

Equipment and Plant Maintenance: Using MindManager at Messfeld GmbH



The Austrian company [Messfeld GmbH](#) provides innovative solutions for maintenance: from vibration measurement technology to infrared measurement technology. The company supports its customers with forward-looking concepts and has specialised in particular in the field of condition monitoring and energy monitoring, in which it has already made a name for itself thanks to its user-friendly solutions.

THE CHALLENGE

The most important factor in the maintenance of machines, industrial plants or other technical products is a detailed status analysis: only when the current status has been fully determined can resolution methods be found and maintenance measures initiated. It stands to reason that it is difficult to have an overview of all the components, processes and dependencies of an industrial machine.

Jutta Isopp, who is an engineer, had a pioneering idea for how to tackle this predicament: she is the managing director of Messfeld GmbH and also works in academia as a lecturer. This is where, more than ten years ago, she came to know and value the innovative process of mind mapping. Her longstanding experience with this method inspired her to adapt this form of presentation for analyses carried out in the field of maintenance.

THE SOLUTION

At Messfeld, information mapping using MindManager has since become an integral component of the various projects. "When deciding on the right maintenance measures to introduce, a longer observation phase is always required beforehand," states Jutta Isopp. Central to this, in her view, are three important themes that must be taken into account in the preliminary stages: a technically viable method, the greatest level of sustainable success that can be expected, and cost-effectiveness. But as she explains, to even begin answering these questions, you need to delve into the depths of the machine or plant.

"We create a sort of organisation chart of the machine, in other words, we dissect the structure down to the smallest cog and present this overall image in the form of a map using MindManager. Then we can carry out assessments at the different levels, for example by evaluating whether a particular machine part is at risk of an above average level of wear and tear, or whether recurring errors

CHALLENGE

Maintenance of machines and industrial plants requires detailed knowledge of the relationships among them and of their components. Measuring, documenting and analysing this information requires not only engineering expertise, but also a reliable process.

SOLUTION

Jutta Isopp, managing director of the consulting firm Messfeld GmbH, uses her knowledge of mind mapping methods and applies this to the demands of the world of maintenance.

RESULT

Using MindManager, she is able to access the individual organisational chart of a machine and derive from this the monitoring tasks and measures that need to be carried out. In many cases, the solutions that Messfeld provides to its customers are also based on the map format in order to provide a greater degree of transparency and clarity.

„MindManager makes it a breeze to depict the organisational chart of a machine, enabling us to perform the appropriate analyses on that basis with no issues.“

Jutta Isopp, Managing Director, Messfeld GmbH

or other anomalies arise," explains Isopp. One part of this, "Failure Mode and Effects Analysis" (FMEA), is an aspect of the maintenance industry that forms the basis for the individual resolution methods being developed; Messfeld records the information gathered from this analyses in a central map.

Here, the dependencies of the various components can be visualised, while additional information is added and processes are mapped. As Isopp continues: "The biggest advantage of using MindManager is the clarity. You can see everything at a glance and it's really easy to analyse subareas and minor aspects via the filter functions - strictly following the Pareto principle: less is more!" Messfeld has even developed its own risk matrix based on MindManager. "It provides us with a clear illustration of which areas of a machine are at low risk or where there is a high level of risk. For this, we use the integrated MindManager's calculation functions," explains the managing director.

THE RESULT

Now Isopp and her colleagues are not just using the software on a regular basis for maintenance, but also as an essential tool in their day-to-day work. For example, the tree structure allows them to map the inside of a machine or its workings in an optimal and easily understandable manner. The employees at Messfeld are proud of the innovative customer solutions that have already been implemented on the basis of MindManager.

And even though some customers ridiculed this unusual form of presentation at the start, branding it as "not technical enough", many Messfeld customers now use a map to determine the maintenance measures they need to implement. Ultimately, it is a question of carrying out the best possible analysis and introducing the correct measures at the right time.

