

COMPANY

Scheuch GmbH

LOCATION

Aurolzmünster, Austria

SOFTWARE

Autodesk® Vault®**Autodesk® Product Design Suite****Autodesk® Factory Design Suite**

Towards a cleaner future – with Autodesk

Scheuch GmbH is migrating its software environment for the planning of air and environmental plants and systems to Autodesk solutions, thereby future-proofing its design and development capabilities.

“The solutions have a better usability and demand less of a learning curve.”

– **Markus Lobmaier**
Product Development Manager
Scheuch GmbH



Also in the mining works in Brixlegg / Austria Scheuch proved itself as a competent problem solver with a modern kiln dedusting. © Scheuch GmbH

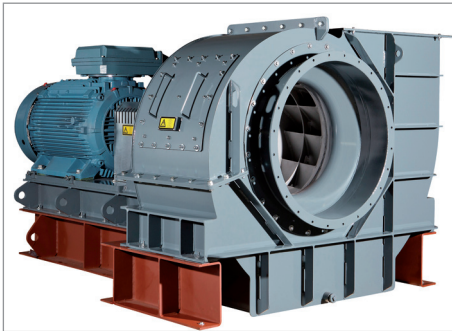
Clean air is essential for our well-being and the preservation of our environment. As experts in extraction, de-dusting, flue gas cleaning and plant engineering, Scheuch GmbH from Aurolzmünster in Austria, is playing a leading role in helping heavy industry through its innovative air and environmental technology. The company, a family business, was set up in 1963 as a small metal-working shop with six employees. Today, half a century later, over 1,000 people work for Scheuch globally on application-specific and sophisticated solutions for their customers' air and environmental requirements in the engineered wood, energy, metal, stone/earth and wood industries.

The device and component business is also coming more sharply into focus. Production is highly concentrated at Scheuch, which means that many products are produced at the headquarters in Upper Austria. The company's expertise is particularly sought-after when technologically demanding solutions are on the agenda. While the company largely produced individual filter modules for many years, the recent years have seen a move to the planning of complete plants and systems. “We aim for healthy growth. We also want to be more active internationally and are therefore currently increasing the number of our sites across the globe,” explains Markus Lobmaier, Product Development Manager at Scheuch GmbH.

Future challenges: networked and international

These trends and shifts confront the entire engineering team at Scheuch with completely new challenges. When developing complete plants and systems the planning – that is, the creation of a factory layout – and design, which forms the basis for the production of the plant concepts, must be optimally coordinated and combined. The international scope of activities and operations also presents some challenges. For example, since the start of 2016, in Willow Springs, USA, engineers have been working on developing plants and systems outside the Austrian company headquarters for the first time, raising questions on how European plants can be adapted to the US-American market. “One of the first challenges comes with the conversion from the metric system to imperial units”, explains Markus Lobmaier. “There are also differences in design methodologies and the preparation of drawings, as well as in the requirements, the product structure and assembly. Our colleagues in North America revise our designs and, for example, adjust the motor power or metal sheet thickness”. In this way, the plans from the USA are a good basis for working in Austria on plants and equipment for Asian countries that tend to follow the American system.

The migration to Autodesk solutions is expected to cut design times by 10 to 15 percent.



Core components such as high-performance fans are produced exclusively in the main factory of Scheuch in Aulolz Münster. © Scheuch GmbH

A project for the optimization of engineering processes at Scheuch prompted a review of the existing CAD software landscape. Two central requirements crystallized out of this: the CAD software should be usable in planning as well as in design, and link the two areas. In addition, a solution for product data management (PDM) should be offered in order to facilitate the exchange of product data with international sites. It was soon clear: the existing landscape had to be reorganized since the solutions previously employed were no longer adequate.

Autodesk prevails

In the search for the right CAD software partner, Autodesk came out on top with its solutions. Scheuch finally selected a combination of Autodesk® Factory Design Suite, Autodesk® Product Design Suite and Autodesk® Vault®. A total of 180 workplaces were equipped with the 3D design and planning software - which is incidentally the largest migration project for Autodesk in the world. As required by Scheuch, the Autodesk suites connect plant and system planning and design on a 3D model, while all product data can be cleanly managed with the Vault PDM solution and exchanged with other sites or external service providers. The solutions can also be linked directly with the Scheuch ERP system, which also represented a basic requirement for the decision.

