

# EISENMANN

Production Control System





# Production Control System E|MES

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.

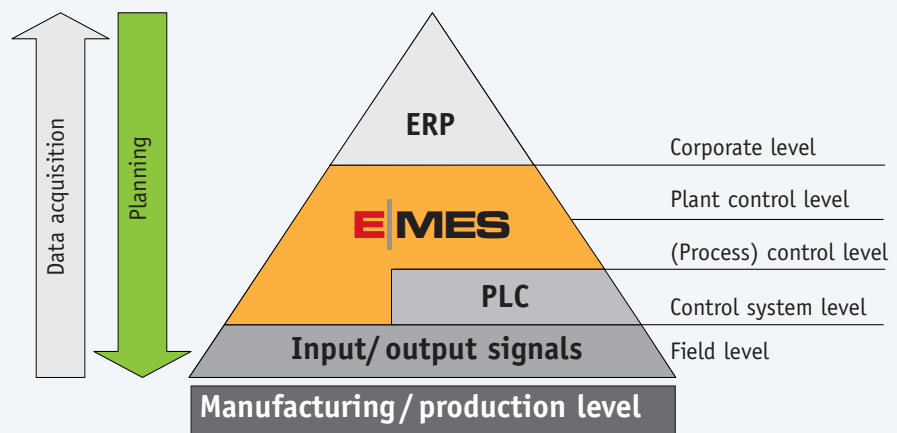
## TOP 5 advantages

- Higher productivity
- Shorter production times
- Transparent production process
- Traceability of production
- Faithfulness to schedules

## Functions within the E|MES automation pyramid

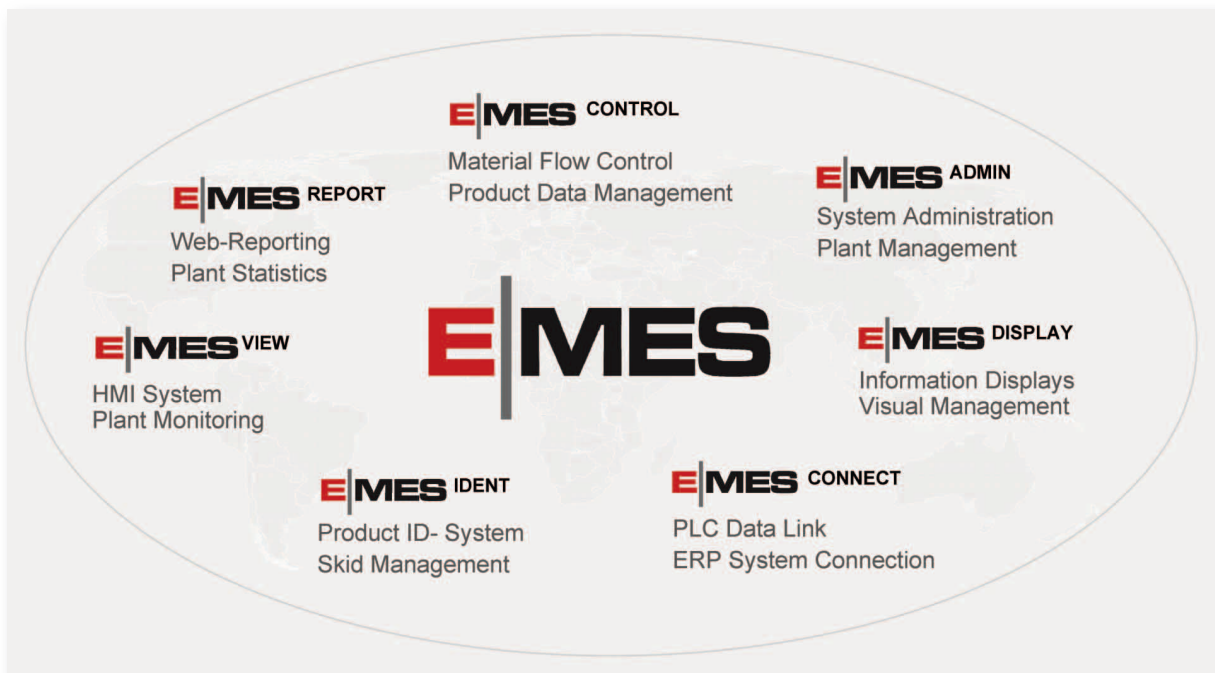
The E|MES production control system from EISENMANN represents the plant control level and process control level in the control hierarchy.

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.



