

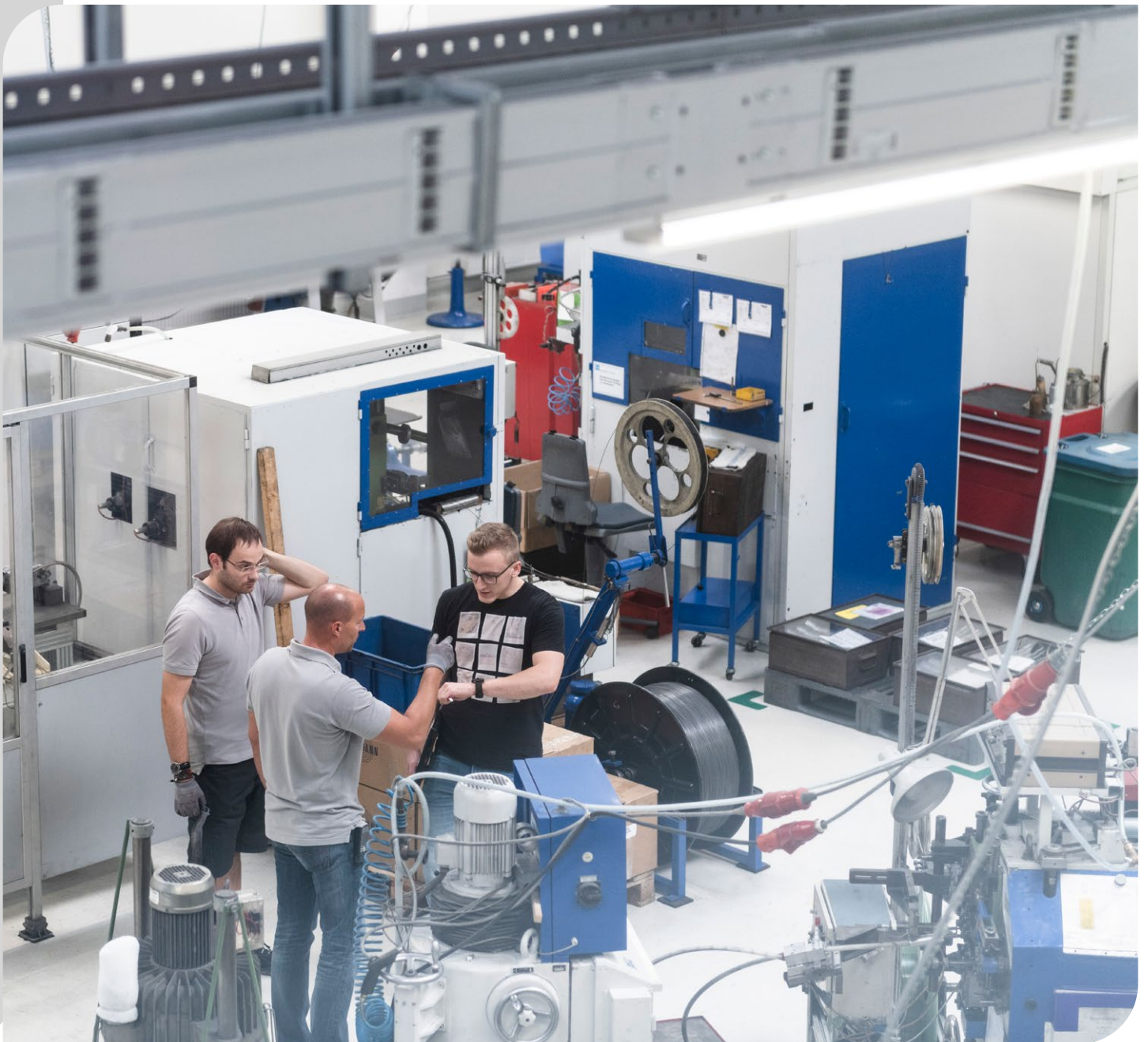
## *EMC.DetailedPlanning*

# Digital production planning with navigation function

Create a **realistic detailed production planning for the machine assignment** with the **EMC.DetailedPlanning module** - without tedious Excel lists or planning tables. It supports you in planning and executing production orders, **taking into account the real resources available**, and enables a **reliable visualization of the order progress** and an **automatic calculation of the order end**. The **navigation function** automatically adjusts your planning to the current order progress and visualizes the planned sequence of orders digitally on the machines.

