



DALLMER GmbH & CO. KG

Using AI to improve production planning

- Increase the MRP of quality
- Use of a large modular system
- Creation of transparency in the Supply Chain

This traditional dewatering technology company Dallmer with headquarters in the North Rhine-Westphalia, Arnsberg focuses on modern production techniques and a sophisticated supply chain management. Latest addition to the AI-based production planning and fine-tuning the system DISCOVER the SCT GmbH, the conventional planning tools in the Under-take to replace, and the processes in the company is significantly optimized.

The challenge: High availability and on-time delivery

Dallmer makes the highest demands on functionality, Design and quality of its products. These claims also extend to the internal processes in the company-wide Supply Chain. A high level of readiness for delivery, and timely delivery to the company at least as important as the quality. To ensure this, the manufacturer already been three years since an optimization tools as an extension of the ERP functionalities in the area of planning and scheduling.

Due to the high complexity with a vast solution space conventionally developed Production Planning and Detailed Scheduling-systems (PPDS) do not meet these requirements.

Therefore, it is in the everyday business life is not rare, that the systems are used only for the visualization of the current production plan, it was created on the Basis of comparatively little of standardized parameters. That doesn't, but never all of the existing restrictions, because the conventional mathematical methods in a reasonable period of time to calculate. This is due to the required computing power and it is not to be in the foreseeable future. As a result, the real production is almost always deviates from the target, and dispatchers must rely not rare on the Expertise of the head of production to the delivery readiness goals is to ensure, nevertheless, somehow. The claim of Dallmer however, is a different one:

The goal is to produce weekly, a feasible production plan that takes into account all existing restrictions in the production, as well as the availability of required resources such as equipment, materials and personnel, and can be taken in the case of new events in the short term on the current state of the art . To be able to the complexity of the production processes fully into account, should come as Artificial intelligence.

Added to this was the desire for the Score functions for the evaluation of the solution scenarios, a work plan model for accurate and flexible figure of the production processes, as well as a clear display of the results in the Form of an interactive Gantt charts.

The solution: AI-based planning with DISCOVER

Recently, the AI-based PPDS DISCOVER for the production and scheduling is added. It should replace the old, outdated planning tool and the planning quality as well as the degree of automation increased. The task of the new PPDS system is to enable an integrated view of quantities, capacities, and resources needed to achieve an optimal planning results. DISCOVER-delivers Dallmer desired functions and is dedicated to finding the Optimum in a seemingly infinite solution space.

As a medium-sized company has also Dallmer an enormous complexity in its production processes. The AI Algorithms to recognize during the optimization, which changes – so-called Moves – does not lead to an improvement and which are not. All Changes to the production are reviewed plan by the Score functions, and examined whether an improvement has set in. This is the case, it will be discarded the previous solution, and from this point on, the current solution as the Optimum retain, until a better solution is found.

The AI is able to anticipate the next steps and to identify areas that can potentially be omitted. Thus, a variety of solution is not taken into account possibilities, but only to the success promise.

The conclusion: this is a Huge efficiency gains

Dallmer was able to achieve within a few months, excellent results in the detailed planning and the on-time delivery to noticeably increase. "Especially in the times of alternating bottlenecks, where suppliers can't deliver and staff fails in the short term, the new AI-based PPDS System has become an indispensable tool. It delivers faster, better results despite the increase in complexity" that explains Maik Babucke, head to the job centre Dallmer.

Users have learned to appreciate the System in a short time and do not want to miss it. In a next step, the external service provider should be on this Tool are controlled. Decided has Dallmer for the PPDS System of SCT Supply Chain Technologies on the basis of the recommendations of the consulting firm Abels & Kemmner, which has also accompanied the introduction.

About Dallmer GmbH & Co. KG

The over 100 years ago, the company founded Dallmer specializes in the development and manufacture of products in the area of the drainage technique. To do this, floor drains, shower drains, drainage systems for patios and balconies, as well as solutions for the rain water to use. The production of predominantly made of plastic and steel products is carried out by means of various manufacturing technologies, including injection molding technology and a variety of mechanical manufacturing processes. In addition, mounting be performed activities by their own staff as well as by external service providers.

Overview

Project	Dallmer GmbH & Co. KG
Place	Arnsberg, North Rhine-Westphalia
Industry	Drainage technology
Challenge	High quality of products and delivery time, request, according to the weekly production plan
Solution	Introduction of Supply Chain Management Software DISKOVER

SCT GmbH Supply Chain Technologies and DISCOVER

Today, companies are not only with their products but also with their Supply Chains in the global competition. The SCT GmbH Supply Chain Technologies with DISCOVER a powerful Supply Chain Planning and APS Software designed to help businesses, their supply chains in an efficient, flexible and future-safe.

DISCOVER, which helps users in their Supply Chain, their management and capacity planning, inventory quickly, well-informed and to optimise sustainable. The Software combines proven methods from the field

the most advanced technologies – including elements of Artificial intelligence, about the automated forecasting, optimisation, and dynamic determination of safety stocks.

In cooperation with the Supply Chain expert of Abels & Kemmner we are continuously working on new, comprehensive solutions for your Supply Chain Management success. The result: More transparency, better quality of planning – including S&OP and PP/DS, lower stocks and an agile Supply Chain that delivers real value.



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