The EISENMANN Manufacturing Execution System E|MES combines many years of experience in plant engineering with the requirements of a production control level in a modern company.

E|MES is a flexible and scalable MES/production control system which has been specially developed for automated production and which can be variously used from a simple operating and observation system to a complete MES system. E|MES focuses on consistent and transparent support for all production processes.

E|MES includes modules to boost efficiency in production. Data acquisition is realized online by the control systems of the production machines.

Data are evaluated through the E|MES REPORT web client. This ensures that all required data can be retrieved at any time on any computer in the company’s network.

### TOP 5 advantages
- Higher productivity
- Shorter production times
- Transparent production process
- Traceability of production
- Faithfulness to schedules

### Functions within the E|MES automation pyramid

The E|MES production control system from EISENMANN represents the plant control level and process control level in the control hierarchy.

Higher level control functions are mapped directly onto the control system level. In this way, IT functionalities of the process and plant control levels are optimally linked with the control system level.
Operation and monitoring with **EMES VIEW**

The graphic visualization **EMES VIEW** presents the entire plant clearly arranged on three different display levels.

In this way, even complex plants can be presented in a clear and well-structured manner.

The degree of detail presented increases with each further subdivision. This kind of display permits simple intuitive operation as well as rapid access to the required details.
Working time models and shift teams can be planned with \textit{E|MES ADMIN}. Higher lever functions can be switched automatically and at controlled times. Among other things, user management also includes activity logging which records all parameter changes and user actions undertaken via the system.

Similiar to \textit{E|MES REPORT} \textit{E|MES ADMIN} can be used as a web client throughout the plant network.

\textit{E|MES REPORT} provides comprehensive data for analysis, not only for planning, but also for production and maintenance. As a web client, \textit{E|MES REPORT} can be used everywhere in the plant network. Together with \textit{E|MES ADMIN} it provides a powerful tool for evaluation and analysis.

Product ID systems and skid management with \textit{E|MES IDENT}

- Handling RFID-System („Read Only” or „Read/Write“)
- Skid administration

\textit{E|MES IDENT} is used for the administration and simple, transparent handling of mobile data carrier systems. Mobile data carriers are used to identify products within the plant. \textit{E|MES IDENT} manages these systems and assists the administration.

Both - Read Only - and -Read/Write- systems are supported by \textit{E|MES IDENT}. 

Web-based evaluations with \textit{E|MES REPORT}

- Alarm reports
- Process data reporting
- Efficiency reports
- Energy monitoring
- Production reports
- Online language selection

\textit{E|MES ADMIN} for system administration and plant managements

- Definition of shift models, shift teams and plant areas
- User management with activity logging
- Automatic on/off switching
- Database administration and maintenance
**E|MES Modules**

**E|MES CONTROL** Material flow control and product data management

- Material flow control, product data management
- Tracking of material, web-based reports

**E|MES CONTROL** is the central control system controlling the production flow. Administration and management of the system are conveniently undertaken via the **E|MES ADMIN** web client, throughout the entire plant network. Product data management also includes safe storage of all product data within the plant. Comprehensive evaluation and parameterization functions are provided for the management and administration of these product data.

**Data exchange with E|MES CONNECT**

- Link to PLC level
- Connections to customer-specific ERP systems

**E|MES CONNECT** manages all connections with higher level and lower level systems. **E|MES CONNECT** includes a large variety of adjustment and control mechanisms permitting convenient administration of the individual connections. Transparency and security are further enhanced by control over internal and external system communication. The **E|MES CONNECT** communication server supports full hot standby redundancy as well as load balancing, thus ensuring maximum availability and optimum performance.

**E|MES server and database**

Connectivity, fault tolerance, performance

**E|MES** server and database functions ensure flexibility and security with optimum performance and connectivity. **E|MES** supports database cluster architectures. The **E|MES** database archives data in the process, material flow and product database. The combination of **E|MES CONNECT** communication servers, redundancy function and load balancing permits fault-tolerant communication between the system and the automation devices, with optimum performance.
Service

Development and service

E|MES has been consistently upgraded to include the latest technology. Within the framework of an EISENMANN service agreement, E|MES can be checked and serviced regularly from our headquarters.

Remote diagnosis and remote servicing via VPN

E|MES and the plant control system or plant network are connected to the Internet via VPN (Virtual Private Network) for remote diagnosis and remote servicing.

This allows EISENMANN to remedy faults and modify the program via remote servicing, thus considerably reducing downtimes and delays.

Service agreement

An E|MES service agreement can be concluded on request. Simply contact us for further details.