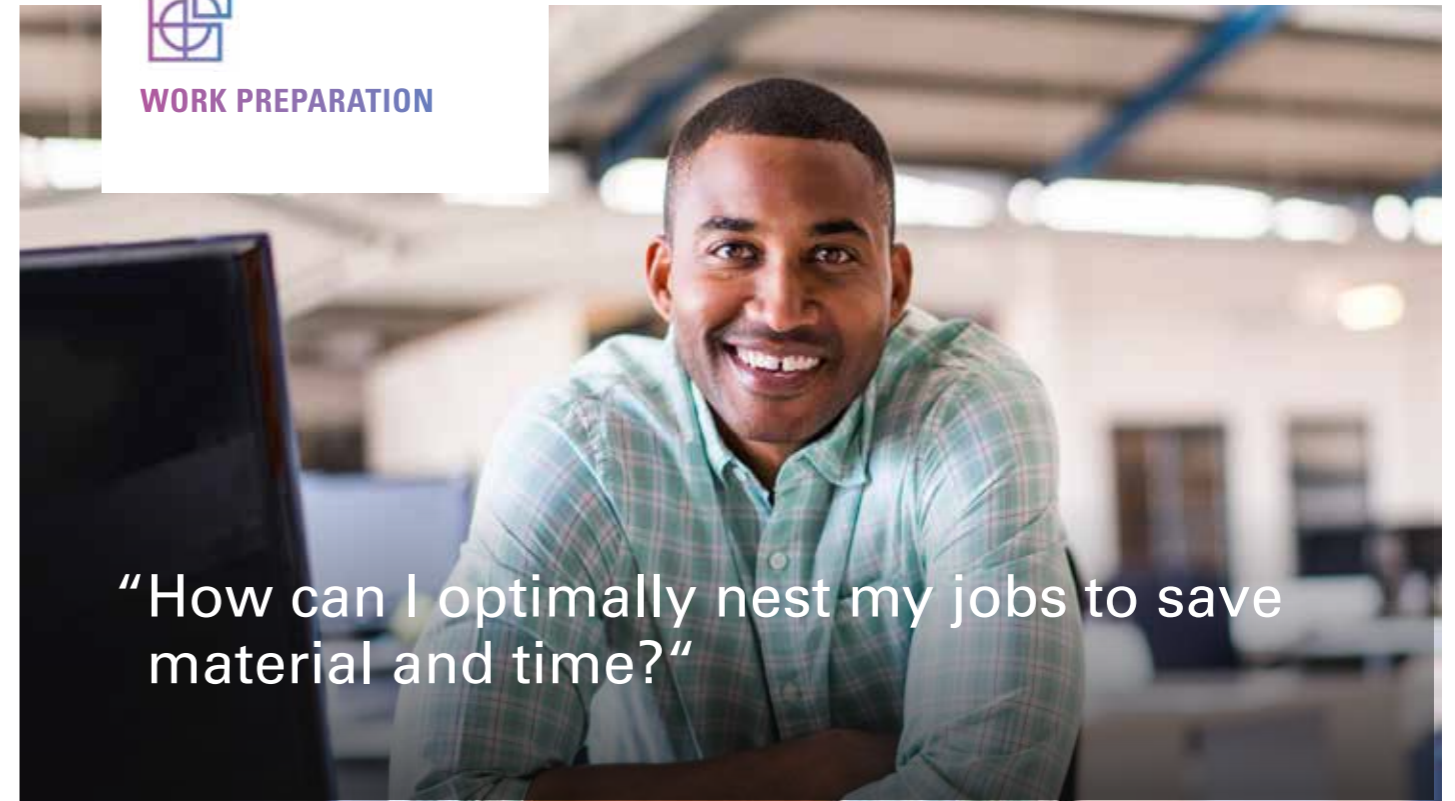
YOUR ADVANTAGES

+ Your offers are based on reliable calculations, not on gut feelings,
+ the creation of the offers is error-free and loss-free,
+ your systems are always up-to-date, even with subsequent order changes,
+ you give your customers correct information on prices, delivery times and delivery status at all times,
+ your accounting works with real-time data from production.