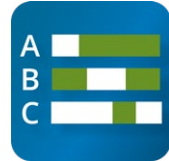
## *Status Quo*

The daily coordination  
to meet the deadlines



## *EMC.DetailedPlanning*

# Comprehensive clarity about the order situation and production workload



**Managing manufacturing in the short-term horizon** is not only **challenging**, but also **critical to manufacturing efficiency**. Those responsible must implement the orders from the rough planning in the current environment. Completion time, machine utilization, plan specifications and constantly changing production situations must be coordinated.

As an **instrument for short-term planning**, production, planning, toolmaking and logistics each use their **own Excel lists**, which are laborious to maintain and have to be corrected and compared on a daily basis. **The resulting effort is enormous and the sources of error are high.**

In the digital factory, **EMC.DetailedPlanning** offers extensive functions for the **effective control and organization of production**. The orders are **planned to the machines at precisely the right time**. The real-time functionalities **automatically update the planning** and calculate the forecast for the expected end.

For all divisions, material logistics, tool making and production, a **perfect basis for the organization of their processes is created**. Everyone can see the planned start date of the orders or which tool is needed when and where - in real time, always up-to-date. With **EMC.DetailedPlanning**, **perfect transparency** for controlling production is easy.

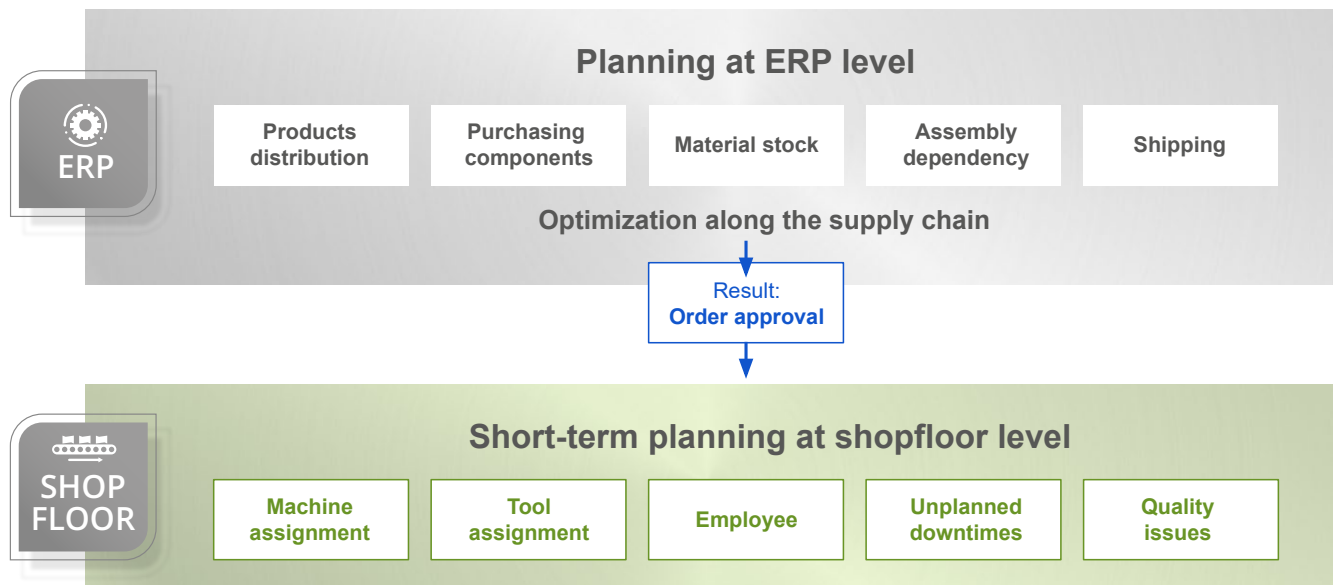


## EMC.DetailedPlanning

# Short-term planning linked with the machine



**Realistic and transparent planning is crucial** to manufacturing effectively and productively. **Common ERP systems plan production only roughly** and assume an **infinite production capacity**. Many companies still rely on **cumbersome order folders or error-prone Excel lists** for **short-term planning**. Even the use of other planning software **does not pay off** if it is **not intelligently networked with machine assignment**.



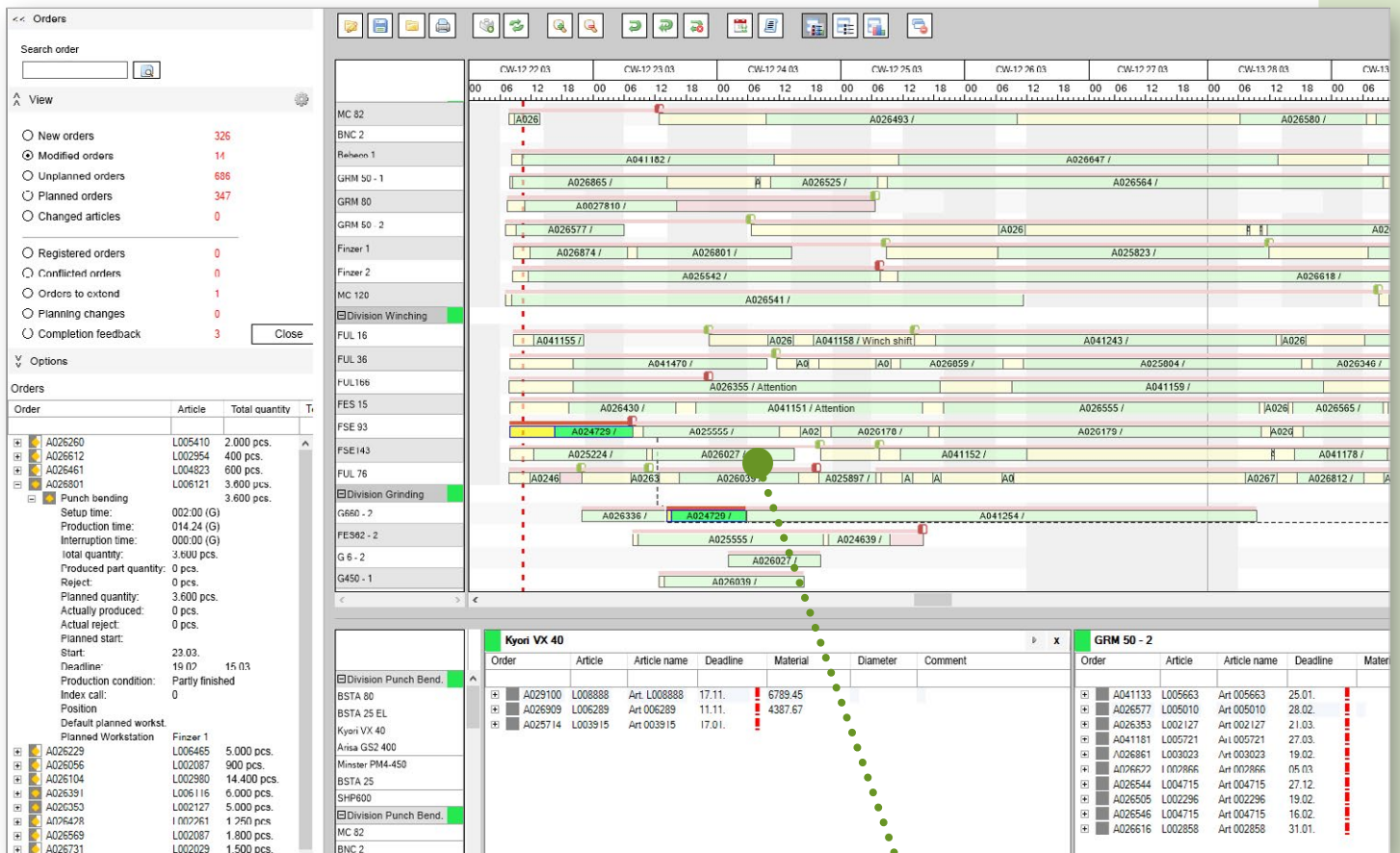
The **EMC.DetailedPlanning module** supports you in **planning and executing production orders** taking into account the real available resources, visualizes the progress of the order and calculates the end of the order based on a **resource-optimized machine assignment**.

