

SUCCESS STORY



Inventory optimization

GRIMME

GRIMME Landmaschinenfabrik Optimizes Spare Parts Logistics with ADD*ONE from INFORM

GRIMME Landmaschinenfabrik has been manufacturing high-quality agricultural machinery for over 80 years and is active in potato, beet, and vegetable technology in over 120 countries around the world. The GRIMME Group also includes the companies ASA-LIFT in Denmark, SPUDNIK in the USA, INTERNORM, RICON, and Schmiede.One in Germany, as well as ten international sales and service companies. More than 3,100 employees currently work for the GRIMME Group worldwide. GRIMME uses the ADD*ONE solution suite from the optimization specialist INFORM for inventory management and planning of the approximately 120,000 spare parts.

Analysis of the Inventory Management and Planning Processes in GRIMME Original Parts Sales Reveals Deficits

Sebastian Zumwalde, who now works in the GRIMME Original Parts Sales department, began his career at GRIMME 13 years ago with a classic apprenticeship as a mechatronics technician and a subsequent dual degree in industrial engineering. As part of his bachelor's thesis, the now 32-year-old analyzed his employer's inventory management and planning processes. He explains, *"The aim of the bachelor's thesis was to identify weak points and to work out recommendations for action to remedy them."*

As the analysis revealed, the inventory management and planning processes for spare parts at GRIMME had been based on two pillars up to that point. The first concerned the reorder point system in the ERP system, which worked based on minimum and multiple quantities. *"If an item fell short of the minimum quantity, the ERP system automatically generated a new order proposal for the respective multiple quantities,"* Zumwalde explains. The second method, which was used for about ten to 20 percent of the items, consisted of manually creating a monthly sales plan for the year in advance and determining the required monthly quantities for the individual items from this. The planning expert adds: *"As a basis for the concrete figures the history of the last one to two years was considered. Based on*



Headquarters of the GRIMME agricultural machinery factory in Damme, Germany

this, the planner gave a personal demand forecast for the next twelve months. This data was stored in the ERP system to trigger the corresponding requirements."

In the course of the vulnerability analysis, Zumwalde also identified two central deficits. The biggest weakness was the high manual effort required, for example, to keep the reorder point system in the ERP system up to date. *"The ERP system was only updated every six months because it was such a big effort,"* he confirms. Moreover, this resulted in a contradiction with GRIMME's seasonal business processes. *"On the one hand, we update our system every six months, but on the other hand, we traditionally have a seasonal business with two seasonal peaks in spring, when the potatoes are planted in the ground, and in late summer/fall when they are harvested. This seasonal business naturally also has an impact on the availability of spare parts, but in the past, it could not be taken into account*

Harvesting success together!

More than 3,100 employees work worldwide for the group of companies, which consists of SPUDNIK (USA), ASA-LIFT (Denmark), INTERNORM (Damme), RICON (Rieste), Schmiede.One (Düsseldorf) and GRIMME. The focus is on innovative and cost-efficient solutions in potato, beet and vegetable technology.

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at all in planning.” Zumwalde’s recommendation for action for his employer was therefore to use external planning software that could optimize the inventory management and planning processes in the long term.

Challenges

- Inventory management and planning processes were based on two pillars;
- The ERP system was only updated every six months, as the manual effort was very high;
- Seasonal requirements were not taken into account in the semi-annual planning.

“Away From Reacting and Towards Acting.”

In a multi-stage selection process with a predefined catalog of criteria and requirements specifications, GRIMME chose INFORM and its ADD*ONE solution suite, which was developed specifically for inventory management and optimization. Based on AI-supported forecasts and mathematical algorithms, the software supports the optimization of inventory management and planning processes in companies by issuing situationally optimal order proposals, warning users of possible bottlenecks at an early stage, and even automating planning as needed. *“The crucial factors for the decision in favor of INFORM were, on the one hand, the comprehensive consulting expertise and the functional scope of ADD*ONE with demand forecasting, demand coverage, as well as diverse simulation options. On the other hand, the new possibilities for inventory controlling and the high transparency that the system creates in the inventory management and planning process spoke in favor of ADD*ONE.”* With ADD*ONE, GRIMME has successfully put the project slogan “Away from reacting and towards acting” into practice. *“In the past, we always chased like the fire department from one ‘source of fire’ to another to prevent the worst. Thanks to ADD*ONE, we are finally able to intervene proactively,”* says Zumwalde.