"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
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 imported, 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,
+ use the numerous tools for best cutting results.

"Is my production running as planned or are there problems?"

"How do I get my plates to the machine just-in-time and unload them quickly?"

"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 work papers for the machine operators."

"We lose a lot of time loading and unloading the plates so that the machine can cut. Sometimes we don't even know exactly which job should be cut on which machine. This also costs us a lot of time and the machines stand still."

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 Omni-Fab PDC. You can use this information to react quickly to unforeseen events and make the right decisions.
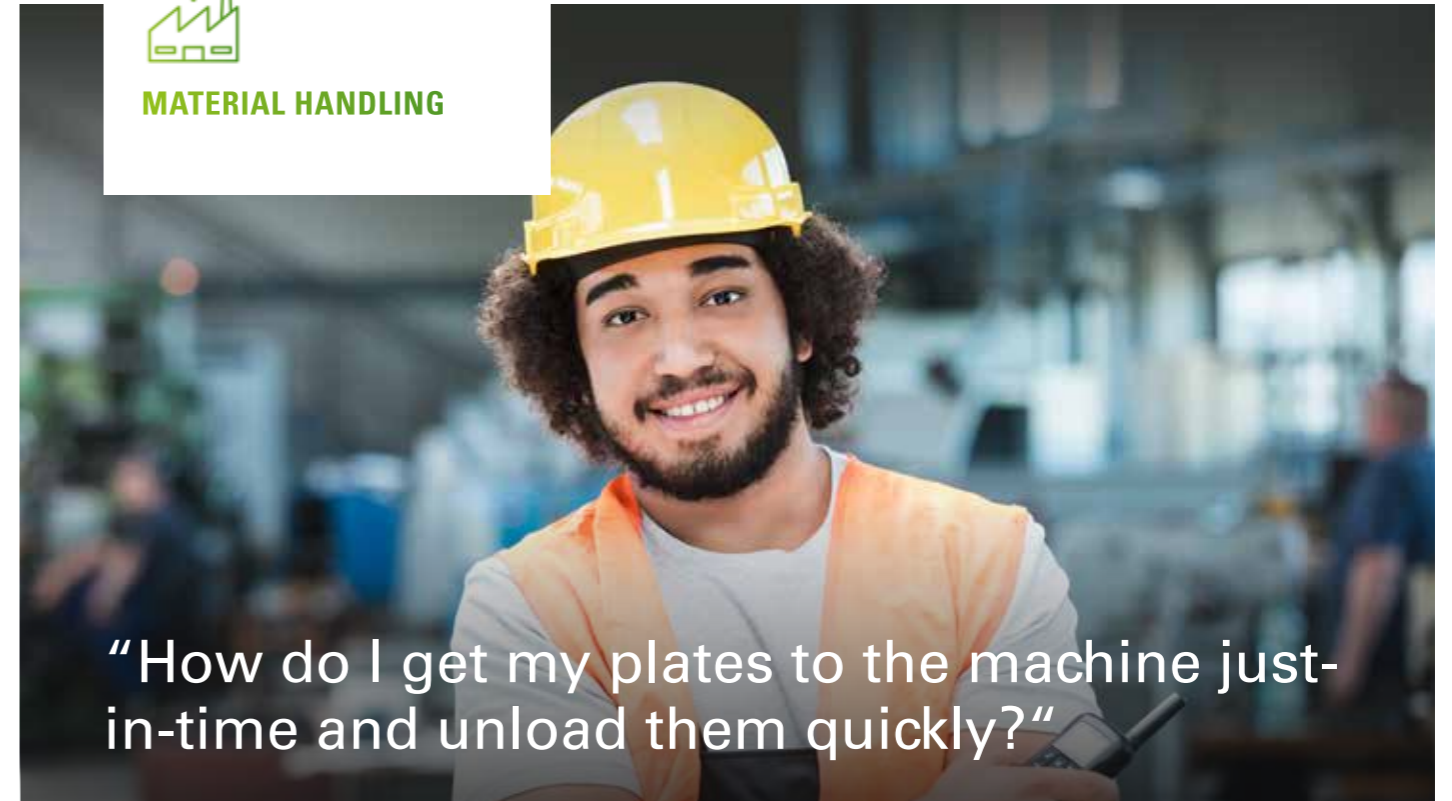
OmniFab Material Flow
Control material handling systems.