The **roughly planned orders are received by the ERP** and **complemented in short-term planning with the data collected in real time on the shopfloor**, such as machine occupancy, tool allocation, employees or reasons for downtime, and adjusted and the operations of the orders planned for the individual resources (machines, workstations). **The machine capacities are calculated according to the planned times and the working time model.**

## Intelligent planning is halfway to control

By taking into account work steps, sequences, production quantities as well as production-related restrictions (interruption times, setup personnel, etc.), bottlenecks or missed deadlines can be easily identified. In the form of a Gantt chart, the planned and current occupancies are displayed using a timeline representation.

This up-to-date and clearly arranged information enables rescheduling at short notice. Unpredictable production delays can be localized at any time. Orders received at short notice can be added simply by drag & drop.

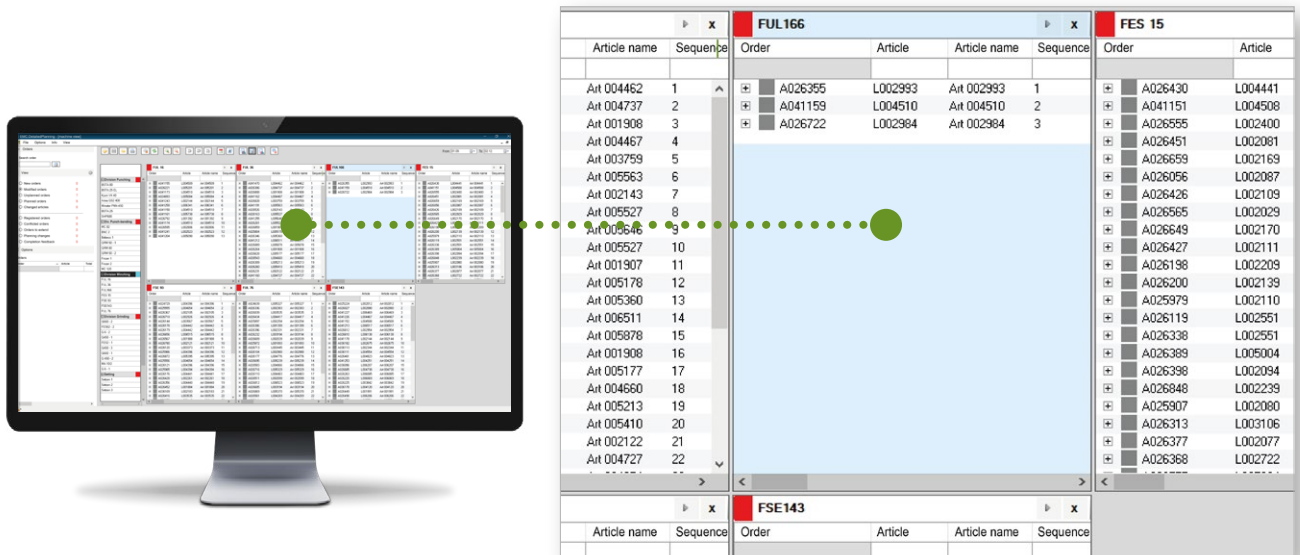


An overview provides clarity about all planned orders and their current progress. By displaying feasible delivery dates, orders can be planned specifically according to priority and urgency. If an order is postponed, detailed planning provides early information on how this change will affect the delivery date.



