

# CIDEON

take the value perspective.

## Efficient Data Migration Meets Seamless System Integration

**For the Hochland Group, innovation is a driver of success - also for its mechanical engineering subsidiary, Hochland Natec GmbH. In order to gradually increase the future potential of Hochland Natec with a long-term vision, a lot has been achieved together with CIDEON. In the course of replacing the old SAP ECC ERP system and setting up the new SAP S/4HANA ERP system, large amounts of engineering data and technical documents had to be migrated. In addition, the SAP Engineering Control Center (SAP ECTR) needed to be updated. This enabled the use of new functionalities for even better performance, which were previously lacking in the old ERP environment. Both the complex data migration and the implementation of the update for the SAP ECTR interface proved to be a real challenge for Hochland Natec. The successful collaboration between CIDEON and Hochland Natec shows how a modern IT infrastructure can be implemented that meets the requirements of mechanical engineering, strengthens teamwork in collaborative networks and develops new tools.**

### Agile Response to Change

The German mechanical engineering industry is currently facing a number of challenges. Too many workarounds, a lack of automation, and complex process landscapes are among the biggest obstacles on the road to a digital future.



### Hochland Natec GmbH

Hochland Natec GmbH is a mechanical engineering specialist based in Heimenkirch in the Allgäu region and a subsidiary of the well-known cheese manufacturer Hochland. Hochland Natec is one of the leading suppliers in the development and distribution of special machines for the high-quality production, processing and packaging of food products. The company employs around 90 people. The direct proximity to the Hochland Group and its innovative strength enables the unique advantage of continuous further development in plant engineering. This applies to maintenance and sustainability as well as to operation and system safety. Further information can be found at [www.natec-network.com](http://www.natec-network.com).

These obstacles are accompanied by system outages and a lack of updates for legacy IT systems. Further complicating matters is the lack of adequate data connectivity and the lack of broadband technologies to transfer large volumes of data. All this must be taken into account in digital engineering and in the management of all resources. Hochland Natec GmbH recognized these challenges at an early stage and transformed them into competitive advantages and growth opportunities with analytical potential and organizational skills.

Hochland Natec impresses with its competitive delivery times of around one year as a plant manufacturer. The company also focuses on innovation and the continuous expansion of its product range. As part of the "S/4 Future Project", as it is known internally, all business processes throughout the Hochland Group were analyzed and, in some cases, redefined to meet customer needs.



CIDEON

PROCESS CONSULTING

ENGINEERING SOFTWARE

IMPLEMENTATION

GLOBAL SUPPORT

# The successful transition to SAP S/4HANA

To this end, SAP S/4HANA was to be implemented in the entire Natec Network, consisting of three subsidiaries of the Hochland Group. All third-party applications should be able to interact and communicate with each other ideally via the technologically adapted interfaces.

## CIDEON Taken on Board

Two further sub-projects ultimately emerged from this overall project, one for data migration and the other for integrating the CAD systems with SAP ECTR. "The project turned out to be much more complex than originally expected. Data migration in particular was a real challenge and became a critical success factor over time." "We weren't able to migrate our database from SAP ECC 6.0 to SAP S/4HANA," said Volker Hanisch, Head of Procurement and S4F Project Manager for the entire Natec Network. "The SAP ECTR interface was also causing us problems." Knowing that this was an ideal test environment for collaboration, Hochland Natec ultimately engaged CIDEON as a consultant and software developer. The goal: to get the best possible support in order to provide Hochland Natec employees with powerful digital tools in the future. "And we do this with a focus on our customers in the mechanical engineering sector - from the customer inquiry to the order and the entire life cycle of the machine up to its possible replacement by a next-generation machine," adds Hanisch.



The "FreeSlice 1500" by Hochland Natec, a machine for the production of processed cheese slices, cubes and sticks

## Challenges

Migration of engineering data and technical documents to SAP S/4HANA and update of the SAP Engineering Control Center (SAP ECTR). Document management and the related CAD integrations as well as SAP PLM as other key areas.

