CIDEON

efficient engineering.

More Efficient Dairy Farming Using SAP ERP/PLM

SILOKING MAYER MASCHINENBAU GMBH case study

PROCESS CONSULTING | ENGINEERING SOFTWARE | IMPLEMENTATION | GLOBAL SUPPORT

CIDEON

FRIEDHELM LOH GROUP

SILOKING Mayer Maschinenbau GmbH

Integrated SAP ERP and PLM Solution for Innovative Feeding Solutions

Facilitating process optimization in cattle feeding, SILOKING feed mixers help dairy farmers achieve sustainably high yields with optimal quality. Aided by CIDEON, SILOKING also lifted the PLM solution to the same platform when converting their ERP software to SAP ERP. This software consolidation improved the sustainability of the fast growing, innovative Bavarian machine manufacturer to tackle future challenges.

SILOKING

simply | intelligent | feeding

SILOKING Mayer Maschinenbau GmbH manufactures innovative machines for the preparation and transport of mixed feed as well as its provision to the dairy cattle. The owner-managed Bavarian family business with about 350 employees is leading the global market of self-propelled feed mixers. Design and development of the innovative machines in Tittmoning near Salzburg follows the requirements of contemporary farming. Manufactured in two locations using the latest production methods and distributed in more than 50 countries around the globe, they fulfill top standards of the feed quality achieved as well as their reliability, safety, longevity and operational economy.

Not only manufacturing but similarly agriculture requires innovative solutions for automation and process optimization. These include machines for feeding dairy cattle such as sheep, goats and camels, but primarily cows.
For their health and for a sustainably good quality of their milk it is essential that the food they get is composed of a multitude of components and has a balanced PH value. This makes it necessary to thoroughly mix the ingredients prior to feeding.

Process Optimization in the Cowhouse

Agricultural machines from SILOKING help dairy farmers streamline the cattle feeding process chain. To this end, the family business designs and manufactures stationary mixing and dosing systems as well as trailed and self-propelled mobile feed mixers. These machines combine the recipe-controlled mixing and blending of the individual food components with transport of the food to the cowhouse as well as its dosed distribution there. The self-propelled SelfLine food mixers also feature milling loader arms so that dairy farmers can cover all activities from material withdrawal from the silos to the actual feeding with only one vehicle.

In self-propelled feed mixers such as the SILOKING TruckLine 4.0 Compact 8, the feed is mixed, transported and provided in the right doses to the cattle in the cow house.

IMPLEMENTATION GLOBAL SUPPORT

CIDEON

Challenge:
Eliminate multiple data storage, reduce administrative work, reduce errors, and increase data transparency throughout the entire company

Approach:
Replace existing heterogeneous ERP and PLM software solutions by SAP including full integration into one system, to cover everything from sales to design to production

CIDEON Solution:
SAP ECTR interface with Solid Edge, CIDEON Conversion Engine for automated conversion of engineering data, CIDEON Import PDM for SAP for data migration from the existing PDM/PLM system to SAP

CIDEON Service:
Process consulting, installation, configuration, support for data migration and testing, customizing, training and support

Result:
Reduced data maintenance work, improved data consistency, increased data quality and process stability to support business growth and internationalization

SILOKING TruckLine 4.0 eTruck is a 100 % electric, zero-emission, self-propelled feed mixer.

"We were using a multitude of software systems", says Dr. Peter Schöttl, Commercial Director of SILOKING. "Particularly the ERP system was not fit to cope with our rapid growth." With the aid of an external consultant, SILOKING drafted a call for tender to improve the company's IT landscape. When SAP and their implementation partner All for One Steeb won the bid, the foundation was laid for a future-proof PLM.

For design and engineering work including the simulation of all mechanical parts and assemblies, the engineering department of the agricultural machine manufacturer based in Tittmoning, Germany, is using Solid Edge CAD software and had been using a PLM software system from the same supplier.

This made it necessary for the company to decide whether to continue using the existing PLM system or to change the PLM environment in the course of the SAP ERP implementation. "Although an SAP interface is available for the legacy PLM system, integration with the new corporate IT systems would have caused quite an effort", says CAD administrator Stefan Röder.

PLM Alignment for a Better TCO

Being SAP partners of mid-sized businesses, the All for One Steeb experts know that an ERP implementation often requires the simultaneous integration of the PLM software to yield the full usage benefit of the software transition. To best serve the technology-minded company SILOKING, they took CIDEON on board. The engineering specialist supports companies with its own range of software products as well as individual services to collaboratively optimize product development processes.

"Aside of CIDEON's well-founded consulting services, our economic assessment was decisive for the concurrent transition to SAP PLM", Peter Schöttl recalls. "Although some were surprised, in our evaluation the consistent SAP solution resulted in a better TCO than the integration of the legacy PLM-System with SAP."

