



Positive changes in Rockwool

Proficy CSense's Troubleshooter advances Rockwool's capacity for process analysis

About Rockwell

The ROCKWOOL Group is the world's leading supplier of innovative products and systems based on stone wool, improving the environment and the quality of life for millions of people.



“A year ago, one of my employees enthusiastically told me about a software system for process analysis, Proficy CSense's Troubleshooter, which he discovered at a seminar. It was his opinion that it was exactly something like that, we needed in our department.”

— Mogens Heine Larsen,
Section Manager, Process & Quality Service,
Rockwool International A/S

Our division is called Process & Quality Service, POP, and consists of eleven highly experienced process experts, all working for Rockwool International in Hedehusene. Half of them are based at our factories around Europe, travelling to our various production lines in the world. The experts' tasks include helping our subsidiaries to solve problems with raw materials, processes and quality controls. Our consultants are all highly experienced, almost as if they have a built-in Proficy CSense, which decreases the daily needs. However, there is a need for new analytical tools that can provide new insights and help to “adjust myths”. The tool should not require deeper mathematical insights or to be difficult to use. We have now found all that we look for in Proficy CSense's Troubleshooter, working with GE Digital partner, Novotek.

New Usage

We expect to make a great use of Troubleshooter to a whole new production process in our new factories, while at same use it in our existing environments. We also have a large ongoing project for automatic control of a complex production process, including environmental facilities. An unexpected and very interesting use, currently being investigated together with Novotek, of Proficy is the possibility to simulate a production process in a simulator. This can be used for training our operators before they control the actual process. The “proof of concept” has been

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— Mogens Heine Larsen

completed and we will continue by presenting the idea to the Directors who have the overall responsibility for training in correlation to introduction of new factories and production lines.



Solutions:

Process optimization

Benefits: *Better analysis and optimization of processes*



Rockwool, A Global Leader

The Group is amongst the global leaders within the insulation industry. Together with other building-related products such as acoustic ceilings, cladding boards and consultancy business, the Group ensures energy efficient and fire-safe buildings with good acoustics and a comfortable indoor climate. We create green solutions for the horticultural industry, inventive special fibres for industrial use, effective insulation for the process industry and marine and offshore as well as noise and vibration systems for modern infrastructure.

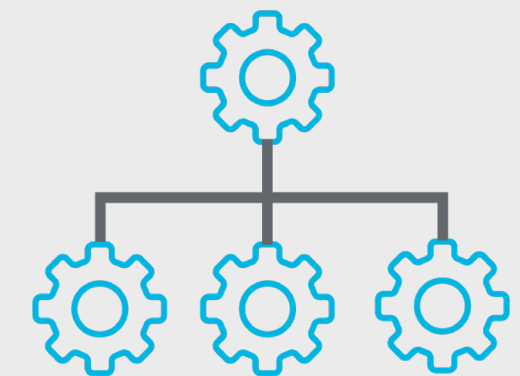


The software has paid for itself

We have chosen a setting where Proficy CSense's Troubleshooter is on a server, accessible to all consultants. However, only one user at a time can access the information, on the one license available. Getting all data was challenging at first, but once we got everything in order; it was easy to transfer between our systems. There is no doubt that the software has paid for itself as we got better analysis and optimization from our processes.

The possibility to analyze data from production has evolved from simple trending to a complete overview of the significance and correlation of these data. Proficy CSense is a tool that through the application of advanced mathematical algorithms, at the same time being easy for the user to use, gives an insight into the process that previously has not been available.

**Mogens Heine Larsen, Section
Manager, Process & Quality Service,
Rockwool International A/S**



Use your industrial data in an easy way

Proficy CSense enables engineers and operators to use the data from production to avoid mistakes and create simulations.