## Approach

Interdisciplinary collaboration, a goal-oriented approach and direct and short decision-making structures. Establishment of an ideal test environment for software development and for transferring relevant data to the new system environment.

## CIDEON Solution

Data enhancement with a newly developed software tool in collaboration with Hochland Natec. Product replication of documents and metadata as well as ensuring the release capability of further software components as additional tasks. Transfer of object connections and files from the existing SAP ECC system to the new S/4HANA system.

## CIDEON Service

Data migration with a specially developed tool as well as installation of the SAP Engineering Control Center (SAP ECTR) including all relevant updates.

## Outcome

New boost in product development for data migration as a win-win result and access to new functionalities for Autodesk Inventor, Autodesk AutoCAD and EPLAN. In addition, a standardized database that can be accessed across departments at any time.



## Professional Team Play as a Driver of Success

The high level of engineering competence and the leap into the possibilities of data-based production are part of the DNA of the entire Hochland Group. This mindset is

## Partnership at eye level

exactly what the company wanted to maintain with CIDEON. Initiators, innovators, and drivers on both sides worked together as partners in hybrid project teams. That means: analog and digital. With a reliable plan for more automation, creativity and growth - step by step. Andreas Müller, Project Manager and specialist for mechanical engineering at Hochland Natec, describes the open topics in the sub-projects as follows: "Hochland Natec uses the SAP Engineering Control Center with Autodesk Inventor and EPLAN and plans to convert the ERP system from SAP ECC 6.0 to SAP S/4HANA on premise. CIDEON was consulted in particular on topics such as document management, SAP Engineering Control Center, the associated CAD integrations and other SAP PLM topics. These are to be explored in greater depth so that further steps required for the migration can be taken promptly."

From the very beginning, Hochland Natec relied on interdisciplinary cooperation, both internally and externally, a goal-oriented approach and direct and fast coordination channels. Reliable and respectful cooperation has always been a matter of course. This corporate culture is also actively practiced at CIDEON. "For CIDEON, consulting means first and foremost listening to the customers and understanding their point of view," says Arol Williams Feulefack Nankeng, Consultant at CIDEON, adding: "Only then can we provide impulses for greater success, act as a strong partner and rethink and develop plausible solutions."

### Data Migration Task Force

To successfully transfer data from one system to another, you must first create a standardized database. Only then can data be viewed, modified, and used - flawlessly, without redundancies and in real time. "Migrating from SAP ECC to SAP S/4HANA while securely transferring existing data is a challenging task. The most difficult task to solve was the migration of documents and file properties. In addition, object links and files had to be transferred from the existing SAP ECC system to the new SAP S/4HANA



### Added value for Hochland Natec

- **State-of-the-art IT infrastructure** for high-performance and digital tools with a focus on the customer business in mechanical engineering - from the first customer inquiry through the entire mechanical engineering cycle up to the order of new machines.
- **Standardized database available 24/7**, to which every Hochland Natec department has access across all locations. Reduction of workarounds and elimination of system failures for greater process efficiency.
- **Creation of an ideal test environment** for future software development projects.

system," explains Andreas Müller, project manager and mechanical engineering specialist at Hochland Natec. In addition, the release capability of the various software components had to be ensured. Müller continues: "Previous service providers had not been able to set up the content server, but CIDEON successfully mastered this challenge alongside us." CIDEON Consultant Arol Williams Feulefack Nankeng describes the approach as follows: "Before we could perform the migration from SAP ECC to SAP S/4HANA, the data first had to be enriched. This was done with the help of a new tool that was developed in collaboration with Hochland Natec in an ideal test environment." Only then could the existing data be successfully and securely transferred.

