MESSER ◆ SOFT

OMNIFAB
DIGITAL TRANSFORMATION

The software suite for your Industry 4.0
Messer Experience

OF

OMNIFAB

DIGITAL TRANSFORMATION

GROWS WITH YOUR REQUIREMENTS

The modular design of OmniFab allows you to gradually introduce digitization in your company. OmniFab grows as a flexible suite together with your requirements. In this way, you can integrate Messer's engineering technology into your business processes in a forward-looking manner.

AUTOMATES YOUR PROCESSES

All systems work "hand in hand" along the entire value chain of the company. Order data from the ERP system is available in your CAD/CAM software. Results from production along with the order data run seamlessly back into your ERP system.

MAKES RESULTS TRANSPARENT

Pre-calculated production times and material usage are checked with real data and flow into the calculation parameters. Data on machine utilization and downtimes are recorded and evaluated.

OmniFab

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INCREASES THE AVAILABILITY OF YOUR MACHINES

From the machine data, you generate plannable maintenance intervals and discover potential for optimization.

The result:

Transparent production, increased production efficiency and competitive advantages through digitization in production.

Drive the digital transformation.

OmniFab brings you real added value because you gain contextual information from >enhanced< data. The OmniFab Suite supports you from the quote to production planning, control and monitoring in the entire value chain.

ERP Connect

When machines, process-oriented software and ERP systems work „hand in hand", all processes run smoothly. From quotation to post-calculation, from designing the parts to creating nesting plans, transferring the plans to the machine and finally cutting the parts.

Use the potential of all software systems along your entire value chain by connecting them with OmniFab ERP Connect. Each installation is tailored exactly to your needs.

OmniFab ERP Connect takes the data from your ERP system and makes them available for production planning and work preparation. In this way, order items, parts, plates and other relevant customer data are automatically made available where you need them.

After manufacturing, OmniFab ERP Connect sends the nesting plans back to your ERP system with the actual production results from OmniFab PDC. In this way, all current data are available to you promptly.

OMNIFAB

ON THE WAY
TO INDUSTRY 4.0

INDUSTRY 4.0

YOUR MASCHINES, SOFTWARE AND ERP-SYSTEMS WORK "HAND IN HAND"

+ Automatic data exchange between ERP system and OmniWin

+ Including data about orders, customers, plates, nesting plans, and much more

+ Easily configurable through custom fields

+ Interface surveillance with monitoring

ACTUAL DATA IS AVAILABLE WHERE YOU NEED IT

+ Production information is available to you digitally

+ You share this information with all stakeholders in real time

+ You have an up-to-date overview of ongoing processes and know their status

Sales Quotes

A fast and reliable creation of quotes is one of the major difficulties and time wasting tasks for order-related production. The Sales Quotes Module helps your sales department to collect all parts and working steps for a professional quotation.

Your sales employees select existing parts or create new parts using fast and easy part templates and add them to the quote. Production times, material consumption and weights for the cut parts are calculated.

Your employees assign further work steps and additional production parameters and attach documents like working papers or dimensioned drawings.

The offer can then be created and sent to the customer. All information can be shared with your ERP or CRM system. Track the status from quotation to produced part in real time. Be always able to provide your customers with detailed information and status of the order.

Job Management

Production orders - called "jobs" in OmniFab - are managed by OmniFab Job Management. The powerful module ensures that the jobs along with their nesting information are available at the right time at the right machine.

Working papers are no longer required. All important information is available digitally in the job.

For effective job planning, you can filter and sort the jobs by urgency, material or other important attributes. Then you schedule the jobs on your machines manually - or even easier - automatically.

By defining shifts, you get a quick overview of the planned production time and the current shift utilization of each machine

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CREATE YOUR OFFERS QUICKLY AND RELIABLY

+ All information is shared with your ERP or CRM system

+ You will receive complete data for your offers including the calculation

+ Your systems are always up-to-date, even if the order changes later

+ The exchange of data is error-free and loss-free

OFFER YOUR CUSTOMERS TRANSPARENCY IN THEIR ORDERS AT ANY TIME

+ Save time with automatic transmission

+ Seamlessly track the status of your quotes through to the produced part

+ Use your permanent access to all relevant data in all systems and process steps