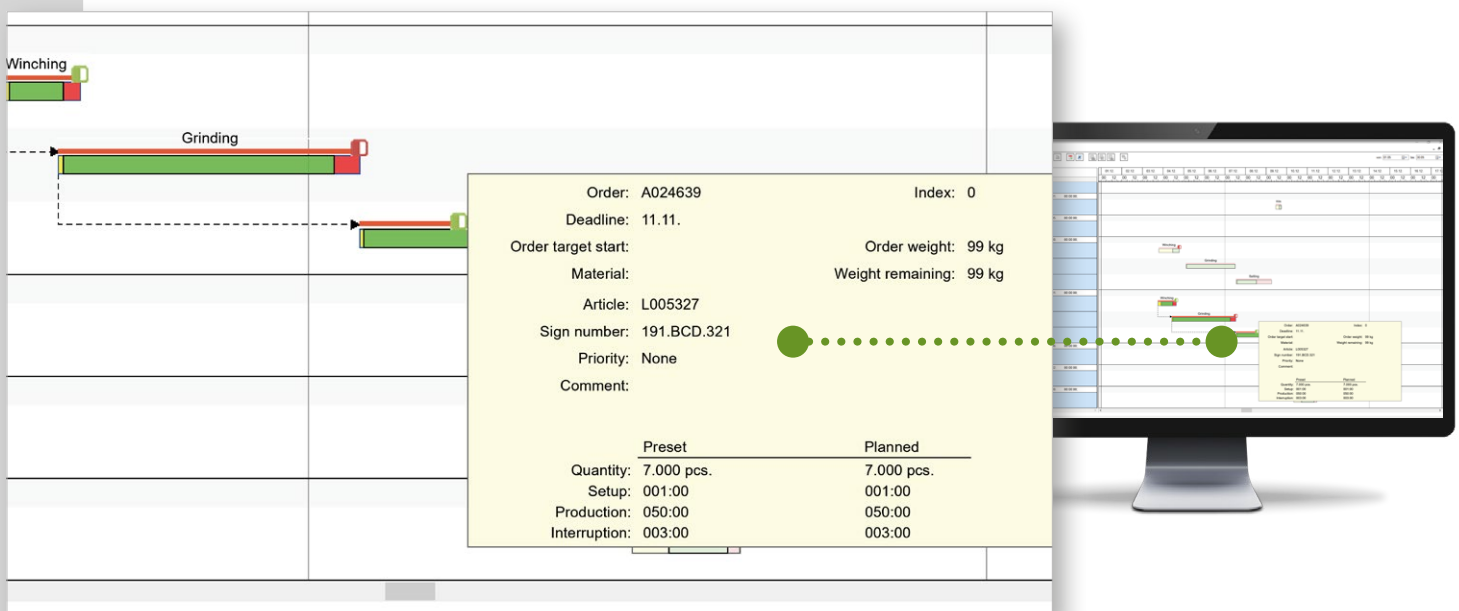
## Graphical or list-based planning

The display can be **easily switched between a Gantt chart display and a list display**, depending on preference. The latter is particularly suitable for a **large number of machines** and enables **simple rescheduling** in the plan list by **moving the operation**.



## Order delivery date and planned start of the work orders

The order view, e.g. sorted by the delivery date of the order, **visualizes the sequence of planned operations and their production progress**. It provides **quick information about the progress of the order** and **perfect transparency about the operations** of an order.