OmniFab Material Flow controls your material flow and intelligently utilizes machines. Including material handling systems such as material loading and unloading stations, storage towers and material handling units such as pallets and lifts.
The module recognizes the status of all systems, whether and how long a machine is productive, its idle time and its error time. It constantly checks which cutting job is to be processed next and

promptly initiates material movements to the machine. The machine receives all information about the job and starts automatically without manual intervention as soon as the material is available in the machine.
After finishing the cutting program, the machine reports the status to OmniFab and the unloading of the material is initiated. When the machine is ready again, OmniFab brings the next cutting job to the machine.

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.

YOUR ADVANTAGES +

+ You utilize your machines to the maximum and coordinate material automatically,
+ optimize machine times and resources through automated processes,
+ use real-time data on production, loading and unloading times to improve,
+ avoid errors and downtimes,
+ relieve employees of routine activities and bind them to your company.

"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 at the end of the shift."

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 remnant 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.
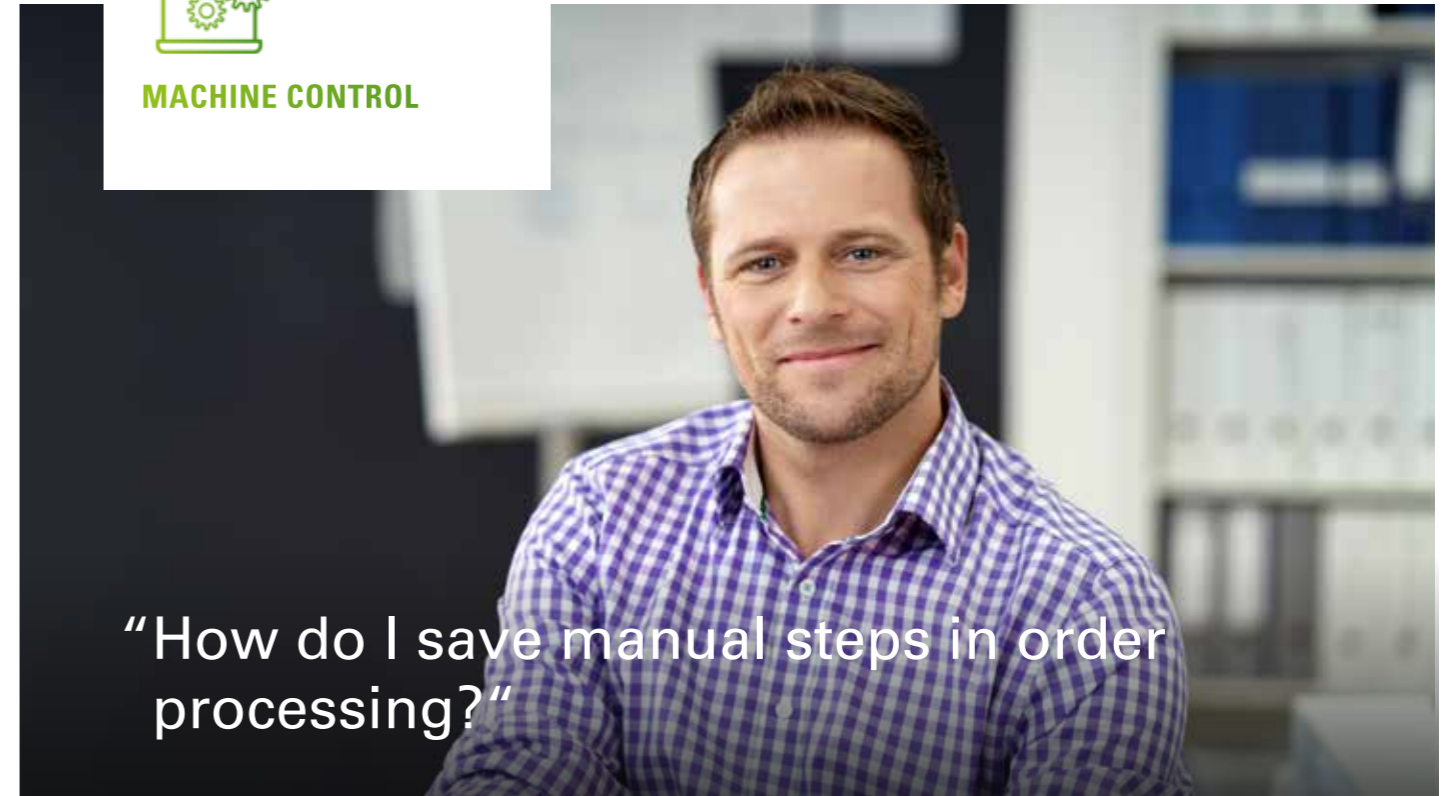
YOUR ADVANTAGES

