



Industry 4.0: Machinery Interconnection for Rubinetteria Mora

Rubinetteria Mora

Goals

- Machinery Interconnection
- Automation of data collection
- Automation of the sending of recipes to the machines at the start of the job order
- Downtime tracking
- Traceability of production
- Compliance with legal requirements for the Italian National Industry 4.0 Plan

Solution

Based on a system consisting of highly modular software solutions for Industry 4.0 that allow interconnection with the company's MES. Thanks to Part Program Manager it is possible to manage all the processing configurations differentiated by machine and by article.

In addition, Production Controller Lite has been implemented for easy management of the flow of orders.

Resources

iDag
Fabbrica Digitale 4.0
Production Controller Lite

The Challenge

Rubinetteria Mora specializes in the production of pressure gauge taps and coils, glass thermometer enclosures, drain cocks, level indicator assemblies and a wide range of calibratable pressure relief valves.

The need is to **automate data collection** in the production department. It is essential to interconnect the machinery, which will undergo technical expertise in order to benefit from the **tax incentives** offered by the **Italian National Industry 4.0 Plan**, with the company database to **know the machinery status** and the **piece counter progress**.

TOOLS for SMART MINDS is required to read, collect data from machinery and automatically transfer it to the company database.



Rubinetteria Mora products



CEMBRE is a leading European company in designing and manufacturing electrical connectors and accessories for cables, tools for their installation, cable glands, industrial marking systems and supplies important markets in the railway, industrial quadrastic and utilities sectors.

The company, founded in 1969, is based in Brescia. Its offices, factories, warehouses, laboratories and services are spread over an area of 60 thousand square meters, set in an area of about 120 thousand square meters.

The rational organization of the spaces has made it possible to create comfortable working environments in

safe and efficient conditions. CEMBRE has over 750 employees distributed in the Italian headquarters and in its five branches in France, Germany, Spain, UK and USA.

Attention to quality, technological innovation and customer orientation are the main objectives that the company focuses on with commitment and passion, through a team of highly trained and qualified people.

The company offers a catalog of over 12 thousand articles and there are over 200 patents and patent applications filed.

www.rubinetteriamora.it/

Rubinetteria Mora

Loc. Molino Rastelli, 24 13018
Valduggia (VC) ITALIA

Solution

To meet the needs of Rubinetteria Mora, T4SM proposed a **complete, customized and scalable solution**, achieving all the objectives set. The softwares for Industry 4.0 already developed and tested at length in T4SM were used: iDaq, Digital Factory 4.0 and the new solution Production Controller Lite of the Digital Factory 4.0 Suite.

All the proposed solutions make the work of the entire company more efficient.

iDaq automatically acquires, records and analyzes data in seconds. With its advanced diagnostic functions in real - time, it allows users to immediately know the status of the machinery and any anomalies in order to promptly solve the problem.

In order to have full traceability of the production process and a more complete view of what is happening during machining, all available functioning parameters are measured from the interconnected machinery. This allows the entire company to choose the best working strategy.

Digital Factory 4.0 facilitates the real-time control of the production plant, allowing for a **visualization**



Production Department



TOOLS for SMART MINDS (T4SM) is a system integrator that develops software solutions for manufacturing companies.

T4SM is Alliance Partner of National Instruments and the development team consists of Certified LabVIEW Architects (CLA) who have long experience in LV Real-Time Programming and LV-FPGA.

T4SM designs from scratch to high-quality solutions easily integrable with third-party products, which help customers to shorten time-to-market of their systems.

T4SM uses the AGILE methodology for the development of software projects and the co-design of applications with immediate benefits for customers, helping them to gain a competitive advantage over competitors.

For technical support and product information:

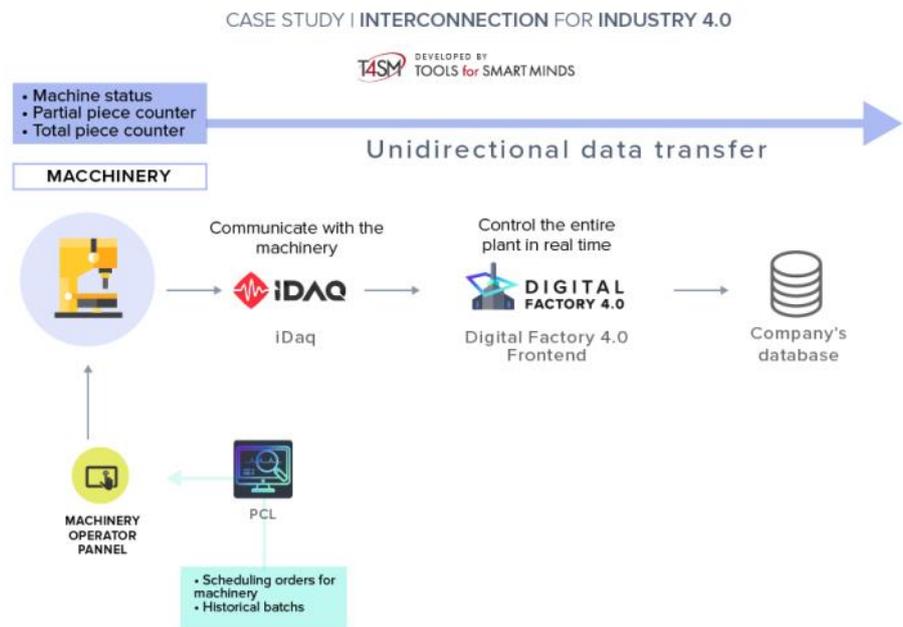
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simple and intuitive use of all process data.

Thanks to the **versatility** of Digital Factory 4.0, communication between the machinery, the company database and the operator panel on the machine is **very fast** and **more efficient, facilitating** the work of all personnel.

Production Controller Lite allows to manage in a simple and intuitive way the **workflow** of the **entire company**: with a single solution it is possible to start a batch, specifying the number of pieces and the article to produce, visualizing the trend of the started batches and planning the production in the best way.



Industry 4.0: diagram of machinery interconnection for Rubinetteria Mora



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Benefits and Results

Having achieved its objectives, Rubinetteria Mora has obtained considerable benefits:

- **Work simplification for the entire company** thanks to easy and intuitive interfaces, making users productive right away.
- **Ability to easily interconnect other machines** thanks to the solution's modularity and scalability.
- **Human error reduction and paper forms elimination** with the digitization of process data, which allows immediate consultation of the acquired and analyzed information to all personnel, improving production efficiency at all levels.
- **Production tracking with a click** allows an instant visualization of all the desired information, having the guarantee to have it always available even in time.
- **State incentives of the Impresa 4.0 Plan:** all the requirements of the legislature have been met in order to access the tax benefits.



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Client's Feedback

"We are very satisfied with our experience with T4SM, we have been able to see the great experience and professionalism in every step of the interconnection of our machinery.

The staff has always been extremely helpful, contacting directly the machinery manufacturers and illustrating with the greatest precision the steps taken.

system for a more efficient management of our company, which allows us to monitor production and consumption".

*Dr. Elisa Mora
Sales Manager
Rubinetteria Mora*