



**PRO.FILE**  
BY PROCAD



## The perfect Composition of PDM and DMS

**Maschinenfabrik Langzauner has chosen PRO.FILE**

**as its enterprise-wide platform for product data and documents**

- **PLM software integrated with SolidWorks, proALPHA ERP and eBASE**
- **Technical document management for all departments**
- **Fast time to implementation with PROCAD partner trisoft while meeting all PDM needs of typical SolidWorks users**

Headquartered in Austria, Langzauner is a family-run business whose expertise in automation solutions and composite presses is sought after the world over. A composite material is a material made from two or more constituent materials. They are “composed” in a way that creates a new material with properties that are superior to those of its individual components. In a way, this is a lot similar to the company’s IT environment today. It implemented the PRO.FILE PLM solution in early 2018. As a digitalization platform, it not only replaced the the design department’s incumbent PDM system but now also manages documents from all other departments as well, which used to be stored in a document management system. By combining the properties of PDM and DMS software in a single system, PRO.FILE effectively became an information hub for the entire organization.

For Langzauner, this meant realizing a long-held vision of having an enterprise-wide platform for its data and documents that can be accessed by users from all business departments alike, allowing them to store and research information on every single product across the lifecycle. The company relies on SolidWorks for its 3D CAD design needs. Its ERP system is proALPHA, which includes its own document management system that Langzauner used to store its commercial documents. CAD drawings were simply managed on network drives and their neutral formats (in PDF format) were, somewhat consistently, checked in manually into the DMS by the company’s designers.

“When projects get larger and more and more teams contribute to the design process, everyone involved needs to be able to access these design documents as quickly as possible,” says Gerhard Mayrhofer, MSc, Head of Automation at Langzauner in describing the initial situation. “Storing them on distributed drives and working with their neutral formats in the DMS system just didn’t cut it anymore. With a DMS<sup>tec</sup> system in place, however, we now have check-in and check-out mechanisms and can have multiple people work with the same information embedded into the product’s structure at the same time.”

#### Automated data exchange with all neighboring systems

When it comes to product engineering and product management, Gerhard Mayrhofer sees a PDM software’s ability to integrate not only with multiple CAD systems but also with the ERP solution as its most important property. But it took the company some trial and error in trying to implement their product data management with SolidWorks’ own PDM system to come to this realization. This attempt was spearheaded by the design department, which is quite familiar with SolidWorks and hoped that using the built-in PDM solution would give them two perfectly harmonized components. Eventually, the attempt was thwarted not so much by a lack of functionality or failure to work hand in hand with the CAD software. The real problem was that there was no way to integrate it with the ERP system and the company’s eBASE ECAD solution. Without this integration, it is impossible to automatically exchange information between the different systems.

This automatic exchange, however, is essential to making day-to-day operations easier and more productive because otherwise designers have to manually create bills of materials in the PDM or ERP system – which was exactly the case for Langzauner as the lack of integration prevented the automatic synchronization of items and bills of materials. Experience has shown that transferring them manually is not a viable option as it almost always leads to incompleteness and is a highly error-prone process. Consequently, Langzauner resorted to automatically storing PDF versions of their drawings in the PDM system and then manually storing them in the DMS. Given the unavailability of CAD data in the latter, however,



Production line at Maschinenfabrik Langzauner

Langzauner had no option but to continue using two systems: Its commercial departments worked with the DMS while designers relied on the PDM system. The PDM module of the company’s proALPHA ERP system also failed to deliver the needed integration capabilities, also making it a non-option.

#### An enterprise-wide approach to PLM

Eventually, Langzauner decided to make the switch to the PRO.FILE PLM system and to bring together the previously siloed worlds of PDM and DMS. “When approaching a project like this, you need to go beyond the mere design perspective,” has Gerhard Mayrhofer quickly learned. “You have to take a step back and look at the enterprise as whole.” In a relatively short time to implementation, Langzauner was as able to meet the most common PDM needs of SolidWorks users and provide its employees with a full-fledged technical document management system. PROCAD’s partner trisoft informationsmanagement gmbh implemented a solution that can be gradually expanded to eventually serve as a comprehensive data backbone with extensive PLM functionality, putting the company on the fast track to digitalization.