E|MES functions within the automation pyramid

# E|MES Modules



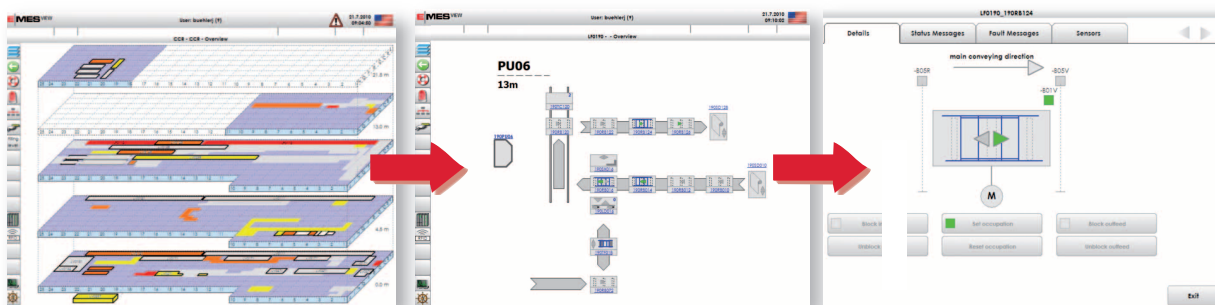
E|MES modules - consistent overall design

## Operation and monitoring with E|MES VIEW

The graphic visualization E|MES 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.

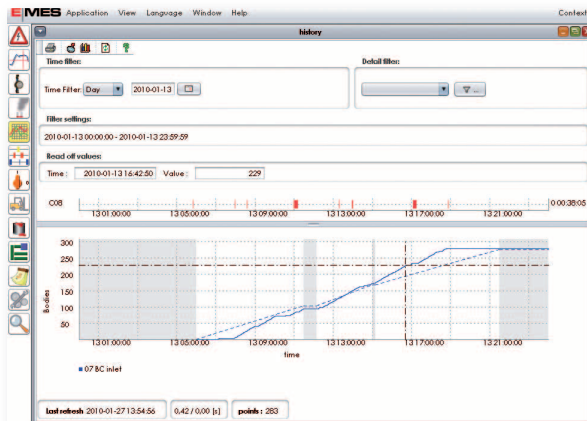
The degree of detail presented increases with each further subdivision. This kind of display permits simple intuitive operation as well as rapid access to the required details.



## Web-based evaluations with E|MES REPORT

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

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



E|MES REPORT production reports

## 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

Working time models and shift teams can be planned with 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.

Similar to E|MES REPORT E|MES ADMIN can be used as a web client throughout the plant network.

Login Name	First name	Surname	Password	Department
meitz	jean	meitz	***	EN
Lang	Alex	Lang	***	EN
test2	test2	test2	***	EN
george	zhou	george	***	EN
zhonghua	hua	zhong	***	SVM Maintenance
zhonghua	hua	zhong	***	SVM Maintenance
xiangyi	xu	xu	***	SVM Maintenance
wangshua	shua	wan	***	SVM Maintenance
shaocong	cong	shao	***	SVM Maintenance
shuliao	liao	shu	***	SVM Maintenance
Nanchao	chao	nan	***	SVM Maintenance
luqiang	qiang	lu	***	SVM Maintenance
shuping	ping	shu	***	SVM Process
geternd	Ludwig	Petera	***	EN
stevan	Stevan	Yi	***	ABB
boberg	Frank	Boberg	***	EN
boehler	Johannes	Boehler	***	EN
waldmann	Waldmann	Horton	***	EN
spare	spare	spare	***	ABB
ghuo	Guntler	Hauptert	***	EN
rossner	Thomae	***	***	EN

System	Area no.	User Level	Status
65	Media no.	3	<input checked="" type="checkbox"/>
66	PVC supply	3	<input checked="" type="checkbox"/>
67	Paint exp.	3	<input checked="" type="checkbox"/>
68	Rectifier	3	<input checked="" type="checkbox"/>
69	UBS_GAD.	3	<input checked="" type="checkbox"/>
70	Printer no.	3	<input checked="" type="checkbox"/>
71	SC/CC no.	3	<input checked="" type="checkbox"/>
72	DVD/PSD.	3	<input checked="" type="checkbox"/>
73	HRK	3	<input checked="" type="checkbox"/>
74	Media stor.	3	<input checked="" type="checkbox"/>

E|MES ADMIN system administration, plant management

## Product ID systems and skid management with E|MES IDENT

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

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. E|MES IDENT manages these systems and assists the administration.

