

Supply chain transparency is the key to continuous improvement at VDM Metals



A big step towards proactive production planning

"Supply chain performance analysis allows us to continuously implement further improvements."

Marcell Sehner,

Senior Vice-President of Digital Transformation and Services (and former Senior Vice-President of Supply Chain Management)



Over the past few years, the global metals producer VDM Metals successfully made the challenging switch from reactive to proactive production planning. This has led to shorter lead times and a notable improvement in service, with much less inventory needed. It's a remarkable achievement, especially in view of VDM's very complex production network.

"Supply chain transparency has been the key to making the switch, forging the path to continuous improvement," says Marcell Sehner.

VDM Metals is a global producer of high-performance alloys, including nickel, cobalt, and zirconium alloys. Markets include the chemical process industry, oil and gas, aerospace, electronics, automotive, and energy. In Germany, VDM Metals operates one upstream facility in Unna, where the melting shop is located, as well as four downstream facilities in North Rhine-Westphalia, producing bars, billets, shapes, sheets, strips, wire, and welding consumables. In the United States, the company operates an upstream facility in Florham Park, New Jersey, and a downstream plant in Reno, Nevada. In February 2026, VDM Metals broke ground on a new facility in Unna for high-purity metal powders for additive manufacturing.

Processes are extremely complex, involving numerous discrete production stages, deploying more than a hundred different alloys, and producing relatively small, highly specific batches. The fact that some production stages are carried out by external partners makes planning even more complex.

Reshaping the organization

"Production planning, production execution, and customer requirements are closely interrelated," Sehner explains. "We aim to increase our delivery performance and reduce lead times to better fulfill our customers' expectations. We knew it was essential to implement a new production planning system, but we also identified the need to reconfigure our organization from a functional to a process-oriented one."

Increasingly complex planning

This organizational change of perspective further emphasized the need for improved planning, which was challenged progressively by a series of market developments. For Sehner, this means that global competition has increased significantly, putting pressure on resources: "We have to reduce costs, become more efficient and reduce inventory, among other things. Added to the requirements to cut lead times and boost delivery performance to improve service to customers, it felt like a Catch-22. How might we reconcile these conflicting aims?"

The solution was to meticulously fine-tune and optimize the entire supply chain. "We knew that we could make significant improvements in coordinating and aligning the different production stages," according to Michael Schickentanz, Head of Operations Planning & Master Data Management.

Bottlenecks revealed, opportunities seized

The breakthrough came when VDM Metals met with OMP. A project was launched to model the entire value chain in OMP's Unison Planning™ solution, including every aspect of production. A bottleneck-oriented finite capacity planning analysis exposed opportunities to get production stages into better alignment.

This was revelatory for Schickentanz: "For the first time, we could identify where inventory in production would rise unintentionally due to an imbalance between order backlog and plant performance. We could also predict which machines might encounter material shortages. OMP provides a transparent view giving planners the opportunity to test and evaluate alternatives. This is how we managed to cut overall lead times and reduce our work-in-process."

Reserving capacity from the start

One of the biggest gaps was revealed at the offer stage. "Before we implemented OMP, we had been estimating lead times based on past experience. We can now base delivery date calculations, for inquiries as well as orders, on a transparent material and capacity check."

Supply chain transparency has also helped overcome initial resistance to this revised approach. "Some of the planners were very skeptical about this new way of working," Schickentanz confirms. "I know it's natural to resist change, but now the organization can see how OMP improves production planning so effectively."

"The system highlights bottlenecks clearly and provides opportunities for planners to try and evaluate alternatives."

Propelling continuous improvement

Sehner concurs: "Using the planning system is like holding up a mirror. It accurately reflects our planning decisions, the successful ones and the less successful ones. This allows us to continuously implement further improvements. As a result, confidence in the processes and the system grows, not least thanks to the strong support of our senior management."

Forecasting system implemented in six months, S&OP followed six months later

After completing the detailed production planning project, VDM Metals went on to implement Forecasting and Sales & Operations Planning (S&OP) to support the company's mid-term and budget planning. "We again had to manage some change issues," says Schickentanz. "But we've been able to convince the process owner by demonstrating the added value of advanced forecasting features such as comprehensive statistics, collaborative loops, graphical visualization, and customizable reporting."

Both budget forecasting and rolling monthly forecasting have been implemented in less than six months, and Sales & Operations Planning followed six months later.





“Planners have seen that the proactive way of working is much more satisfactory.”

Michael Schickentanz,
Head of Operations Planning & Master Data Management at VDM Metals

The need to develop a strong in-house team

Supply chain optimization projects such as those carried out at VDM Metals require the full support of senior management to be successful, according to Sehner: “Our management supported us from the start, and they still do . This means we can put together strong project teams of highly skilled people throughout the entire organization. We are also very lucky to have a top-quality in-house center of competence for sales, SCM, and support solutions. Having a solid and reliable data management program is equally indispensable.”

Additional opportunities unleashed

Meanwhile, VDM Metals also unleashed opportunities to further improve the supply chain through market differentiation. Sehner elaborates: “VDM Metals works for both the automotive industry and aerospace, but these are two very different sectors. Automotive is relatively predictable, with a high degree of standardization, requiring less detailed planning than aerospace where we work within framework agreements. OMP allows us to take a different approach for these customer groups.”

Project details

OMP was introduced at VDM Metals at its plants in Germany, as well as those in the United States. The features implemented include:

Melting shop scheduling

Internal upstream and subcontractor planning

Downstream planning including campaign planning and scrap returns

Inquiries and orders based on a capable-to-promise (CTP) system

Budget forecasting and rolling forecasting

Sales & Operations Planning

Detailed scheduling for the downstream plants

VDM Metals will also bring the new powder production facility into Unison Planning™.

About OMP

OMP helps companies facing complex planning challenges to excel, grow, and thrive by offering the best digitized supply chain planning solution on the market. Its Unison Planning™ concept has a unique approach. It handles all supply chain planning challenges in a unified way. It's full scope and in-depth. Unison Planning™ synchronizes all planning stages, horizons, functions, and roles. From source to delivery, from strategic to operational planning. The unique combination of services and technology boosts collaboration throughout your value chain, from forecasters to schedulers, from business leaders to technology experts.

Unison Planning™ is a cloud-based, out-of-the-box solution for industry-specific challenges. Hundreds of customers in consumer goods, life sciences, chemicals, metals, and paper & packaging run it to make the right decisions at the heart of their business. Valued as a thought leader by experts such as Gartner, OMP invests one out of every three dollars earned into innovation.

About VDM Metals

VDM Metals develops and manufactures nickel, cobalt, and zirconium alloys as well as high-alloy special stainless steels.

For over 96 years, the company has been supplying sheet metal, strips, rods, wire, and welding consumables to customers in the chemical process industry, plant construction, power generation, oil and gas, electrical engineering, and electronics, as well as the automotive and aerospace industries. Worldwide, VDM Metals employs more than 2,000 people.



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info@omp.com
omp.com