*View the planning directly  
in production*


**Search order**

Order filter

Article filter

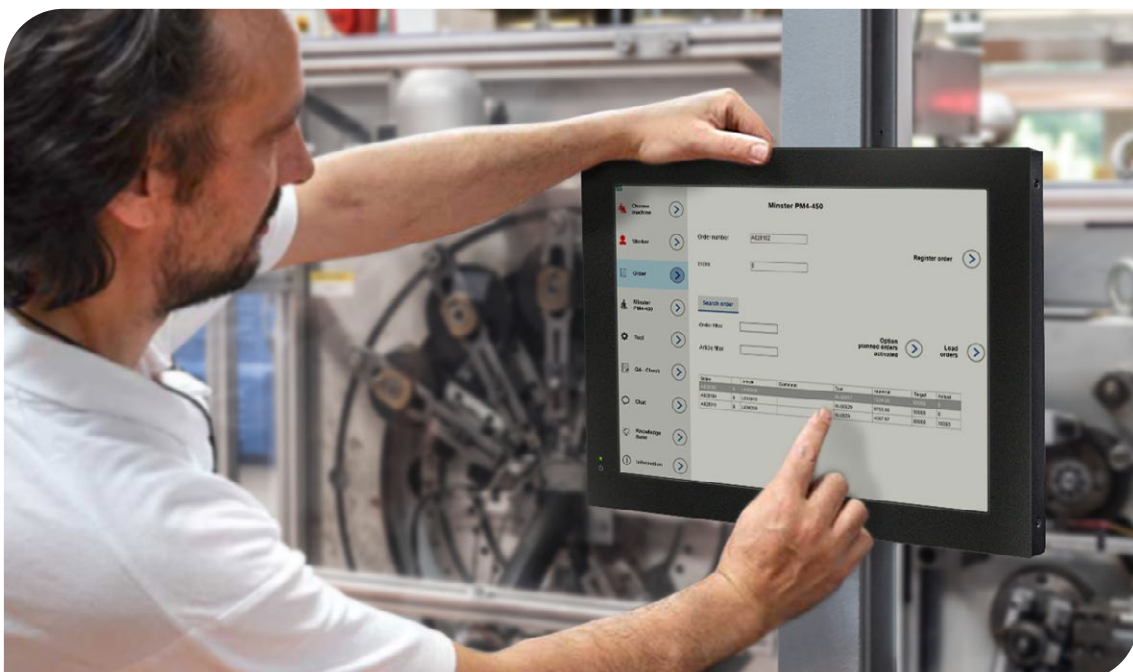


**Option  
planned orders  
activated**

 **Load  
orders**

Order		Article	Comment	Tool	Material	Target	Actual
A028102	0	L005608		W-00057	1234.56	80000	0
A028104	0	L003915		W-00029	9755.88	50000	0
A026911	0	L006289		W-0029	4387.67	80000	19393