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

# 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.

Skidtype	Skid num.	in plant	Location	Time	Kenn nu.	Code for...	Col
TC (Popcoat skid)	0212	✓	4110.2 (CC ROBOTS FEEDBACK)	2009-08-07 15:52:45	32124545	AS30	2121
TC (Popcoat skid)	0198	✓	6220.1 (DECISION AFTER WAX LINE)	2009-08-07 15:56:16	...	...	...
TC (Popcoat skid)	0325	✓	0000.2 (CLMOS LOAD OWN DATA AFTER)	2009-10-20 09:49:48	45012589	...	...
TC (Popcoat skid)	0136	✓	3735.1 (INTO LZAP 2)	2009-08-07 17:06:20	33521695	G534	BB8
TC (Popcoat skid)	0140	✓	4110.2 (CC ROBOTS FEEDBACK)	2009-08-07 17:14:43	33121291	G534	19X
TC (Popcoat skid)	0194	✓	3750.1 (IN FRONT OF NA PREPARE DETECT)	2009-06-07 16:05:22	33530689	G534	19X
TC (Popcoat skid)	0001	✓	4110.2 (CC ROBOTS FEEDBACK)	2009-08-07 15:12:23	32223389	AS34	BB8
TC (Popcoat skid)	0236	✓	2600.1 (INPUT COLOR BATCHING BUFFER)	2009-08-06 12:25:17	99999995	H...	BB8
TC (Popcoat skid)	0059	✓	6110.1 (IN/OUT AFTER DVD/DECOB)	2009-08-07 14:36:07	99999995	G...	BB8
TC (Popcoat skid)	0305	✓	6220.1 (DECISION AFTER WAX LINE)	2009-08-07 14:07:47	...	...	...
TC (Popcoat skid)	0236	✓	2600.1 (INPUT COLOR BATCHING BUFFER)	2009-08-07 16:30:21	33421445	G534	19X
TC (Popcoat skid)	0081	✓	8150.1 (DECISION AT BT SPOT REPAIR AR...	2009-08-07 16:02:10	32225624	AS34	BB8
TC (Popcoat skid)	0112	✓	6220.1 (DECISION AFTER WAX LINE)	2009-08-07 16:25:56	...	...	...
TC (Popcoat skid)	0241	✓	2600.1 (INPUT COLOR BATCHING BUFFER)	2009-08-07 15:43:37	33121130	G534	3Q3
TC (Popcoat skid)	0020	✓	2120.1 (TRAE OUT DAMAGE PAINT SKIDS)	2009-08-06 09:52:44	...	...	...
TC (Popcoat skid)	0034	✓	3735.1 (INTO LZAP 2)	2009-08-07 17:07:11	04980032	AS30	B46
TC (Popcoat skid)	0008	✓	2400.1 (AFTER UBS OVEN)	2009-08-07 16:22:23	32124170	AS34	BB8
TC (Popcoat skid)	0150	✓	3540.1 (BUT COLOR BATCHING BUFFER)	2009-08-07 16:16:29	32226201	AS34	BB8
TC (Popcoat skid)	0167	✓	2600.1 (INPUT COLOR BATCHING BUFFER)	2009-08-07 15:33:36	33220789	G534	19X
TC (Popcoat skid)	0057	✓	6220.1 (DECISION AFTER WAX LINE)	2009-08-07 14:15:08	...	...	...
TC (Popcoat skid)	0156	✓	6220.1 (DECISION AFTER WAX LINE)	2009-08-07 16:19:50	...	...	...
TC (Popcoat skid)	0159	✓	6220.1 (DECISION AFTER WAX LINE)	2009-08-07 16:25:50	32124613	AS34	BB8
TC (Popcoat skid)	0134	✓	5600.1 (SPOT REPAIR L2)	2009-08-07 15:57:16	33120934	G534	19X

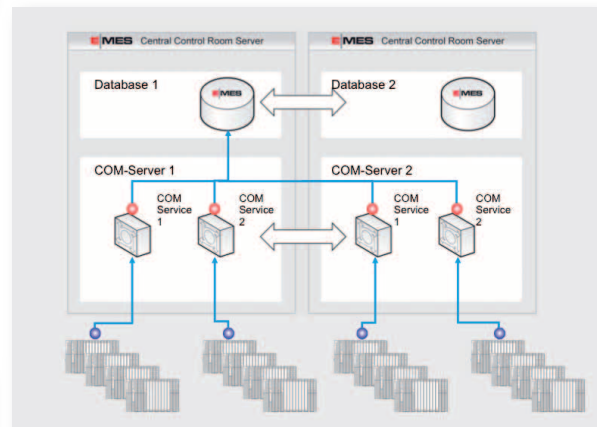
## E|MES CONTROL material flow control, product data management

## 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.

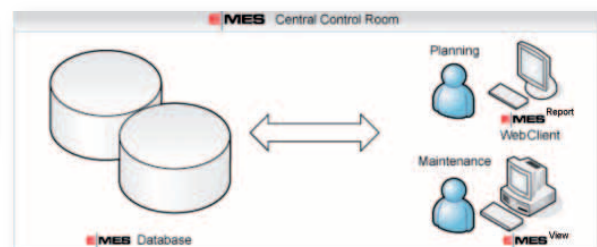


E|MES CONNECT hot standby redundancy and load balancing

## 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.



E|MES server and database

# 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.



# EISENMANN

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