PLAN YOUR PRODUCTION ORDERS DIGITALLY AND PAPERLESS

+ Your production orders are available everywhere without paper

+ Filter and sort according to your priorities

+ Choose whether to plan your orders manually or automatically

GET ALL JOBS TO THE RIGHT MACHINE AT THE RIGHT TIME

+ Plan more effectively automatically

+ Avoid errors through paperless processes

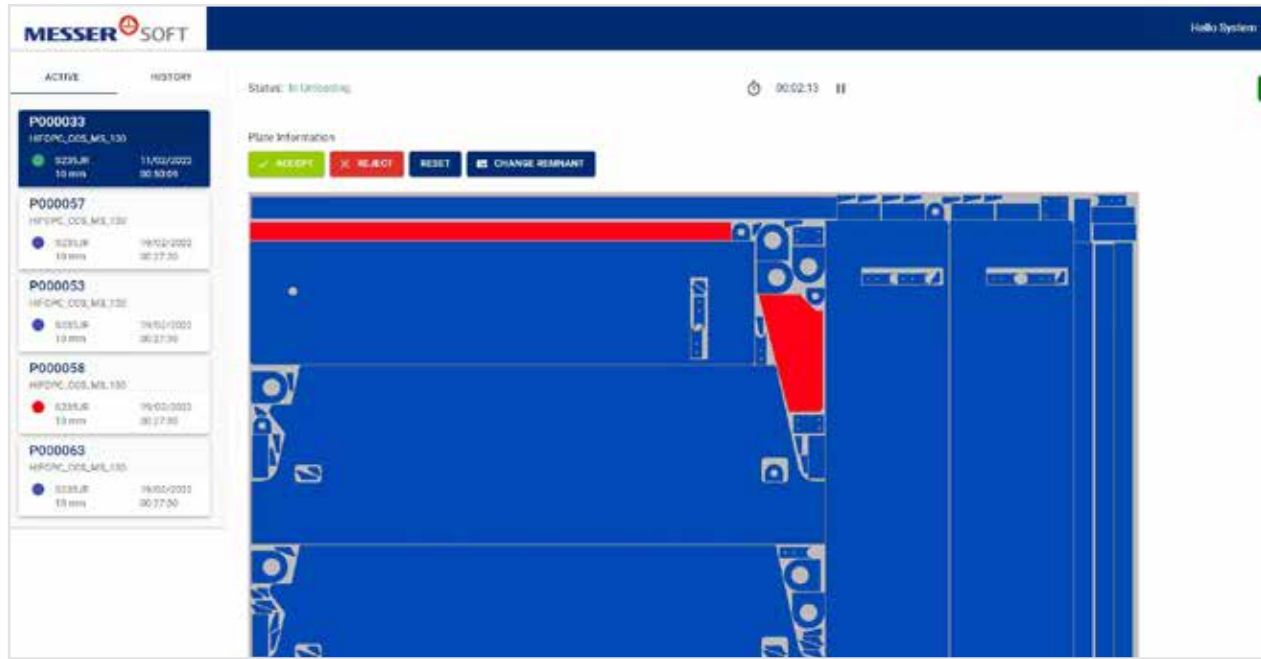+ Get an up-to-date overview of production times and utilization

Material Flow

Material Flow is the module that connects to a material handling system comprised of material loading and unloading stations, towers, and material transportation devices like pallets and lifters. Material Flow controls the entire material flow automatically.

This integration allows the module to know exactly, which jobs are scheduled for a machine at which time. Your operators get an overview of the planned jobs including plate information and select the correct plates for feeding into the system.

The material will be optionally stored, then moved to the cutting machines and eventually to unloading stations according to schedule. Material Flow helps to configure jobs completely with all required information in advance so that the machine can automatically start cutting.

Thanks to the integration with other OmniFab modules, Material Flow reports actual production data back to your connected systems.

Production Data Capture

The OmniFab PDC module is integrated into the machine's Global Control. It also runs on all connected devices that have a web browser, such as tablets or smartphones. With OmniFab PDC you generate complete, up-to-date and reliable data for production control.

Machine operators use OmniFab PDC to record setup, production, loading and unloading times, number of parts produced and scrap, the actual plate used and the actual material usage. The result is transparency and traceability of all processes.

Once the operator has completed a job, this information is displayed directly in Job Management. If problems occur during production, the operator sends a message to the production planning department so that it can react immediately and reschedule or re-nest the jobs.