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Head of Automation  
at Maschinenfabrik Langzauner

The role of the implementation partner should not be underestimated in projects such as this. With its depth of IT expertise, trisoft was able to implement an interface between PRO.FILE and proALPHA very quickly. The partner was given database access to the DMS, enabling it to transfer all of its items, BOM information, supporting documents, and customer-related information to PRO.FILE by way of the new interface. In the next step, the legacy DMS was shut down.

### Dependency knowledge between PLM and CAD

Going into the second phase of the project, trisoft took just that approach in replacing the SolidWorks PDM system. The first order of the day was to deal with a slew of legacy issues stemming from the switch to the incumbent PDM: conversions were made and references that were lost along the way were restored. Now that the cleanup is complete, the reference relationships between the 3D drawings in SolidWorks and the accompanying documents in the PDM system are finally back in place in PRO.FILE. “trisoft brings a lot

of pertinent experience to the table and proactively contributed to the project with its improvement suggestions,” points out Christian Doblhammer, Head of Design at Maschinenfabrik Langzauner.

Langzauner has a total of approximately 50 PRO.FILE licenses, which means that roughly half of its about 100 employees use the system daily. The company’s roughly 20 designers search the PLM software for information as do their colleagues from other departments at another 30 workstations, who mainly rely on PRO.FILE’s as a technical document management system. While in the past it had been essential to their daily routines – creating items and bills of materials, researching the use of parts and so on – Langzauner’s designers have largely abandoned working with the proALPHA ERP system. PRO.FILE has become their go-to tool for the creation of bills of materials, which are now automatically transferred to the proALPHA ERP system. “This is exactly why we implemented a system like this: To work faster and to have interfaces that save our designers the hassle of having to create parts in the ERP system and maintain bills of materials. After all, that’s not part of their core responsibilities,” explains Christian Doblhammer.



Dependency knowledge and interface between CAD/PDM/PLM and ERP system

#### The challenge

When projects get larger and more and more teams contribute to the design process, everyone involved needs to be able to access these design documents and other product-related information as quickly as possible. Since there was no way to automate the exchange of information between its systems, Langzauner had no choice but to work with two separate software solutions for PDM and DMS. It wanted to consolidate the information managed in these systems in a single PLM system that would serve the needs of all users across all departments.

#### The solution

PRO.FILE combines the properties of Langzauner’s previous siloed PDM/PLM and DMS solutions in a single system. It now serves as the central information hub for the entire organization.

#### The result

Roughly half of the company’s employees across all business divisions now use PRO.FILE daily. With automatic synchronization in place, designers no longer have to create parts in the ERP system or maintain bills of materials. Sales, service, and accounting all switched to PRO.FILE as their document management system and use it to manage all of their business-critical documents.



Overhead view of the company's headquarters

### The customer

Headquartered in Lambrecht, Austria, Langzauner is a leading expert in the development and production of hydraulic presses, automation solutions, special solutions, and tailor-made concept solutions in the automotive, aerospace and sports industries. Started in 1924 as a wood-working business, the family-run company has consistently extended its expertise to automation solutions and composite presses.

### Leveraging a central platform across the enterprise

Langzauner now leverages PRO.FILE as a central platform across the enterprise, giving everyone the ability to access and exchange product-relevant data. From design and technical departments to sales, purchasing, and service – relevant information is now readily available across the product lifecycle. For Gerhard Mayrhofer, product lifecycle management is all about a seamless experience across the enterprise and across every stage of the product lifecycle – made a reality with PRO.FILE as the perfect composition of PDM and DMS.

### Why did they choose PRO.FILE?

It is not enough for a PDM/PLM solution to interact with whatever drawing program is installed. It needs interfaces with other systems as well: ERP, DMS, and ECAD. On top of that, PRO.FILE also lets companies embed their documents into their products' structure. trisoft was able to quickly integrate it with Langzauner's existing IT environment.



PRO.FILE as a central platform for the entire company