In the preceding evaluation, the project managers at Scheuch investigated the software offer according to three main criteria. The focus was on the available functions, the strategic orientation and the costs. The Autodesk solutions won out on all three points. They included all the required functionalities such as the support of point clouds from 3D laser scanners in the Factory Design Suite. It was also important for the philosophy of the software producer to fit with that of Scheuch. "We were looking for a partner who agreed with us that

planning and design belong together", explains Sascha Tremel, responsible for the technical selection and execution of the software implementation. The topic of globalization and the worldwide data exchange also played an important role for him. "Autodesk and Scheuch harmonize very well here. For example, Autodesk has been promoting the idea of design anywhere, build anywhere' for some time. And that is what we want to achieve with our international sites: design everywhere, produce everywhere." Moreover, Autodesk solutions are very widespread internationally, so that companies around the globe can work with the design data. Autodesk also scored well in the cost comparison. A decisive point here was the subscription model. Accordingly, Scheuch pays monthly fees for the use of Autodesk. "With this model we save the high investment costs for purchasing the software and remain flexible. Depending on the order situation, we can simply subscribe to new workplaces or drop existing ones. Without the subscription model, the decision for the engineering software might have been different", explains Sascha Tremel.

Ambitious targets

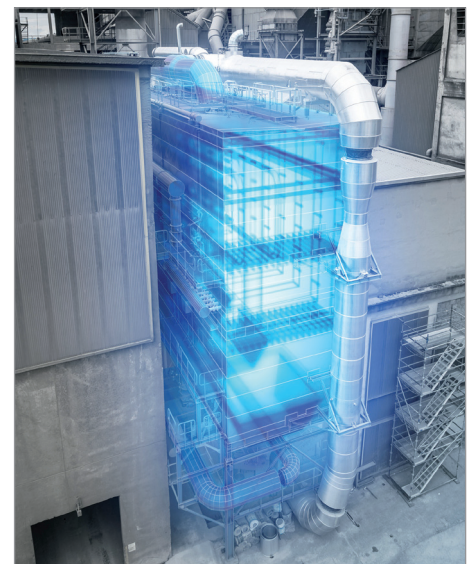
The managers at Scheuch expect the migration to Autodesk solutions to cut design times by 10 to 15 percent. They are also looking to minimize the error rate in planning and design. "If I have the model in digital form, I can avoid potential problems like clashes. If I first notice them on the building site, I can still solve them - but then it costs a lot more time and money", says Sascha Tremel.

The first pilot projects with the Product Design Suite and Vault have been underway since the beginning of 2016. Even in this early phase the first positive effects can be seen. For example, time savings are already perceptible and project managers are receiving enthusiastic feedback from users. Markus Lobmaier sums up: "The solutions have better usability and demand less of a learning curve than the software we used previously. Vault is also quicker to set up and more intuitive to operate. Here, we are talking about apparently small details that can still make an enormous difference." An example is the drag-and-drop function users are already familiar with from other environments like Windows Explorer. But these features are not currently supported by the software we used before. As the next step, the project managers are getting to grips with the Autodesk Factory Design Suite, in order to make plant and production planning even more efficient.

"With the subscription model we save the high investment costs for purchasing the software and remain flexible. Depending on the order situation, we can simply subscribe to new workplaces or drop existing ones."

– **Sascha Tremel**
Responsible for the technical selection and execution of the software implementation, Scheuch GmbH

In summary, it can be stated that the software migration represents an optimal foundation for consistent progress along Scheuch's chosen growth path on the way to becoming a global player in the industry. Now and also in future, the technology leader is rising to the challenges of the international markets. Scheuch has already found the ideal partner here – a sound foundation for a promising long-term business relationship.



Scheuch technology to reduce emissions in the cement industry. © Scheuch GmbH