+ Your digital working papers contain the latest information,
+ you receive feedback on production results including remnant plate geometry,
+ your production planning receives direct feedback,
+ you record loading and unloading times.

"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 papers, which I pass on to the production planning department. We have to pay close attention, especially when changing the order at short notice. When production is finished, I receive back working papers 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 automatically.

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 problem.

YOUR ADVANTAGES

+ You save time through automatic transfer,
+ the exchange of data is error free and is never lost.
+ your systems are all always up to date, even if there are subsequent changes,
+ you have permanent access to all relevant data in all systems and process steps.

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,
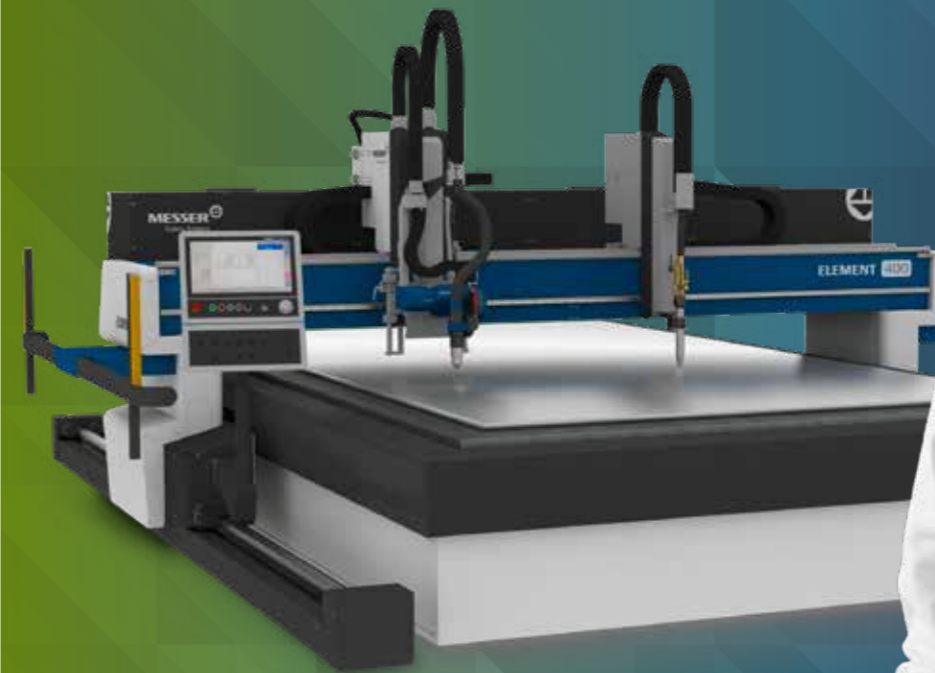+ use the mobile application for constant control.

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.

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.

OmniFab
Sales Quotes

supports cutting companies in professional preparation of offers. With a user-friendly interface and extensive component templates, offers can be created quickly. The platform enables the progress of the offer to be tracked and offers comprehensive analysis functions.

Follow the progress of your offers in real time. Gain insights into customer preferences. Gather valuable data to continually improve your offerings. OmniFab Sales Quotes is a powerful tool for efficiently creating compelling quotes.