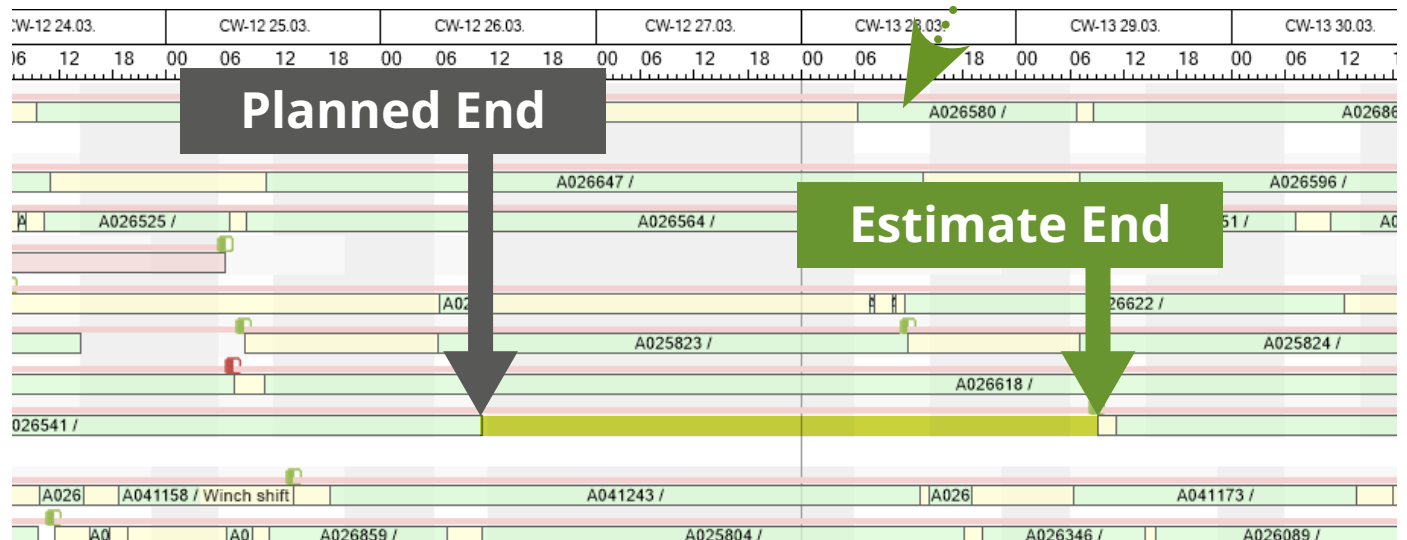
**In the digital factory**, planning no longer has to be printed out as time-consuming production lists and distributed on the shopfloor. **The current schedule sequence is displayed directly on the MES terminal and in the shopfloor dashboard.** The order can also be **logged in directly via the displayed planning list.**





## Navigation functionality

After the start of the order at the machine (setup, production, interruption), the **actual progress is continuously reported back to the planning** in real time. Planning then **updates itself automatically**, performs a **forecast calculation for the end of the order** and **updates the start date** of the following orders.



# Produce and plan more efficiently with smart maintenance integration

The **seamless and digital documentation of maintenance and repairs** offers **immense advantages and simplifications**, not only for machines and tools. Especially in **interaction with production and planning**, smart networked maintenance unfolds its full potential.

The digital information exchange and access of the **MES Software EMC** enables a **predictive control of the individual production processes** via the most important departments. In ongoing production, for example, the tool shop can **be informed directly from the MES terminal at the machine** in the event of a repair. **Without detours**, this information also reaches **production planning**.



By **interconnecting** maintenance with the **EMC.DetailedPlanning module**, the planner knows the **current tool status** at all times. Upcoming maintenance and current repairs are **automatically integrated into the detailed planning** and thus ensure **realistic and smooth production processes**.

At the same time, the **tool making department** gets the information from the planning **when which tool is needed and which maintenance is due**.