“Management by Exception” Instead of “Fire Brigade”

ADD*ONE has been in use at GRIMME since the fall of 2020. As an add-on solution, the software was connected to the existing ERP system via an interface. Sebastian Zumwalde explains: *“ADD*ONE extracts the master and movement data from the ERP system via the interface and prepares it transparently for a demand forecast. From this and on the basis of predefined parameters such as the planned service level and replenishment lead times, order proposals are then determined. We check these daily on the basis of the ‘Management by Exception’ method recommended by INFORM. In doing so, we only consider those processes where there is a real need for action.”*

More and more processes are being left to ADD*ONE for automatic processing. Zumwalde: *"We have already selected a part of our range of items for which ADD*ONE produces very good forecasts. In these cases, we already leave the complete ordering process to the software. We don't even look at these items manually anymore."*

But ADD*ONE also offers a solution for planning sporadically sold items. Here, classic forecasting models are no longer effective, and other approaches must be taken to ensure the target service level without building up unnecessary inventories. In order to be effective, GRIMME uses the approach of dynamic, service-level-oriented sporadic item planning at this point.

Today, almost 120,000 items for GRIMME Landmaschinenfabrik are integrated in ADD*ONE. In addition, seven sales and service companies that work for GRIMME Landmaschinenfabrik abroad have been connected.



Beet harvester for harvesting beets, root chicory, and celeriac

Three-man Team Handles Complete Spare Parts Logistics

Organizationally, the entire spare parts planning is handled by a team of three people. *"One colleague processes the items for the global central warehouse of the agricultural machinery factory, the other the ones in the sister companies in a subproduct division. My task is to process all order proposals at GRIMME's foreign subsidiaries,"* he says, describing the division of work in the team. With the introduction of the optimization software ADD*ONE, the ordering system of the foreign subsidiaries was centralized again at the main location in Damme. This has led to significantly more transparency since, according to Zumwalde, *"Everyone involved, both here at headquarters and abroad, always have the same level of information."*

» **INFORM's project experience is another advantage from which we have benefited and will certainly continue to benefit.**

Sebastian Zumwalde, Abteilung Vertrieb GRIMME Original-Teile



Bucket laying machine for laying potatoes

In addition to operational work, ADD*ONE also facilitates master data maintenance. For example, the system calculates safety stocks dynamically, taking into account various constantly changing environmental parameters. This saves a lot of time and ensures that safety stocks are always up-to-date and optimally calculated – another important aspect of spare parts planning.

ADD*ONE knows similar dynamic approaches for the calculation of replenishment lead times that, once stored in the ERP system, do not always correspond to reality but represent an important basis for planning.

The future plans for the use of ADD*ONE at GRIMME include further automation of the ordering processes according to the "Management by Exception" principle. *"In the meantime, our confidence in ADD*ONE is so great that we are sure that further automation of the inventory management is possible for many of our items and that we will only have to handle real exceptions in the future,"* says Zumwalde. *"The last two years have shown that the system works very successfully when automated with the appropriate specifications."*

In addition, further service and subsidiary companies will gradually be connected to ADD*ONE. Further considerations concern the integration of large trading partners of GRIMME Landmaschinenfabrik into the system

*"ADD*ONE gives us the freedom to focus on the real challenges in our procurement. The interaction of artificial intelligence for the standard cases and human intelligence for the special cases is proving to be a complete success,"* Zumwalde summarizes with satisfaction. *"INFORM's project experience is another advantage from which we have benefited in our collaboration to date and will certainly continue to benefit."*

Benefits

- With ADD*ONE, GRIMME has successfully put the project slogan “Away from reacting and towards acting” into practice.
- Grimme now operates according to the “Management by Exception” method. In this process, only those processes are considered where there is a real need for action.
- A part of the item spectrum has been selected for which ADD*ONE produces very good forecasts. In these cases, the complete ordering process is already left to the software.
- Almost 120,000 items for GRIMME Landmaschinenfabrik are already integrated in ADD*ONE. Seven sales and service companies working for GRIMME Landmaschinenfabrik abroad have already been connected.



Onion haulm beater for efficient haulm separation

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