For all completed jobs, the web-based OmniFab Production Data Review view provides an overview of all reported production data. This allows you to control and adjust production results and ensures that you always have reliable data in your system.

AUTOMATE YOUR MACHINES AND MATERIAL HANDLING SYSTEMS

+ Control your material loading and unloading stations, storage towers and material handling units with pallets and lifts

+ Configure jobs fully and in advance with all required information

SAVE TIME AND RESOURCES WITH AUTOMATED PROCESSES

+ Utilize your machines to the maximum

+ Win production results including residual plate geometries in real time

+ Use all data on production, loading and unloading times for analysis

KEEP TRACK OF YOUR CURRENT PRODUCTION DATA

+ Use real-time feedback to production planning on disruptions and problems, missing material or wearing parts, errors in the nesting plan and other reasons

+ Record set-up and production, loading and unloading times, components actually manufactured and scrap, plates actually used

ENSURE MAXIMUM FLEXIBILITY IN YOUR PRODUCTION

+ Keep always track with mobile devices such as tablets or smartphones

+ Control all data and react quickly to changes
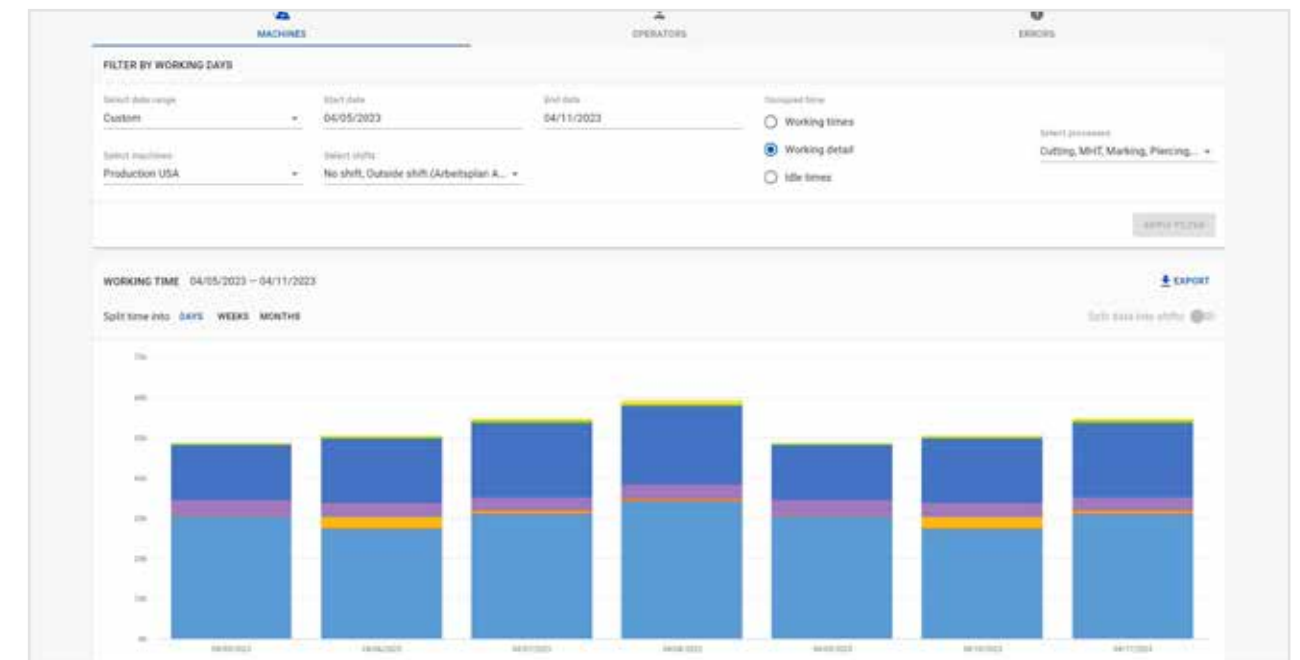
+ Ensure transparency and traceability

Machine Insight

OmniFab Machine Insight provides you with important information about your cutting machines in real time during operation. This real-time machine monitoring provides you with the status and data of each connected machine.

Graphical illustrations show the machine utilization and reasons for downtime for definable periods of time (days, weeks and months), working time, idle time and error time. You see all important information about the program that is currently cut on the machine.