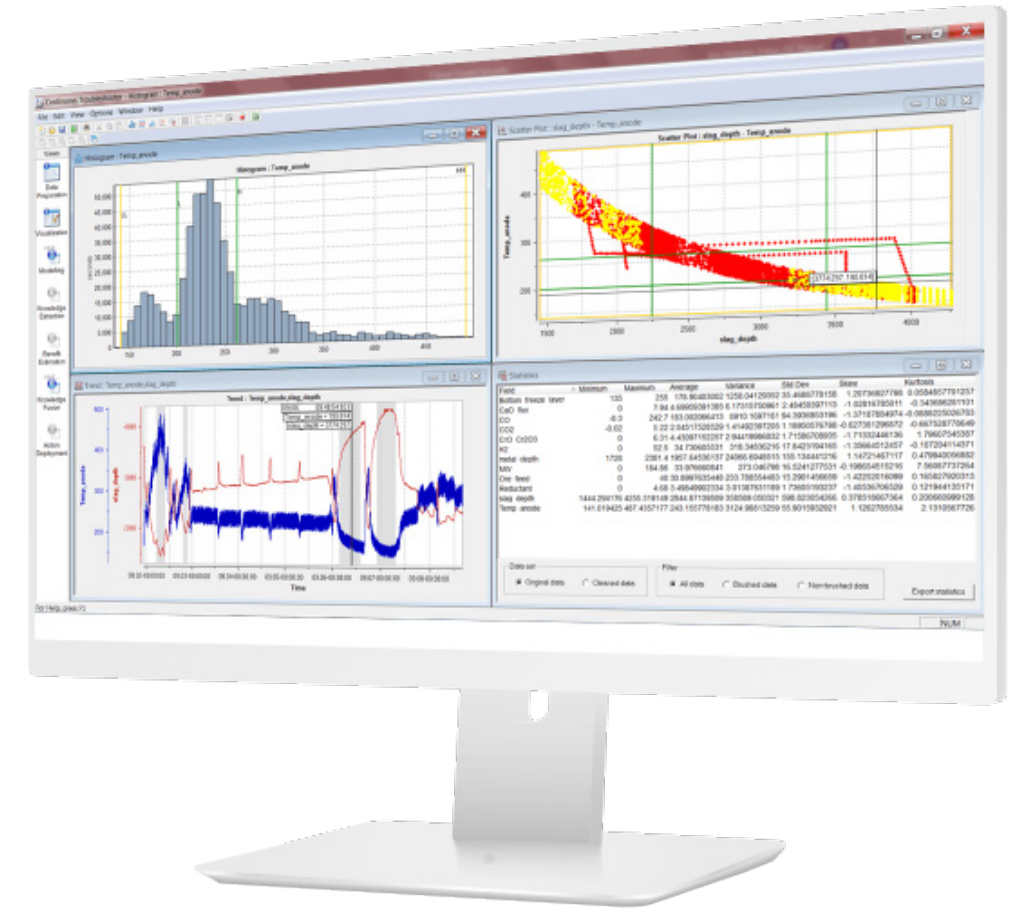
The result is knowledge of how and what is needed to improve the quality and yield of the production process, by using historical data, hence knowledge, intelligently to make it possible to identify the causes of the problems and variations in the process.

Prevent Recurring Problems

With Proficy CSense, you can now prevent future problems from happening by using modeling and thereby the ability to predict how the process will be developed. Proficy CSense can be used in wholesale, manufacturing and continuous process.

Numerous Usages

With the use of Proficy CSense and Troubleshooter, you can visualize process problems and their causes through modeling and simulation based on historical data. Proficy CSense becomes a digital Process Twin facilitating process intelligence and optimization. It requires knowledge of the actual process, but no knowledge about modeling, PCA etc., as this is not visible to the user.



Proficiency CSense works with most historians on the market. Even data from relational databases and text files can be used. This gives the users more data to work with in the multivariate analysis of historical data.

With Proficy CSense's Troubleshooter you can:

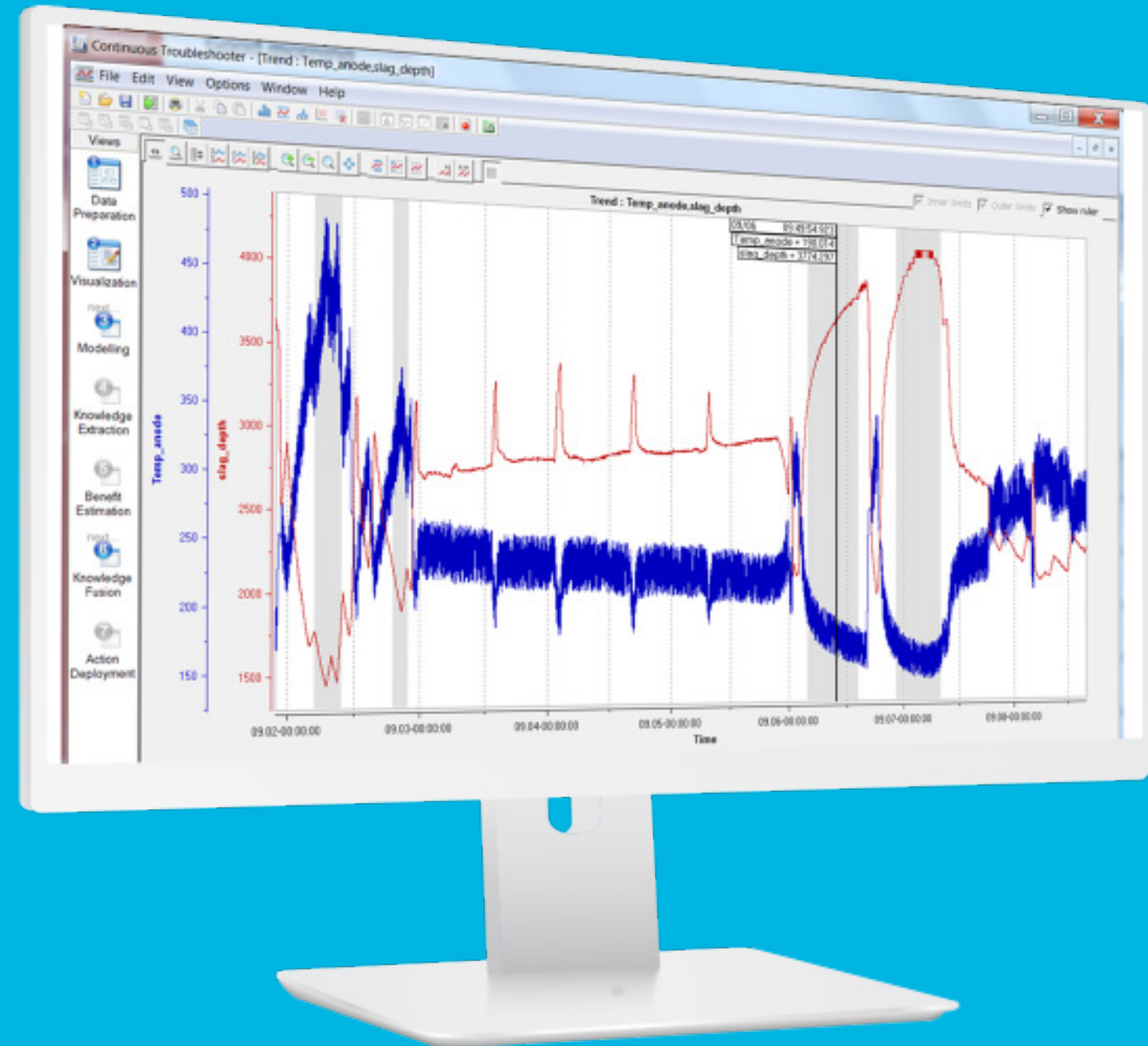
- Identify the likely causes of process problems and variations
- Identify process rules automatically based on historical data
- Identify correlations between variables
- Estimate the benefits of an online real-time solution
- Build and simulate the real-time solution

After the collected data is transformed into intelligent knowledge, it is used to find causes of process problems and variations, and to take real time corrective actions.

Decision support for operators

Proficy CSense can, by using the models, provide feedback in real time on process events and thereby avoid discrepancies and errors. You can, step by step, expand the decision support for operators—directly integrated in the iFIX and CIMPLICITY HMI/SCADA screens or other HMI/SCADA software. As these decisions and guidance have proven its value, you can continue to expand with real-time control.

With Proficy CSense, we can ensure that operators and process engineers get immediate insight into the process status, the rules that drives the process in its current status, as well as identifying the process values that have the greatest impact right now. This is possible through a specially developed real-time component and provides a unique opportunity for operators and process engineers to constantly be alert and to avoid errors. The loop has been closed and we have now enhanced the intelligent HMI/SCADA system.





About GE

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

Contact Information

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