

**USE CASE MES**

# MANAGING PRODUCT DIVERSITY EFFECTIVELY

How an industrial equipment supplier is digitally optimizing its production using the MES FLEX solution as a foundation for continuous improvement and AI

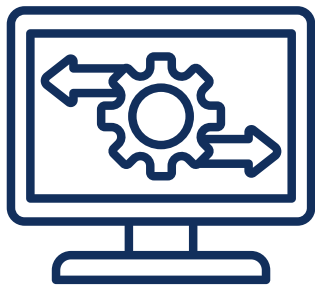


# BACKGROUND

## 01 Staying Competitive Through Digitalization

“How can we strengthen our competitiveness in the face of globalization?”

A few years ago, a global manufacturer of industrial equipment and services answered this question with a simple solution: Stay competitive through digitalization.



## 02 Switch to a new ERP system

To strengthen customer focus and profitability, management decided to implement a global software migration to a new ERP system as a key initiative.

Objective: To harmonize, standardize, and future-proof core processes.

## 03 Modernize Production Digitally

Another strategic lever: a comprehensive digital modernization of production.

The decision was made to strike a balance between “greenfield” (entirely new plants) and “brownfield” (modernization of existing sites) in short: “bluefield.”



# CHALLENGE

## Ensure quality



For many decades, the company has been known for its diverse range of high-quality products and highly reliable services. It was essential that this reputation and the brand remain intact.

A key challenge of the digital transformation was therefore to maintain quality across all product lines while digitally modernizing a production network that had grown over many decades and spanned every continent.

## Find answers



What are the specific goals we aim to achieve through digital transformation?

How can we make our production processes future-proof, especially in a high-wage country?

Which software technology offers us the greatest benefits?

How do we prepare our workforce for this journey—and how do we support them along the way?

Where do we start?

# LÖSUNGSWEG

## GOALS



- Maintain flexibility despite high product variety
- Reduce cycle time losses
- Improve energy and process efficiency through automation and robotics
- Make informed decisions through data-driven manufacturing

## PRODUCTION



Organize manufacturing more flexibly using a matrix production system.

This type of "checkerboard production" represents a departure from traditional assembly-line production.

## STARTING POINT



The rollout will begin at the production facility where it makes the most economic and technical sense—that is, where the greatest productivity gains are expected.

## DOCUMENTATION



A change management program and collective bargaining processes support all teams.

- Early communication
- Ongoing dialogue with the works council and the workforce
- A culture of reliability

## SOFTWARE MES FLEX

**FORCE**  
**MES FLEX**

The company chose the modular MES software MES FLEX from FORCAM ENISCO. Key reasons:

- The solution offers a wide range of pre-installed modules, including a real-time planning tool (APS—Advanced Planning and Scheduling), as well as all the necessary interfaces for horizontal and vertical integration.
- Production teams can make data-driven, precise decisions every minute—which is especially important when dealing with a wide variety of products.
- The FORCAM ENISCO team impressed with its extensive experience in shop floor operations as well as in the planned company-wide ERP migration.

# ADDED VALUE

# MES FLEX

**01**

Transparency  
in real time

MES FLEX uses real-time data to lay the groundwork for greater transparency in production: lead times have been reduced by 30 to 50 percent.

**02**

All the  
information at  
your fingertips

Workers can access all documents from the ERP system with the click of a button.

**03**

Fewer errors  
and less waste

The causes of errors and defects are identified in real time, allowing teams to immediately pinpoint where and why specific errors occur and resolve them permanently.

**04**

Smooth order  
processing

Efficient order processing through seamless communication between planning and production. Data exchange is trigger-based and bidirectional: The ERP system reports target times to MES FLEX; MES FLEX reports actual times back (order, work step, material number, setup times, etc.)

**05**

Accurate  
Calculation

Cost calculations have become significantly more accurate: The causes of inefficient processes are identified at any time and can be addressed.

**06**

All Interfaces

When migrating to the new ERP system and integrating third-party solutions and apps, MES FLEX provides all the necessary interfaces between the back office and the shop floor.

**07**

Foundation  
for CIP & AI

All the data needed for the daily continuous improvement process (CIP) and for integrating AI apps is available—for real-time performance analysis, alerts, predictive analytics, traceability, historical evaluations, and more.

# CONCLUSION

The industrial equipment supplier is strengthening its competitiveness through a company-wide digital transformation driven by two strategic levers:

- the global transition to a new ERP system and
- the digital modernization of production with MES FLEX.

The goals of greater flexibility, efficiency, and data-driven decision-making in manufacturing are achieved with the modular MES FLEX solution.

At the first facility where MES FLEX was implemented, we were able to

- to improve turnaround times by up to 50%,
- calculate costs more accurately and
- to ensure seamless communication between ERP and production.

Comprehensive change management and continuous improvement processes ensure employee buy-in. The quality of products and services is maintained during ongoing operations.