Based on SILOKING's requirements, integration tests were performed with the SAP modules, the SAP Engineering Control Center and the CIDEON Conversion Engine. "Following CIDEON's suggestion, for the sake of reduced maintenance during operations we decided for an integration of the PLM and ERP software without any custom programming", says Stefan Röder. "This provided us with the full functional scope in a very short time."

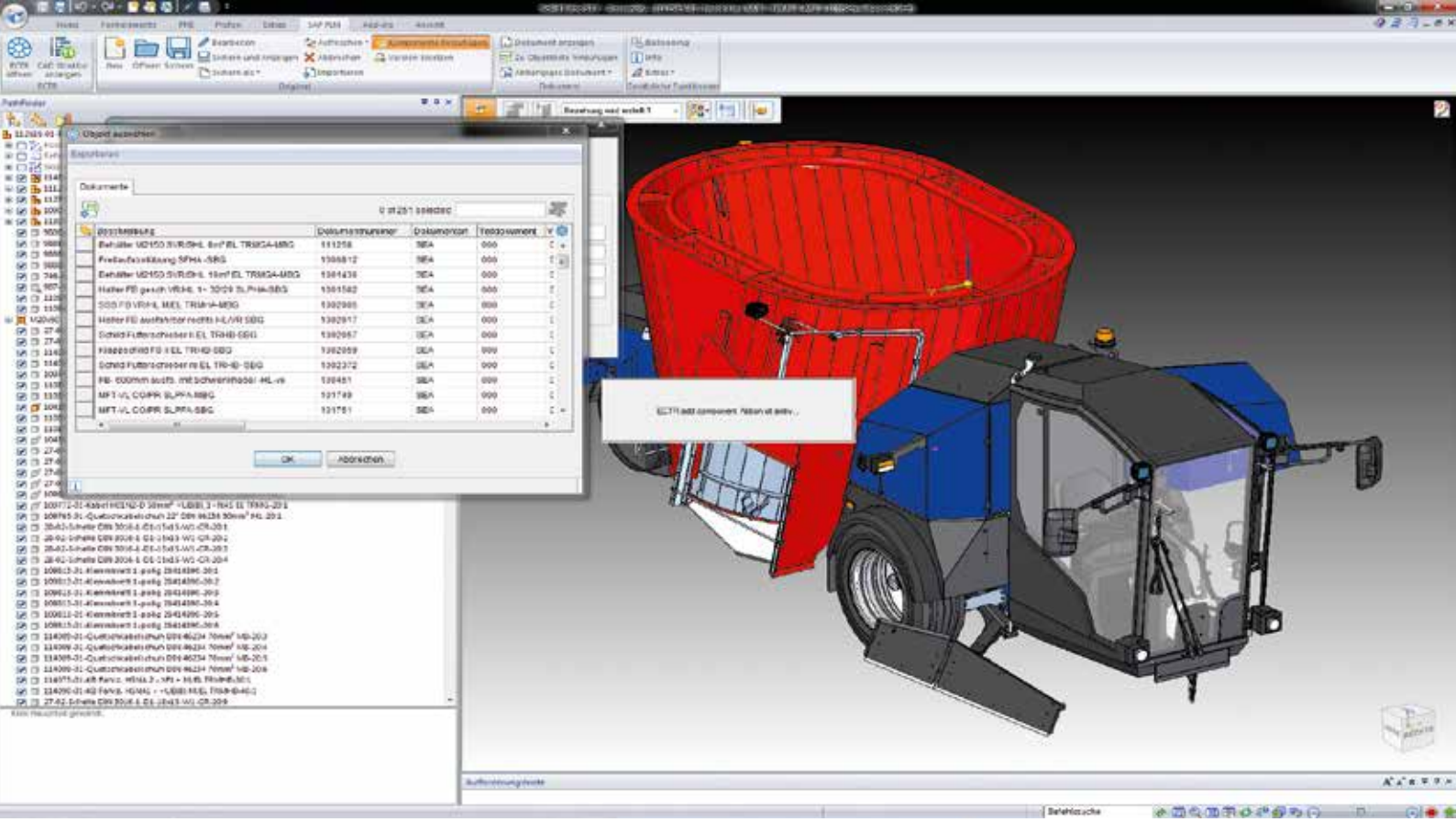
The data to import from the legacy system came with a number of inconsistencies from the time before the superseded PLM software. CIDEON therefore first provided the customer with support in data preparation for conversion using the CIDEON Import PDM for SAP software. For this conversion, SILOKING did not need to stop any of the affected systems. Migration was performed successively by transferring delta data during running operations. This way, existing data that has not been taken into account can be migrated long after the initial transition if needed. Active support from CIDEON throughout all project phases guaranteed the success of this company-wide comprehensive SAP implementation.