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
Material Flow

is the central element that automates your production. Integrates your systems from the ERP system, order management, CAD/CAM software to the machines and material handling systems. All production data is reported to all connected systems and is available to you in real time.

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
ERP Connect

takes the data from the ERP system and makes it available for production planning and work preparation. Order items, parts, plates and other relevant customer data are thus automatically made available where you need them.

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.

CAD/CAM PROFFESSIONAL
DESIGNING & NESTING

The OmniWin CAD/CAM system is technologically future-proof and ready for full integration into your Industry 4.0 applications. Together with OmniFab, you use OmniWin for pre-calculation of quotations, live machine monitoring, assignment to cutting jobs and job monitoring as well as the exchange of data with your ERP system. For oxyfuel, plasma and laser cutting with CNC-controlled machines.

OmniWin

Standard

for simple, effective and fast design and nesting OmniWin is a simple, clear and fast design and nesting software, which adapts intelligently to your machine and your cutting needs. It takes over all cutting tasks for order-based production with CNC thermal cutting machines

Speed up and simplify processes
The integrated operation of CAD, import and nesting for vertical and bevel components drastically simplifies your work processes. Technology functions such as tabs, bridges, common cuts and matrix nesting shorten your process times.

Highest cut quality guaranteed
With OmniWin you nest your parts in an extremely material-saving manner. The NC nesting plan generated in OmniWin ensures fast, efficient processing with high cutting quality. You fully exploit the technological possibilities of your machine such as True Hole®, Contour Cut, Q Hole or Silent Cut

Networked working
Use the flexible license models at your individual workstation or in your network. Share and update components, nesting plans, orders and plates via a database. OmniWin is available in numerous languages.

The result
You achieve maximum technical flexibility with efficient work and reduce your costs through minimal material consumption. Save up to 30% time thanks to the clear operating concept and simple processes.

OmniWIn

Edition Enhanced

extends the basic version with numerous functionalities: Autonest automatically nests parts with minimum time and maximises material utilization under a wide range of conditions in your production. Enter, manage and track your orders.

OmniWIn

Edition Professional

convinces with numerous additional technology functions. Single and multiple stitches as well as scrap cut selection as well as pre-piercing or any remnant material geometries. Stone mold cutting is also included in the range of functions.

OmniWin

Product options

With product option **Bevel** you nest bevel components. Beside nesting, you generate reports as well as production data and manage components, plates and nesting plans in a database.

With product option **STEP** you import 3D STEP files such as surface components, multi-body geometries and assemblies

