



# Reference Report



MES-Software cronetwork  
at Thomas Magnete GmbH

Automatic process data collection:  
MES supersedes Excel

# Thomas Magnete

increases efficiency  
with automatic  
process data collection

Automobile supplier Thomas has relied on cronetwork MES for process data collection since 2014, displacing Microsoft Excel as their primary software tool. The many effects extend from saving time once spent for data input to accruing new knowledge that drives the optimization of production processes.

Until some 60 years ago, a century of iron ore mining occurred at the site of the modern plant of Thomas Magnete GmbH. Except for some street names, there is not much to remind

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*Bernd Brass, Director of Production Service, Supply Chain Management & Operations*

us of the San Fernando mine site, where now 650 employees of Thomas produce electromagnetically driven products and systems for fluid control. More than 40 production lines produce the innovative pumps, valves, control systems, etc. for diverse application domains on the automotive sector as well as for mobile hydraulics and medical applications, likewise in Herdorf in the Rhineland-Palatinate region of Germany.

## HOW THOMAS MAGNETE BENEFITS FROM CRONETWORK

- :: time saved in production data collection
- :: transparency at production lines
- :: improved quality and currency of data
- :: meaningful information in real time for optimizing production processes

### GOAL: TRANSPARENCY ON THE PRODUCTION LINES

To enable managing the diverse production areas in daily operation as efficiently as possible, already in 2012 the company introduced OEE metrics in the realm of shop floor management. Bernd Brass, Director of Production Service, Supply Chain Management & Operations at Thomas, describes the situation then: “We wanted to introduce transparency in our production lines in order to better understand processes and optimize them. Therefore we began to collect classical production metrics such as output and scrap manually via production monitoring sheets.” These measures provided initial insights, and Brass and his team could begin to optimize internal processes.

However, the limits of the new method soon emerged. In order to achieve meaningful information, employees manually collected production data on an hourly basis. Further, they needed to transfer the data to Microsoft Excel in order to evaluate and discuss these on the following day. Although added value was apparent, the necessary effort was simply too great. Furthermore, there was no access to data in real time, and the data were also inadequate in terms of quality, meaningfulness and correctness.

- 1 Marcel Sanchez-Martin, Head of Lean Management & Business Process Management at Thomas Magnete GmbH
- 2 cronetwork is in daily use at 36 production lines.
- 3 Thomas Magnete GmbH develops and produces with the help of cronetwork products for the automobile, mobile hydraulics and medical sectors.
- 4 Bernd Brass, Director of Production Service, Supply Chain Management & Operations
- 5 Over 650 employees work at Thomas Magnete in Herdorf, Germany.



### SEARCHING FOR THE RIGHT MES PARTNER

"The original method gave us important insights, but we soon encountered various limits. We needed to be able to automatically collect and evaluate process data. The logical consequence was the introduction of an MES, including machine data collection," reports Bernd Brass regarding the decision to invest in software-supported production optimization.



Brass explains the Thomas decision for cronetwork MES by Industrie Informatik based on multiple factors: "We were looking for a vendor who could – in the long range – provide the overall MES service spectrum instead of specializing in only some sub-domain. Further, we needed a ready standard interface to our current ERP system, customized evaluation options, and an optimal release policy. All this pointed to Industrie Informatik, which provided the maximum in investment security."

Currently we have 36 production lines equipped with cronetwork terminals where operators report operation feedbacks, enter disruption reasons, and access important data. Marcel Sanchez-Martin is responsible for lean management and business process management at Thomas; he actively supported the introduction of cronetwork MES: "After a one-year pilot phase on three lines, within two years we equipped 30 additional lines with machine data collection and plant data collection. In the pilot phase we learned a great deal and carried our experience into subsequent projects. Today, when we operationalize a new line, it is automatically connected to cronetwork machine data collection."

### THE RIGHT DATA AT THE RIGHT TIME AND PLACE

The company enjoys many positive effects. In addition to massive time savings for production data collection, above all the currency and quality of data play an important role. Here not

only are machine stops immediately detectable; the respective operators also receive important information about disruption reasons, and this information in turn can be used for further optimization measures. Furthermore, daily shift meetings with team leaders, foremen, schedulers and quality staff were previously based on data that were at least a day old; their analysis was static and thus difficult to evaluate. "Today, at our shift meetings we view real-time data and set measures on the basis of these. This aspect has also contributed significantly to improving efficiency. Furthermore, we can extract exactly the data that we need now, which gives us a new form of dynamics in production," Marcel Sanchez-Martin describes the added value of the installation.

### HEIGHTENED EFFICIENCY AND RESOURCE DEVELOPMENT CREATE NEW JOBS

To ensure the success of the MES project, Thomas strived from the start to win the acceptance of its employees. Already in early planning phases, the workers council was involved in considerations. In addition, there were info events on a small scale so that employees could openly express their reservations and questions. Introduction of the project in stages also contributed to reducing trepidation. "Implementation of cronetwork MES and the improved efficiency that resulted created new resources. This enables us to better manage the strong growth of our company," summarizes Bernd Brass with satisfaction.



Products: electromagnetic and fluid actuator systems for the automotive and mobile hydraulics industries as well as medical technology equipment

Staff: 650

cronetwork modules: plant data collection, machine data collection, process data collection, incentive pay, work center monitor, PIDO, KPI, OPC

Additional information online at:

[www.thomas-magnete.com](http://www.thomas-magnete.com)

[www.industrieminformatik.com](http://www.industrieminformatik.com)



## Scheduling Board

Graphic scheduling for your production: live, fast and flexible

## Plant Data

Low feedback effort for a real-time view & traceability

## Machine Data

Correct data & information automatically

## Time & Attendance

Clear employee administration and flexible scheduling

## Business Intelligence

Analyses & evaluations with real-time information

## Mobile Applications

Enter and evaluate data from any location

## Technology

Benefits for software owners and users

# cronetwork MES: The data hub for the Smart Factory



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