You see the shift in which you are currently working, a graphical representation of the workload in the last eight hours, and the number and type of faults that have occurred on the machine in the last 24 hours.

Times used for the various processes (cutting, positioning, piercing and preheating,) are also clearly displayed. Display times and work steps per shift. You get an insight into the utilization of the machines, the downtimes and reasons and recognize the accumulation of errors at certain times.

By recording the actual times, you gain better data for planning production. Important information about the machines and the current utilization can also be displayed via an app for mobile devices like smartphones or tablets. This means you always have an up-to-date overview of production, even when you are on the go.

The job reports show you when a job was started, when it was stopped, how much time was scheduled for the job, and how much time was actually needed for the job.

Jobs with the largest deviations between planned and required time are clearly identified and can be optimized.

Get your reports as PDF files based on working days or weeks. Thanks to the compact presentation of the reports, you can also easily keep track of a large number of machines. Additional functions make it easier to recognize patterns in the event of anomalies in the data and initiate necessary measures earlier and more purposefully.

OBSERVE WHAT'S RUNNING IN PRODUCTION AT ANY TIME

+ Use the real-time data of your machines as important "raw materials"
+ Recognize the actual utilization and sources of error of the machines
+ Use configurable, meaningful charts and graphics to optimize your p rocesses

RECOGNIZE AND AVOID ERRORS AT AN EARLY STAGE

+ Introduce effective troubleshooting measures at an early stage
+ Optimize your production with the help of machine monitoring and machine utilization
+ Get a quick overview with the help of the graphic functionalities

KEEP AN EYE ON THINGS WHEN YOU'RE OUT AND ABOUT

+ Use the mobile application on your smartphone or tablet to constantly monitor production
+ Create reports as PDF according to your requirements
+ Gain contextual information from the machine data

MINIMIZE DISRUPTIONS AND PROBLEMS

+ Keep an overview even with a largenumber of machines
+ Recognize patterns and anomalies in the data
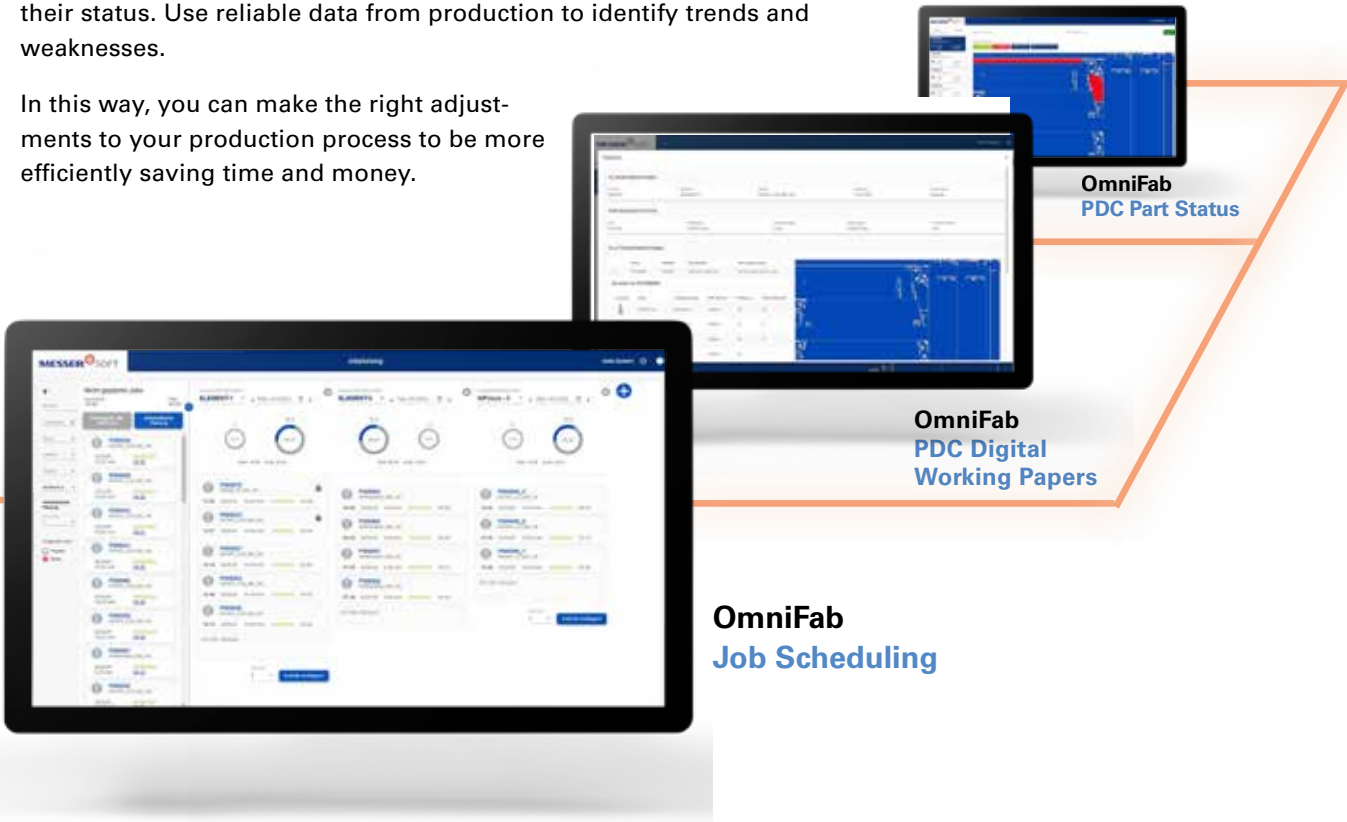+ Optimize your order and resource planning