### Product Development as Value Creator

Working together in an ideal test environment with a reliable database, reciprocity and a solid use case as part of the project with Hochland Natec enabled CIDEON to significantly advance the development of its data migration tool. "The data migration tool was developed specifically for the



# Connecting engineering and business data

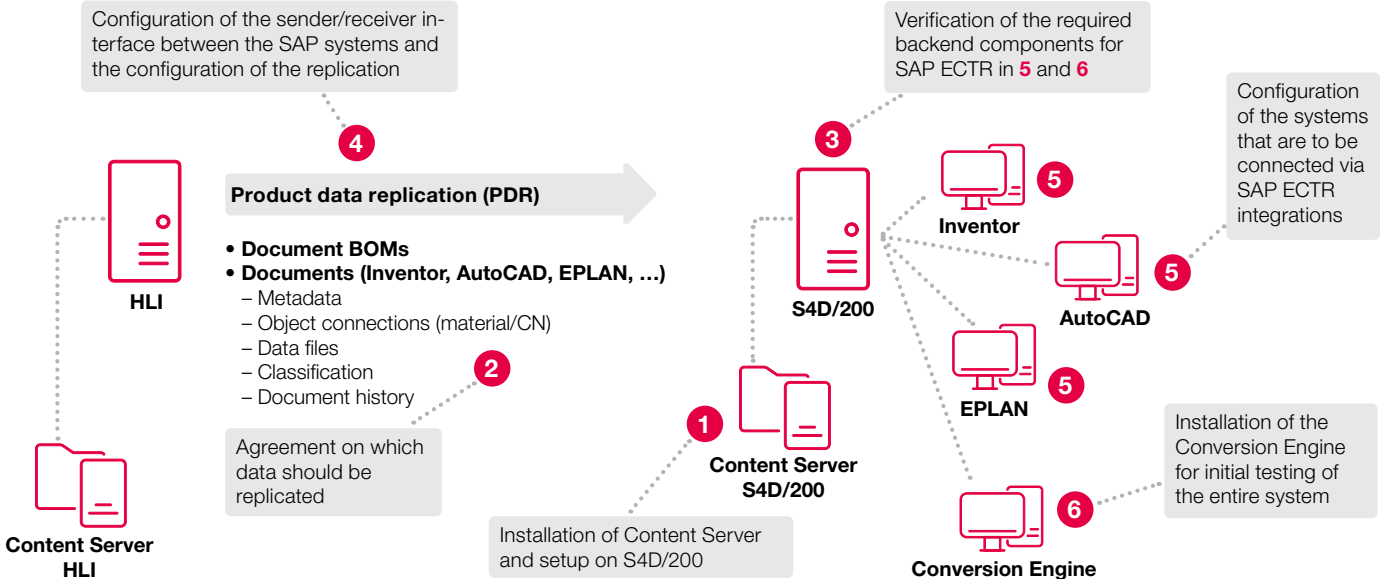
requirements of this project and is a perfect solution for CAD, PDM and PLM data and their interconnections. The tool also laid the foundation for the successful migration of additional data for the upstream and downstream processes carried out by other service providers and Hochland Natec," says CIDEON consultant Feulefack Nankeng, underlining CIDEON's in-depth expertise in customer-specific software development.

The actual technical data transfer consisted of several phases. In terms of the project schedule, the migration was divided into a main or pre-migration and a go-live migration in order to shorten the necessary runtime for the go-live. Andreas Müller, Project Manager at Hochland Natec, also speaks of a win-win situation. He adds: "CIDEON was able to develop the data migration tool with us, test it on Hochland Natec and successfully transfer the data from Hochland Natec to SAP."

## SAP ECTR Update Successfully Implemented

SAP Engineering Control Center (SAP ECTR) was used to integrate all engineering data into SAP PLM and link it to business data. At Hochland Natec, this mainly affected the following applications: Autodesk Inventor, Autodesk AutoCAD and EPLAN. In the EPLAN connection in particular, the Part Synchronizer was used to harmonize the EPLAN part database with SAP part data. This new single source of truth means that all current data from SAP is always available in the EPLAN database. Moreover, CIDEON supported the connection of the already existing CIDEON Conversion Engine to the relevant processes in SAP S/4HANA. This is necessary for testing the entire system. "Apart from that, the version compatibility of the individual software components must also be ensured. This also applied to the latest version of SAP ECTR, which does not exist in the R3 world," says Hochland Natec project manager Müller.