Product option **Unfold** offers a wide integrated range of 3D geometries for tubes, transitions and joints with multiple technology functions for subsequent machining on a bending or rolling machine.
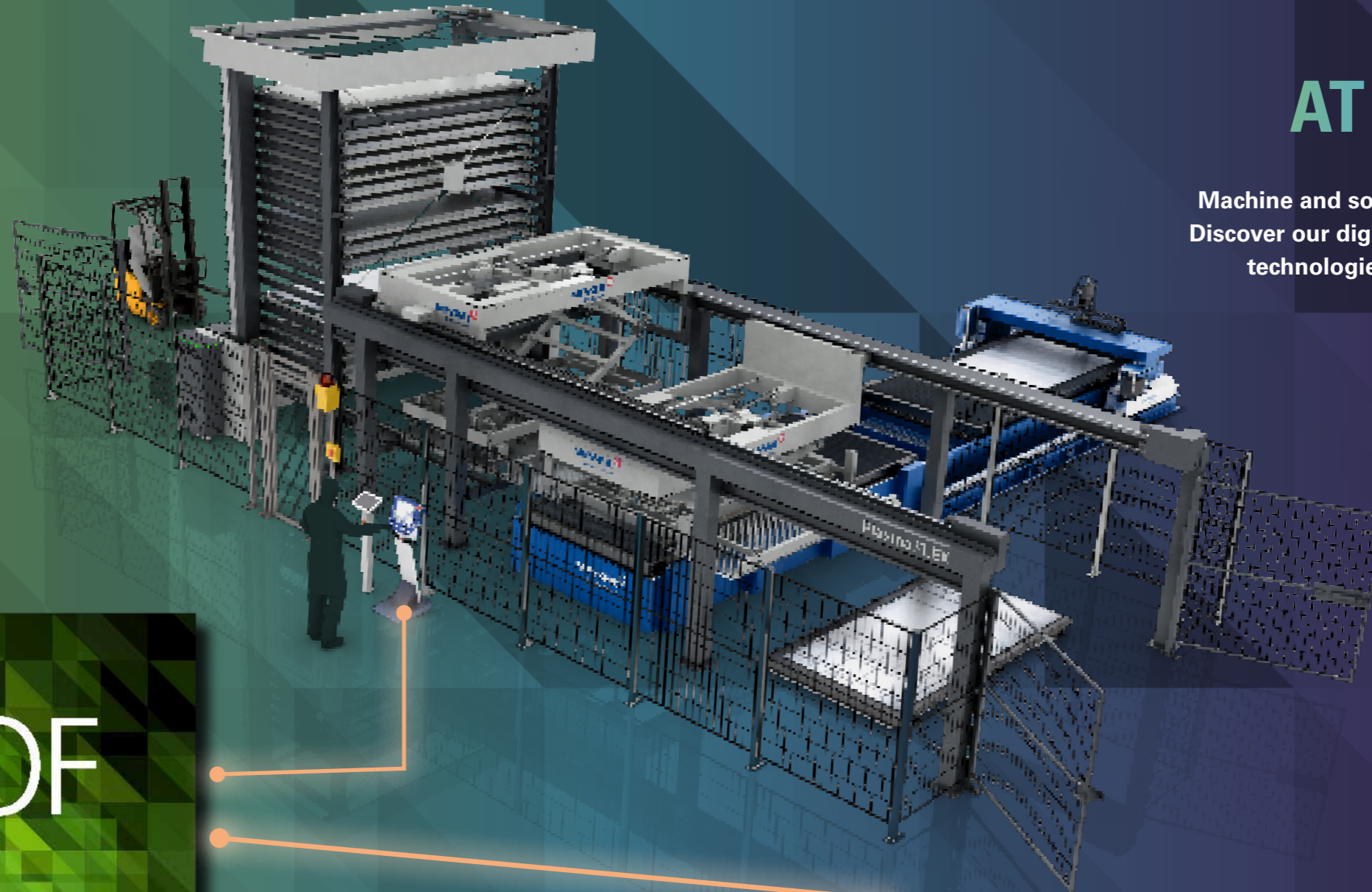
With product option **Drill** you import and create all drilling operations with 3D visualisation.

Machine dished ends with the **Boiler End** product option. Specially designed for the requirements of tank and apparatus construction, you cut cylindrical pipe penetrations with or without additional VDS bevels.

DIGITIZE YOUR PRODUCTION

The digital solutions perfectly complement the holistic range of products, automation, services and know-how.

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.

COMPLETE INTEGRATION

Modular Portfolio

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

SALES QUOTES

JOB MANAGEMENT

MATERIAL FLOW

PRODUCTION DATA CAPTURE

ERP CONNECT

MACHINE INSIGHT

OMNIFAB

Software Suite for your digital transformation

The OmniFab software suite integrates Messer Cutting Systems' mechanical engineering technology into business processes in a holistic and process oriented manner.

It provides relevant information for work preparation, production planning and plant management by connecting all systems. OmniFab also integrates material handling systems like loading/unloading stations, towers, material transportation devices and more – even on mobile devices.

OMNIWIN

Ideal for work preparation

The powerful, easy-to-use design and nesting software that saves time, materials and costs. OmniWin is the ideal tool for work preparation when cutting with oxy-fuel, plasma and laser cutting. It takes on all the cutting tasks that arise, tailored to the order-related production with CNC-controlled cutting machines.

CREATING SOLUTIONS
BEYOND MACHINES

Messer Cutting Systems recognized the importance of digitalization in the areas of work preparation, production planning and control at an early stage. Therefore, Messer Cutting Systems founded MesserSoft GmbH in 2008. 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 Germany.