Dashboards and statistics

You get an overview of available plates, parts or the current orders and their status. Use reliable data from production to identify trends and weaknesses.

In this way, you can make the right adjustments to your production process to be more efficiently saving time and money.

OmniFab
PDC Part Status

OmniFab
PDC Digital
Working Papers

OmniFab
Job Scheduling

INDUSTRY 4.0
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 digitizati is traditionally via work preparation with OmniWin and OmniBevel for CAD/CAM, nesting and bevel. Our solution becomes holistic thanks to the OmniFab Suite as digital support for operators, production managers, process analysts, service technicians and management. Messer machines and software thus guarantee the perfect introduction to digitalization.

OmniFab system requirements and features

Hardwarerequirements

+ Processor with 4 cores

+ 32 GB RAM, 150 GB hard disk space

+ Windows Server 2016 (or higher)

+ MS SQL Server 2016 (or higher)

+ Supported operating systems:
  Linux, Cent OS7 (recommended)
  Windows 10 64 Bit
  Windows 11 64 Bit

+ Supported browser:
  Google Chrome (latest stabie version)
  Firefox (latest stable version)
  Microsoft Edge (latest stable version,
  only Chrome-based)

Requirements for OmniFab PDC on the control

+ Windows 10 recommended

+ Network connection between control (HMI version 11.14)
  and OmniFab Server

Requirements for OmniFab Machine Insight

+ 4-8 GB main memory, depending on expansion level

+ 120 GB hard disk space

+ Operating system included in delivery

+ Network connection to cutting machines and license server

Due to the large amounts of data and concurrent access via the application, a full SQL server instance is recommended. This must be licensed separately. The SQL Server Express version is not recommended.
Please contact support-omnifab@messersoft.com for more detailed system requirements.