### Outlined tasks of CIDEON



**CIDEON**



## Recognizing the benefits and opportunities of change

The new version - compatible with SAP S4/HANA - now enables the use of new functionalities for an even better performance. This is particularly true for the SAP ECTR interface to Autodesk Inventor. After all, Autodesk Inventor CAD software provides professional tools for mechanical 3D engineering, documentation and product simulation. This includes, specifically, the effective combination of parametric, direct, free-form and rule-based engineering functions.

### "Cleverly implementing tasks thanks to team spirit"

One thing was clear: people, organizational structure and corporate culture are often more important in a transformation process than the technology itself. In order to gain acceptance among employees, it is essential to explain a lot and to highlight the benefits and opportunities of the change. This was especially true for the harmonization of the IT system landscape, the extensive migration of data and the adaptation of the SAP ECTR interface at Hochland Natec.

The two sub-projects with CIDEON started in July 2021 and were completed in fall 2022. How does Hochland Natec evaluate the project in retrospect? "Hochland Natec was the initiator, CIDEON was the software developer, coach and companion all in one. The migration of Inventor, AutoCAD, EPLAN and the technical documents from the ECC system to S/4HANA was cleverly implemented with a lot of team spirit," summarizes Volker Hanisch, Project Manager S4F at Hochland Natec. This teamwork not only got the sub-projects "quickly up and running", but also brought them safely to their destination over a longer period of time with sufficient optimization loops. "Of course, this also requires a certain amount of honesty and transparency. And this was always possible with CIDEON as part of an open exchange at eye level," add Volker Hanisch and Andreas Müller. "Furthermore, a professional first-name basis was also used in day-to-day business - this also noticeably supported the close, agile teamwork. In this way, Hochland Natec and CIDEON were also able to find innovative solutions to the various system requirements as further technical challenges," continues Müller.



Natec Network Innovation Space

*Previous service providers had not been able to set up the content server, but CIDEON successfully mastered this challenge with us. “*

Andreas Müller, Project Manager  
at Hochland Natec



CIDEON and Hochland Natec

## A consistent database leads to success

### Scalable Process Environment with a Consistent Database

Thanks to the successful migration process, a consistent database is now in place. All departments at Hochland Natec can access this data at any time. The frequency of errors has been reduced as there are no longer any redundant data sets. The transition from SAP ECC 6.0 to SAP S/4HANA, including data migration and CAD integration with SAP ECTR, has eliminated system discontinuities and reduced the number of workarounds. The optimized process landscape reduces transition costs, as it is designed to be largely technology-independent and can therefore be scaled flexibly and quickly over the coming years. The foundation for this is a state-of-the-art IT infrastructure that fully meets the requirements of the mechanical engineering subsidiary Hochland Natec, and thus the entire Hochland Group.

*CIDEON was able to develop the data migration tool with us, test it at Hochland Natec and successfully transfer the data from Hochland Natec to SAP.* ““

Andreas Müller, Project Manager  
at Hochland Natec



#### About CIDEON

CIDEON advises and supports companies in optimizing their product development processes – from the initial concept through to engineering, production and services. CIDEON's innovative solutions ensure continuous data flow along process chains making data accessible and cost-effective throughout the company. In this way, CIDEON's customers can fully exploit the potential of digitalization to benefit themselves and their clients. CIDEON employs more than 300 staff at 13 locations in Germany and Austria. It is part of the Friedhelm Loh Group, a globally successful Group with more than 12 production facilities and over 95 subsidiaries.

Further information can be found at [cideon.com](https://cideon.com) and [friedhelm-loh-group.com](https://friedhelm-loh-group.com).

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