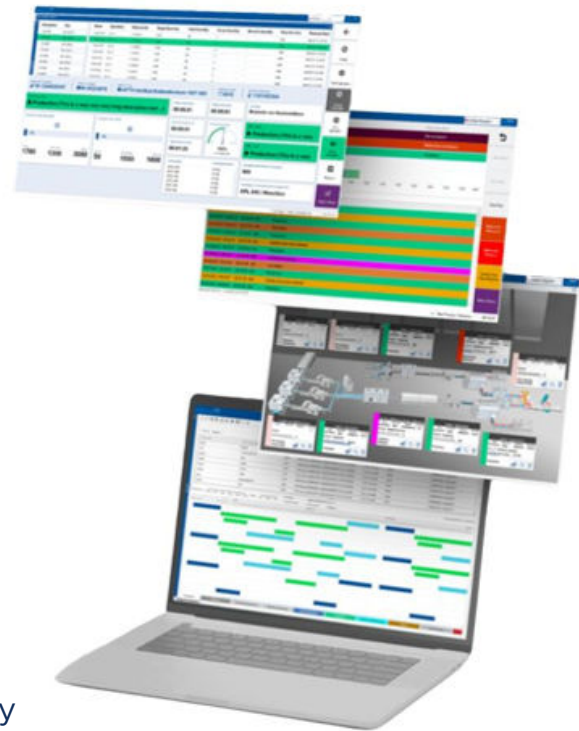
# OUTLOOK

The rollout of MES FLEX will continue on a rolling basis as needed at each plant.

The solution's modular and open architecture allows each production facility to implement the new software in a way that aligns precisely with its own progress in digital transformation.

It will now only be a matter of weeks before MES FLEX is implemented at a plant and helps to boost efficiency and productivity.

The plan is to have achieved 80 to 90 percent of the company's production goals within five years—while production continues as usual.



# SHOWROOM

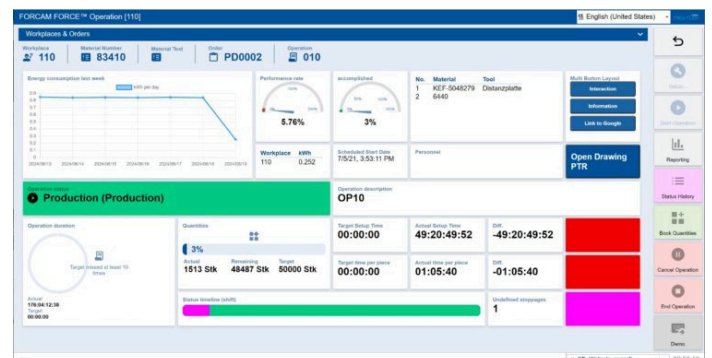
## MES FLEX - Flexible Platform for AI-Ready Manufacturing Management

MES FLEX is the flexible manufacturing execution system for modern production management.

The solution links process information from machines, systems, and sensors with business data such as order, product, and shift information. MES FLEX converts this data into semantically structured production data that accurately reflects the actual production status. This creates a consistent, actionable overview of production operations.

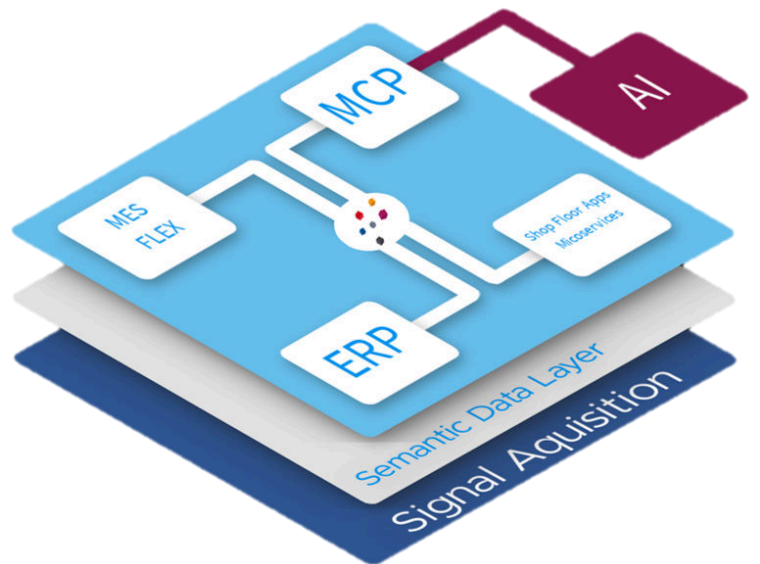
This production data is available both historically and in real time for analysis, automation scenarios, and AI applications. The data can be seamlessly integrated into existing IT and OT system environments.

MES FLEX serves as the foundation for operational and strategic decisions. The solution lays the groundwork for step-by-step automation across the value chain—from production monitoring and process optimization to AI apps and data-driven assistance solutions.



## Learn how MES FLEX provides you with AI-ready production data

From structured machine data to a unified semantic data model—MES FLEX lays the foundation for modern manufacturing management, providing AI-ready data for reliable analytics in shop floor and executive systems.



Learn More



# We look forward to speaking with you!

Our experts are happy to speak with you for a no-obligation consultation. Simply send an email to:

 [customerrelations@forcam-enisco.net](mailto:customerrelations@forcam-enisco.net)

