



Smart factory raises productivity by 30% at GS Metaal



Achieve clarity and structure in production by simplifying and synchronising information flows and eliminating purely paper-based systems. Single-source-of-truth solutions add transparency and ease the burden on staff, with all key data at your fingertips in real time. Scheduling becomes simple rather than a time-consuming chore marked by uncertainty.

The ROI



30%

**INCREASED EFFICIENCY
AND PRODUCTIVITY**
through transparent processes

20%

**IMPROVED PRODUCTION
PROCESSES**
by reduced throughput times



INTEGRATED DATA

Provision of all data
through one 'single source of truth'



The challenge

Error-prone, manual and almost intransparent production planning



Medium-sized enterprises represent the lion's share of production and engineering companies in Germany. But as is often the case in traditional sectors of industry, production planning can lack transparency due to a large number of manual processes – which are prone to (human) errors. Making heads or tails of processes or gaining an overview can be time-consuming, often causing employees headaches when simply trying to track production status or progress with orders. It's also common to find staff dashing around the shopfloor with manual logs and planning documents.

- Large number of paper-based processes with little information logged as reusable data
- Different individuals responsible for tracking and updating plans manually
- Difficulties checking production status and order completion levels

The engagement

Consultation on concept development and software implementation



As one of the ground rules of the brief issued by the metal sheet production company was that no extra staff should be needed, the first step taken by GFT was to assess and understand the current situation and the roles played by individuals in managing both the day-to-day shopfloor processes and live manufacturing flows. As well as scrutinising the current decision-making processes, this involved walking step by step through each production process, capacities, planning systems, data sources, manual tasks and of course the underlying information flows – almost all of which currently revolved around traditional paper-based processes.

Making things too complicated was the last thing the client wanted, so drawing on its experience in enhancing yet simplifying processes, GFT proposed a handpicked selection of powerful production solutions, primarily based on XETICS LEAN:

- A single-source-of-truth package to simplify and synchronise information flows and provide real-time access to data
- Consultation and tangible support in optimising machine capacities to empower staff to manage the large number of product variants and complex client portfolios (batch sizes of between 1 and 800 units)
- Paperless production: presentation of all key data on orders, batches and machine status using XETICS LEAN to replace complex ERP documentation
- A tracking and tracing module for digitalising production orders from start to finish
- Software to optimise indirect processes and reduce the number of time-consuming manual tasks occupying valuable human resources

The benefit

Enhanced production utilisation rates through introduction of a software solution



As soon as the new systems went live, everything was in place for productivity to shoot up by around 30%. As well as the 'hard' benefits of reduced throughput times – largely up by 20% due to the improved planning process and small batch sizes – staff immediately enjoyed 'soft' benefits and found it easier to

- Track and monitor orders
- Pinpoint potential errors and take evasive action using PDCA procedures
- Minimise work in progress thanks to improved planning and machine utilisation rates
- Gain an instant, real-time overview of all processes, orders and machines and thus enhance transparency
- Significantly reduce fire-fighting, unexpected reprioritisations and time-consuming 'panic button' situations

As a result of the unique combination of consultation and advanced production systems introduced with the support of GFT, the client also laid a foundation for continual improvement processes. Introducing digital shopfloor management has allowed staff to tap into the right information in the right places – now also in the right (digital) format. The client has been empowered to use its valuable human resources more effectively, thinking and planning around corners and changing the way the factory operates – now and in the future.



“I think the cooperation with GFT will in a way reinvent our company, be ahead of others in this industry. So it will help us make our processes more lean, make our factory shopfloor cleaner. It will help us getting more digital – we are working on a situation where we produce paperless.”

└ Jan van de Maat,
Managing Director GS METAAL