"Selecting the ERP system, it was important for SILOKING not merely to get an interface but the PLM software as an integral part of the overall solution."

Dr. Peter Schöttl
Commercial director, SILOKING Mayer Maschinenbau GmbH

"By converting both ERP and PLM software to SAP in one go, we were able to interconnect design, production, logistics and administration to achieve full data consistency from management to the work benches."

Stefan Röder
Administrator and key user, SILOKING Mayer Maschinenbau GmbH



Without leaving the familiar environment of the CAD software, design engineers can use the SAP Engineering Control Center for instance to access assembly data from other systems guaranteed to be up to date.

Added value for SILOKING

Acceleration of processes
due to reduced search thanks to company-wide information provision

Reduced coordination efforts
due to automated workflows and approval processes

Improved collaboration
across system boundaries due to unified “single source of truth” data base

Eliminated sources of error
due to company-wide unique data storage and automated versioning of all documents

Quality improvements
due to work instructions with interactive drawings

More efficient order processing
due to global data access and direct interaction between engineering and sales

Smooth Migration with Minimal Resources

As SILOKING faced increased demand for customized designs during the transitory phase, limited access to resources was a major challenge. “In spite of this and the enormous scope of the project, all thanks to CIDEON’s expertise, the implementation was running perfectly”, says Stefan Röder. “Since the system went fully productive in May 2017, we have been discovering new opportunities and potentials on a daily basis.”

As the procedures in engineering have not changed much, making the transition was an easy step for the designers. Furthermore, using SAP Mail to process the workflows is easy to understand and to do and authorized engineers can use all relevant SAP mechanisms for instance for item creation directly from their familiar working environment. Consequently, all data needs only be maintained in one system. This reduces unpopular “red tape” side activities and eliminates a notorious source of errors.

Paradigm Shift Improves Readiness for Future Developments

The unified overall ERP/PLM solution was rolled out in all locations simultaneously. TruckLine 4.0 was the first new product series to be consistently designed using the new software configuration with SAP for both ERP and PLM.

"Although we are not yet fully exploiting all operative benefits, we are already experiencing the advantages resulting from avoiding unproductive side activities and ruling out possible sources of error, for instance by having all documents up to date", Stefan Röder says. "Additionally, a new and higher degree of self-service by other departments considerably relieves the design engineers."

"25 years after we commenced production and following our development from a handicraft business to our current dimension, this software change is another paradigm shift for us", Dr. Peter Schöttl concludes. "With this transition, CIDEON empowered us to adjust our processes such that they can reliably and efficiently support our future growth."

"Concurrently implementing SAP ERP and SAP PLM has the advantage of requiring less effort for conception and implementation of the overall solution over first working out and establishing a partial solution and later having to redefine and rework its processes for integration with a comprehensive solution."

Martin Noack
Sales, CIDEON Software GmbH & Co KG

"As this kind of transition always poses quite a challenge for companies, as CIDEON we support our customers drawing from the rich experience we gained in numerous PLM projects, ensuring professional as well as re-quirement-oriented implementation."

Stefan Winzer
Principal Consultant / Unit Manager SAP PLM Consulting, CIDEON Software GmbH & Co. KG

The consistency of the fully integrated PLM solution implemented by CIDEON spans all SILOKING locations and ranges all the way to the shop floor.

About CIDEON

CIDEON provides advice and support to companies intending to implement innovations and optimize engineering processes in order to improve their performance, customer benefits and company value. CIDEON is Autodesk Platinum Partner in the German-speaking region, PROCAD Partner, Platinum Build Partner of SAP SE and software partner of Dassault Systèmes. With about 300 employees at 16 locations in Germany, Austria and Switzerland as well as the US, CIDEON is part of the Friedhelm Loh Group.

CIDEON

efficient engineering.

- Process Consulting
- Engineering Software
- Implementation
- Global Support

Contact us for advice!

JAN COPPEL
Sales Manager
Phone +49(0)211 5228899-29
jan.coppel@cideon.com

MARTIN BENTIN
Sales Manager
Phone +49(0)151 10818910
martin.bentin@cideon.com

03.2019/SILOKING Mayer Maschinenbau GmbH case study

CIDEON Software & Services GmbH & Co. KG
Lochhamer Schlag 11 · D-82166 Gräfelfing
Phone +49(0)89 909003-0 · Fax +49(0)89 909003-250
info@cideon.com · www.cideon.com

PROCESS CONSULTING · ENGINEERING SOFTWARE · IMPLEMENTATION · GLOBAL SUPPORT

CIDEON

FRIEDHELM LOH GROUP