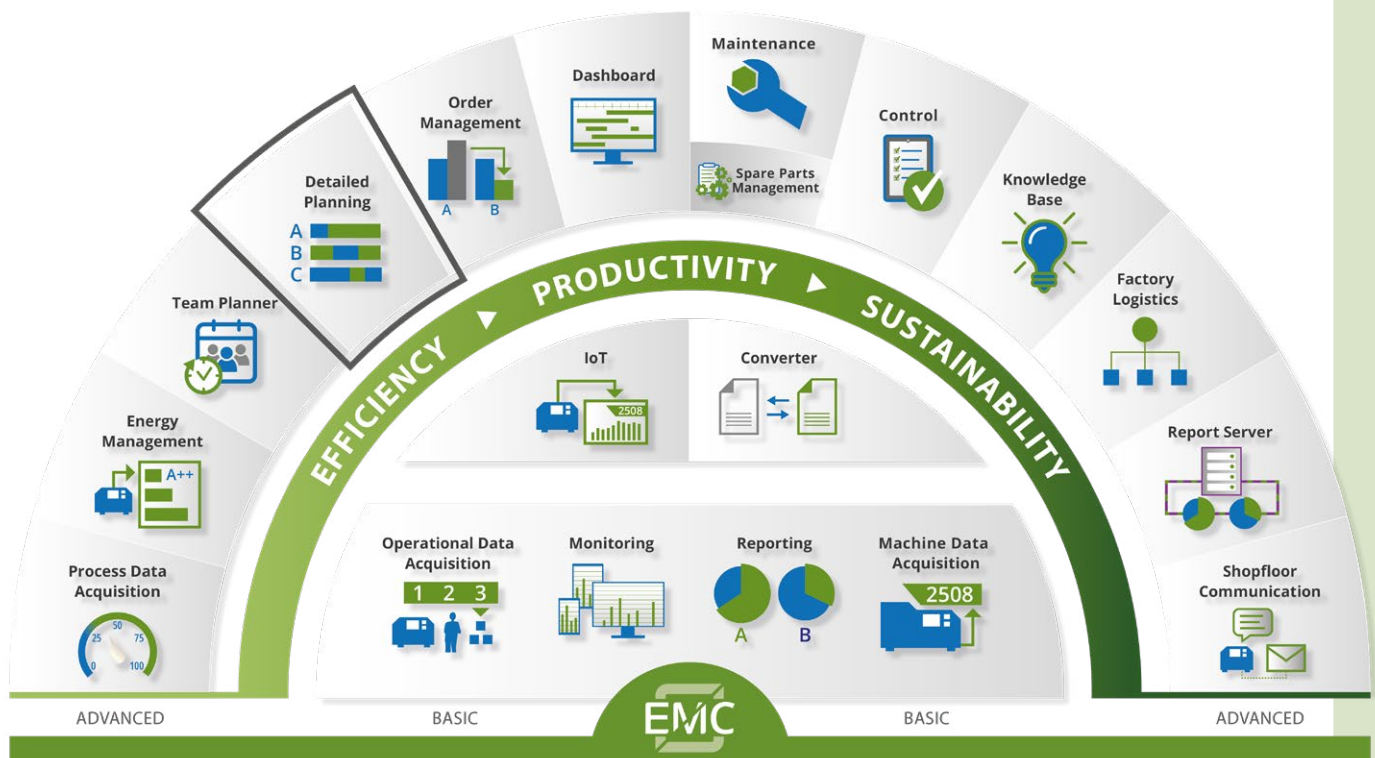


## MES Software EMC

# The solution for your smart networked manufacturing

Our user-friendly MES Software EMC controls all digital processes on the shopfloor **from planning, implementation, maintenance to traceability, shipping, production orders and a sustainable evaluation.**

It adapts completely to your needs, integrates into your existing IT landscape and brings together the data streams from ERP and the shopfloor.



The modular architecture of the MES Software EMC offers you the important **freedom and flexibility** in the implementation of your future-oriented production. Together with the **central MES database**, it is the basis for a **customer-oriented implementation - step-by-step or holistically - individual modules or as a complete system.**

No matter which solution you choose, with EMC you are always one step ahead and have the **best possible transparency** in production. All with the aim of **increasing your efficiency.**



iT Engineering Manufacturing Solutions GmbH is your provider of a well-developed Manufacturing Execution System in production management.

As an IT and MES expert in the metal forming industry and thanks to our large network of partners and memberships in associations (including VDFI and netzwerkdraht e.V.), as well as the best contacts with machine manufacturers, we know exactly how to obtain the important data and how to use it to digitalize processes and thus increase efficiency and productivity in manufacturing.

Our MES Software EMC acts as a central information hub and, by integrating the production data, ensures integration of production data for transparent production processes, flexibility and cost efficiency.

With a high level of technical and industry competence as well as many years of experience and expertise, we accompany you personally and step by step in transforming your production into a digital factory.

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**WE ENABLE SMART MANUFACTURING**