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, our knowledge: through practical training and consulting.

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.
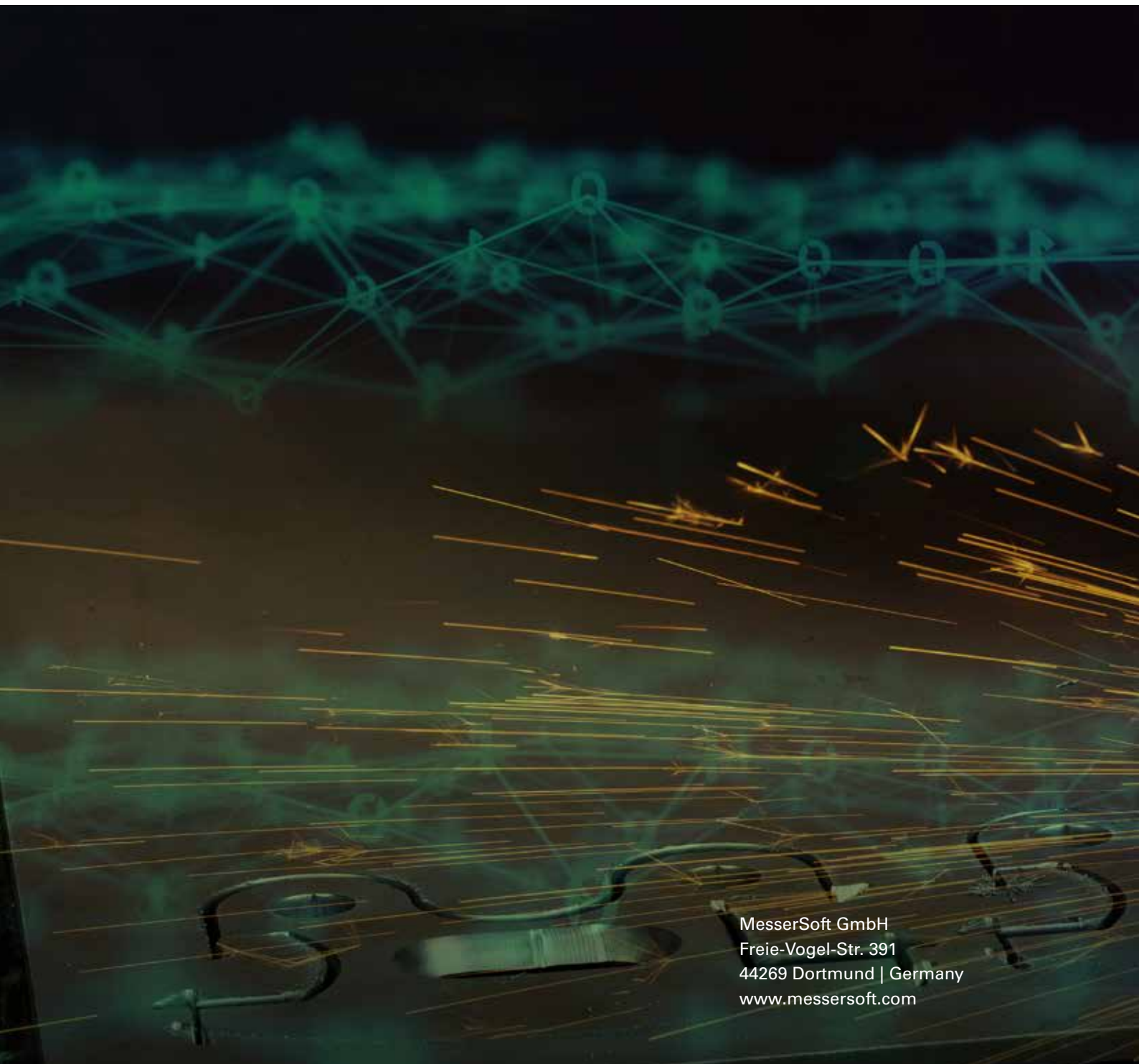
Digitalization and Automation from A to Z

At every stage, from the preparation of an offer to after-sales service, you will receive 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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Cutting Systems