

GISLER - THE DIGITAL SUMMITERS

The consistent path
to digitalization



Careful, sustainable growth so that the business is preserved for the next generation

Innovations have always played a major role at Emil Gisler AG and GIPO AG. The rapidly expanding, dynamic mechanical engineering companies in the canton of Uri in Switzerland not only rely on production that, with new Messer machines, is more efficient. They are also consistently pursuing the path to digitalization. With OmniFab from MesserSoft, the company positions itself ideally for the future.

Extensive task definition

Within the framework of this future project, the flame cutting and bending center is of particular importance. Twelve employees work shifts in the state-of-the-art production and assembly halls. With an in-house production share of ninety percent, the oxyfuel and plasma cutting systems must offer a high degree of flexibility. Large work pieces with areas of 3,500 mm x 16,000 mm and thicknesses up to 300 mm have to be cut.

The demands on shapes and dimensions are very high. New machines and modern digital processes should help to make production more cost-efficient and competitive in the future.

In addition to the specifications for the new flame cutting machines to improve quality and throughput, increase process reliability, minimize wear part costs and ensure compatibility of the machines, the innovation plan included high demands on software.

Strict selection criteria

When selecting suitable suppliers for this ambitious project, a number of strict criteria had to be met. "The top priority for us was the quality of service support, especially the geographical proximity and the short reaction time of the suppliers," explains Kari Gasser, CEO of Emil Gisler AG. "Direct access to the manufacturer and easy communication are also important to us. Added to this is the conversion of the objective into a task-oriented solution. In addition, we were looking for a solid and innovative supplier", Gasser continues."

SOLUTION

Versatile cutting system and digital transformation

With two MultiTherm® flame cutting machines, that support a variety of equipment options, Gisler can now cover a wide range of current and future applications. The versatile cutting machines have been equipped for oxyfuel cutting with one or two ALFA torch heads respectively, as well as one plasma torch each vertically. In this way, they work efficiently and meet the highest demands on quality and productivity.

"By using the new machines, we were able to significantly reduce the costs for personnel and wearing parts," says Department Manager of the Flame Cutting and Bending Center Rafael Imgrüt happily. "We have also reduced the proportion of external work with the help of the MultiTherm® machines."

Digitalisation - tailor-made

Gisler uses the software suite OmniFab and the CAD/CAM software OmniWin. "It was important to us that the systems work hand in hand across the value chain of the company. That's why we chose OmniFab," explains Imgrüt. "Our order data from the ERP system is available in OmniWin. Results from production run back into the ERP system seamlessly together with the order data."

OmniFab is the tool that companies in the flame cutting industry use to drive digital transformation. The OmniFab suite is used for production planning, control and monitoring by >refining< the data.

The OmniFab ERP Connect module connects to the AMS ERP system. This enables the automatic exchange of order data from AMS to OmniWin and an automatic import of

drawings from the design department. The feedback of production data back to the ERP system is also automated.

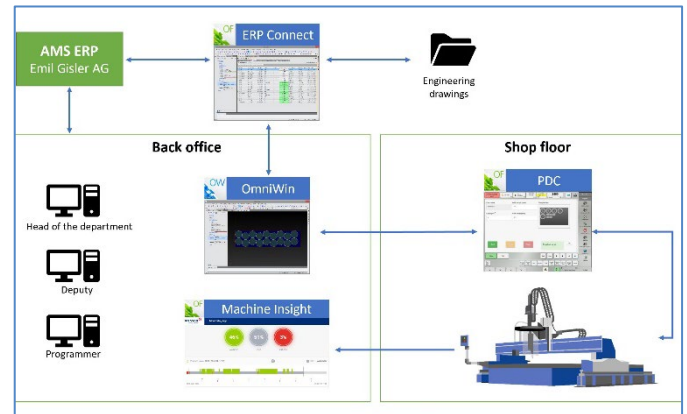


Figure 1: Final implementation with OmniFab and OmniWin

OmniFab Production Data Capture (PDC) allows the feedback of production data directly from production back to OmniWin. It achieves this by integrating with the Global Control system connected to the machine. OmniFab PDC generates complete, up-to-date and reliable data in the production control system on set-up, production, loading and unloading times, number of parts produced and scrap.

OmniFab Machine Insight provides the production area with important information about the flame cutting machines during operation. Real-time machine monitoring provides status and data on the connected machines.

IMPLEMENTATION

Knowing what's going on

The introduction of the software ensured maximum transparency in operations management, production planning and control, work preparation, machine operation and service and maintenance at Gisler.

Thanks to the automatic import of order data from the ERP system and the simultaneous import of the corresponding drawings from the design department, the manual creation of orders and manual import is no longer necessary. Also the >logoff< has been accelerated considerably.

The machine operators select the nesting plan on the machine in OmniFab PDC and report it as >ready<. Missing parts are recorded directly at the machine and are immediately visible in the nesting plan in OmniWin. The production data of the returned nesting plans are automatically reported to the ERP system, so that here too, no manual intervention is required.

RESULTS

Processes optimized

"We now know how things are going in our production and are turning the right screws. Transparency and traceability are the results," says Gasser happily. "We recognize errors faster and initiate measures to eliminate them at an early stage. Omni-Fab PDC has enabled us to save sixty percent of the workload in order entry and deregistration," adds Imgrüt. The team now always has an overview of all work orders and knows what is pending and what is finished.

With the new Messer machines and software, the production department has succeeded in optimizing processes, saving time and taking advantage of the many technical possibilities to increase productivity. Digitization with its automatic data exchange ensures less paper and prevents errors.

For users and machine operators, this means process reliability, up-to-date information in all systems at all times, improved user-friendliness and better workflows.



Caption: Department Manager of the Flame Cutting and Bending Center Raffael Imgrüt, © Emil Gisler AG

OUTLOOK

'Definitely yes', Gisler would opt for this solution again.

"We have already taken a big step with the ERP connection and hope for further work simplifying the areas of operating and user tools," summarizes Imgrüt. In addition to the expansion and modernization of the production halls, he and his team are also looking to further optimize and expand contract manufacturing.

When asked about the cooperation with Messer Cutting Systems and MesserSoft, Imgrüt particularly emphasizes the customer-oriented and friendly approach. "We feel the customer orientation," he adds with a smile. The service support, to which the company attaches great importance in terms of

location, reaction time and support with the software, is also exemplary. "Definitely yes", they would again opt for this solution.

It is important for the success of such a project to take a close look at the supplier's company structure, in particular its range of products, solutions and broad positioning. Equally important, however, is service friendliness in terms of adaptation to customer requirements, support, maintenance, personal contact and the fast and professional implementation of the solution.