

SUCCESS STORY

GARANT TIERNÄHRUNG

PRODUCTION
PLANNING

The animal feed producer Garant has digitalised its production planning with MCP Algorithm Factory. This has enabled the market leader in Austria to increase its efficiency in production, logistics and order management.

Garant is now saving many hours of key personnel time every day; this time is being channelled into the next important improvement projects to achieve the annual productivity targets. Garant is thus further expanding its leading role in the market.

Initial situation

“Before the project, we had an established system. Our production managers calculated all incoming orders by hand and transferred them to a production plan: with silo allocation, with winding batches, taking the contamination matrix into account manually, an extremely complex task. 840 recipes with an annual tonnage of 400,000 tonnes.

This is how the Chief Executive Officer Dr. Bauernfeind describes the situation

triggered by growth and the expansion of product diversity.

Goals

The aim of the project was to implement a solution that could automatically calculate a new production plan containing everything needed for the optimal operation of the plant. It should be possible to create a new plan very quickly. Disruptions and short-term

orders should be considered several times a day in the new optimisation of resource selection and the production sequence in order to take account of the dynamics of call-off behaviour and current events in production.

Provider selection

The selection process was in two phases. In the first phase, there was no provider that could fulfil the specific requirements of a compound feed factory. It was only in the second search phase that Garant found MCP Algorithm Factory, which has a solution for the process industry based on the APS tool Opcenter Scheduling from Siemens Digital Industries Software.

There is a tried and tested version of this for compound feed. In an on-site workshop, the Garant team built up the necessary confidence for the decision because the functional requirements were clearly demonstrated in a tool demo. The technical flexibility in embedding the solution in the existing system landscape was also a plus point.



One of the decisive factors for us was that the MCP consultants immediately understood our processes and our infrastructure.

Dieter Herbst – Head of Production

Challenges

Due to the high degree of coverage of the functional requirements in the MCP standard, creating the specifications was not the major challenge. Rather, it was to improve the master data in such a way that the planning result really fits one hundred percent for production.

It took months to adjust the master data and check it in tests.

The discussions about the costs have led to a strategic direction: a very clear decision has been made in favour of digitalisation and the ongoing improvement of master data in order to have a sustainable basis for further cost reductions through automation and optimisation. The improved master data supports the continuous improvement process not only in production planning, but also in many other areas such as costing, process automation, quality management and data analyses. After the initial revision of the master data, the effort involved in ongoing operations is minimal.



“We see the qualification of our IT systems and our master data as a new development in our industry.”

Dr. Gerhard Bauernfeind – Chief Executive Officer

“Only those who continue to develop can survive in the market in the future.”



Project methodology

An agile approach was used for the project

01 The customer provides a "product owner" who represents and is responsible for the customer's interests in the project. There is a jointly accessible "product backlog", which contains the specifications of the customer solution to be implemented as part of the agile realisation.

02 In cycles of e.g. 3 weeks ("sprint"), MCP creates the next release of the solution as specified in the product backlog. The latest tested version of the customer solution is installed on the customer system. The tests are carried out together and, after sufficient training, partly by the customer alone. The results of the tests are analysed and the necessary measures for the next sprint are derived. Through this experience users get to know the planning tool better and better and can utilise its possibilities.

03 Following the final approval of the solution for live operation, the solution was put into operation in December 2023 and has been running to the full satisfaction of all stakeholders.

Results

● Effort reduction

My time spent on planning has been reduced from seven hours to one hour. I now finally have time to optimise production and for my team.

Stefan Moser – Production Manager Pöchlarn

The reduction in effort and the speed of planning enable Garant to optimise the operation of the systems, to keep an even

better eye on product quality and avoid waiting times at systems.

● Delivery capability

In the project with MCP, Garant has sharpened its strategy for working with stock items and order items. The stocks of the warehouse items can be managed very precisely between the minimum and maximum levels

using the planning tool because it automatically recognises any gaps and uses it to replenish the stock items. Therefore Garant is now more flexible when it comes to stock items.

● Order acceptance

Orders are collected and accurately checked for feasibility several times a day using the planning tool. In the event of a high order intake, Garant can recognise exactly the point at which additional demand in the short term has led to other orders being produced too late. The reliable confirmation of a smaller quantity or a later deadline leads to efficient

processes for the customer and Garant. The key improvement is to create the order feedback so quickly that the trucks does not even set off if the goods are not available. In this way, Garant reduces downtimes and increases satisfaction among partners and customers.

● Increase in capacity without machine investment

By optimising the use of the systems, Garant increases the maximum output quantity without having to invest in infrastructure.

This provides a good basis for further development!

Outlook

Garant has successfully implemented the new planning tool at its main plant in Pöchlarn and runs production one hundred percent according to the optimised plan.

The rollouts to the other plants are already underway and it is clear that the costs in the follow-up projects are significantly lower than in the pilot project.



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