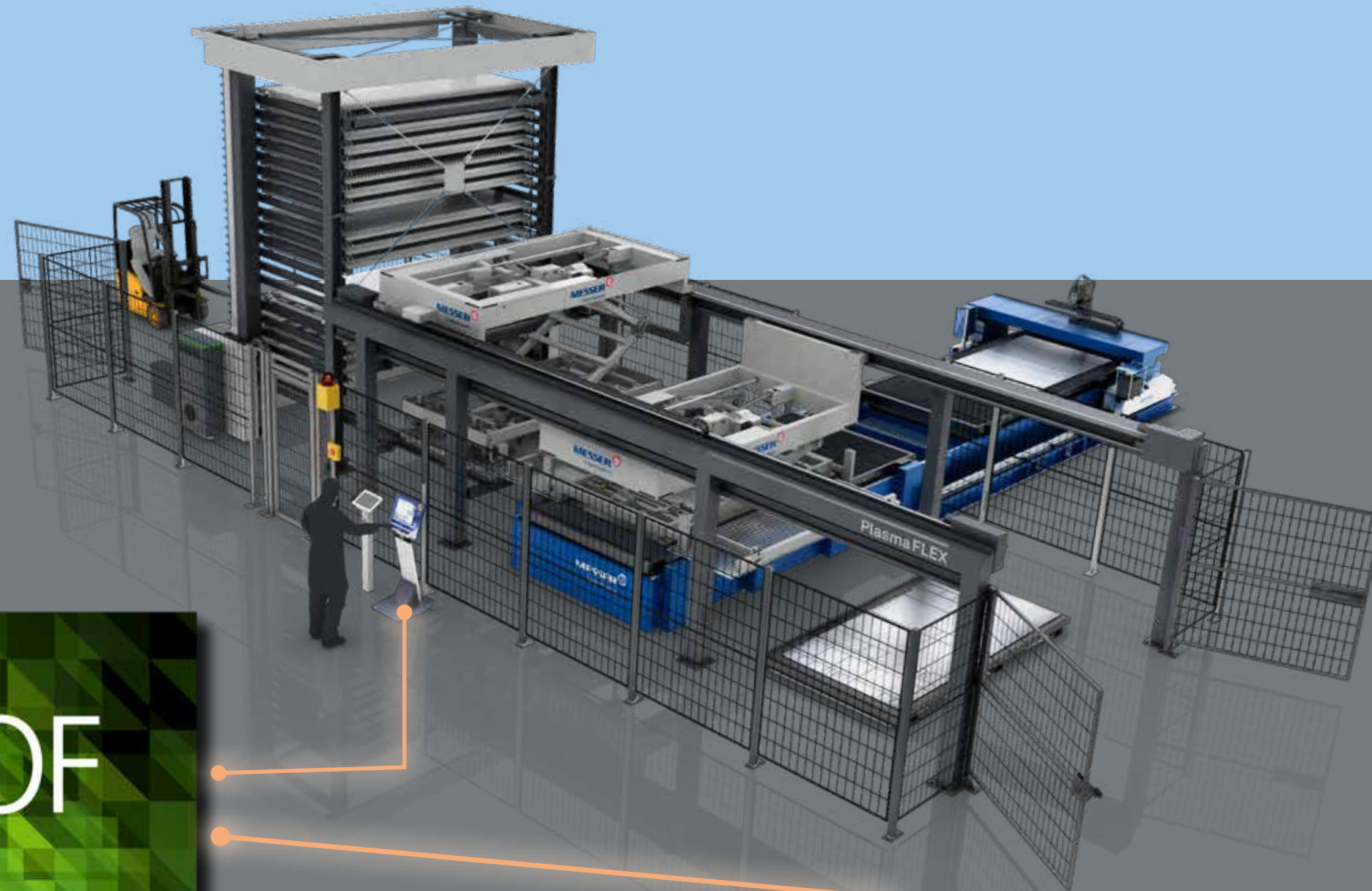
OmniFab
OmniWin
OmniBevel

DIGITIZE YOUR PRODUCTION

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

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.

ERP CONNECT

SALES QUOTES

JOB MANAGEMENT

MATERIAL FLOW

PRODUCTION DATA CAPTURE

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 designing and nesting software that saves time, material and costs.

OmniWin is the ideal tool for work preparation in oxyfuel, plasma and laser cutting.

It takes over all cutting tasks for order-based production with CNC-controlled cutting machines.

CREATING SOLUTIONS
BEYOND MACHINES

PRODUCT

AUTOMATION

DIGITAL

SERVICES

KNOW-HOW

What we stand for

The entry into digitalization traditionally takes place via work preparation with OmniWin and OmniBevel for CAD/CAM, nesting and beveling. Our solution becomes holistic with the OmniFab Suite as digital support for operators, production managers, process analysts, service technicians and management. Messer machines and software from MesserSoft thus ensure the perfect entry into Industry 4.0.

There is perfect information management from the part design through the creation of nesting plans, the transfer of plans to the machine and finally the cutting of the parts. This guarantees efficient working with the highest quality standards both in engineering and plant construction as well as in production against orders in contract cutting factories.

Innovations at MesserSoft are always developed in close cooperation with our customers. This leads to truly relevant products and services. For the benefit of our customers. Today and in the future.

MesserSoft develops and distributes software for the integration of Messer engineering technology into business and technical processes for customers worldwide. MesserSoft is a company of Messer Cutting Systems and part of MEC Holding.

THE MESSER
EXPERIENCE