

# Product Lifecycle Management Solutions



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CAD data management, product data management (PDM), and technical document management system (DMS<sup>tec</sup>) capabilities seamlessly integrated into your ERP system.

# PRO.FILE Product Lifecycle Management

Manufacturing companies today need their product lifecycle management (PLM) processes to be highly integrated across their design, manufacturing, and service departments. The time and effort involved in executing manual processes or exchanging bills of materials, purchased parts, and PLM-relevant documents between various CAD and ERP systems directly adds to the cost of goods sold, increases the time to market, and can result in a competitive disadvantage.

Whether you are struggling with your engineering-related version control or workflows, producing wrong parts due to incorrect drawings, experiencing outdated specifications in your ERP system, or having difficulties integrating the PLM processes of different sites across the globe, PRO.FILE is here to help.

PRO.FILE PLM solutions provide you with CAD data management, product data management (PDM) and technical document management (DMStec) capabilities that can be expanded to deliver a fully featured collaborative product lifecycle management solution that is seamlessly integrated into your ERP system.



A step-by-step model to follow your own evolutionary path to PLM, fully integrated into your ERP system

## Integrate CAD, product, and document management in a single electronic vault

## The Product Data Backbone

The Product Data Backbone is the foundation that allows you to store, retrieve, manage, and control all of your important product-related data and documents in a single vault from the beginning to the end of your product lifecycle.

The Product Data Backbone allows you to build a sustainable and future-proof foundation for the implementation of PLM processes, such as automated engineering change management, bills of operations, and other PLM processes.

The implementation of the Product Data Backbone is a two-phase approach. Based on your business priorities, we can start implementing CAD Data Management and Product Data Managementfirst and follow with technical Document Management (DMS<sup>tec</sup>) in the second phase—or we can reverse the order.



## CAD Data Management and Product Data Management (PDM)

CAD data management and product data management (PDM) are crucial to your ability to securely manage and control your product lifecycle data throughout the enterprise. In most manufacturing companies, part master data, bills of material and technical drawings form the backbone of product lifecycle management. This data and these documents drive manufacturing and in later stages service and maintenance.

Once implemented, you will be able to automatically and securely transfer the BOM from engineering (PLM) to manufacturing (ERP), have one common database in order to re-use drawings, bills of material, product descriptions for similar products and comparable projects, plus prevent the cost intensive and repeated design of parts and components.

Additionally, there are many other benefits including the reduction of administration expenses and reducing turnaround times in development and engineering.

## **Range of PDM Functions:**

- Centralized electronic vault
- Version and revision control
- Product classification
- Part master data management
- Bills of Material(BOM) management
- Drawing administration
- "Where used" lists
- Activity report and change journal
- Multi-MCAD integration
- Multi-ECAD integration (Mechatronics)



- Flexible authorization concept: roles, workflow, single user, user groups
- MicrosoftOffice (Word, Excel, PowerPoint) and Outlook integration



The Product Data Backbone integrates CAD, product and document management in a single electronic vault.

## Technical Document Management for Manufacturing and Engineering Companies (DMS<sup>tec</sup>)

Technical documents are an inherent part of your products and therefore of your PLM process. This makes it crucial to have a single solution to classify and store every document only once and manage them along with your product data or project documentation by creating a digital lifecycle file that contains all data for a particular product and accompanies it throughout its lifecycle.

This means that you will always have the right documents at the right time, regardless of the origin of the documents themselves. Once implemented, you gain full visibility and transparency regarding the relationship, for instance, between part master data of a component or an assembly and technical documents such as manuals, contracts and specifications, plus business data such as correspondence and meeting minutes. In addition, you will improve collaboration with your service employees, customers and operators by providing them with exactly the lifecycle files or machine files they want and need, such as digitized photographs, video, audio recordings or processor software for controlling machine components.



Support through all phases of the product lifecycle.

### **Range of DMS**<sup>tec</sup> **Functions**:

- Document storage in the same electronic vault as for PDM
- Relationship between documents and parts
- Classification and workflow on complex multi-level document structures
- Easy archiving and retrieval
- Documents storage only once to avoid data overload and duplicates
- "Where-used" lists/activity report
- Traceability (e.g. for compliance purposes)
- Flexible authorization concept: roles, workflow, single user, user groups
- Transmittals for external processing

# Automating processes and tasks with Product Lifecycle Management (PLM)

Implementing PLM is the next step towards a fully collaborative PLM system. Being able to control and automate your product lifecycle processes can have a direct and positive impact throughout your organization.

PLM allows you to integrate your task management with your product data in order to retrieve all data and documents that are relevant to a process or project from a single source. You will be able to automate your notifications and escalation management, whichcan significantly reduce processing times and ensure a better and more reliable coordination of ongoing processes and projects. Information on the current status of a project or process is always just a click away.

This probably sounds familiar: You are working on a development project and need to make short-notice changes. Manually coordinating the change process would simply take too long. This is where the task file for the change process comes into play. It helps you overcome this challenge by automating the PLM process for you. The system will automatically alert you of deviations therefore allowing you to stay on top of the change status at all times. Even better, it gives you the ability to automate parts of the process such as sending out documentation or creating an impact matrix (to determine the impact of the change).



Your personal home screen is showing ongoing processes and tasks as well as their statuses.

### **Range of PLM functions:**

- Project and task file management
- Escalation management
- Engineering change management (ECM) process (can be started on the ERP side)
- Mechatronic process management across departments
- Initial design release (IDR)
- Bill of operation (BOO)



Mechatronics change order management across multiple CAD systems, departments, and sites

# The final frontier: collaborating globally with PRO.FILE PLM

## **Collaborative PLM**

Today, it is commonplace for companies in many industries to have design and development teams distributed across multiple locations. Collaborative PLM was designed specifically for these companies to allow them to coordinate and synchronize the development work of these globally dispersed teams.

By implementing Collaborative PLM companies will enjoy the benefits of:

**Rapid access to (CAD) data from remote locations** powered by an infrastructure that delivers identical working conditions across all sites, even if transmission bandwidths are suboptimal. Colleagues on opposite sides of the world get to work together in real-time on the same data and documents.

**Data backup** which allows the satellite offices to continue working smoothly even if the central PLM server fails. Once disaster recovery is complete, the replicated data can be restored at the affected location.



Quick access to product data across the globe

### Examples of Collaborative PLM

- Automatic synchronization of local databases
- Significantly faster access to data and documents across the globe
- Coordination of differentiated access rights to CAD models and documents depending on release status and location
- Significantly reduced load on the IT systems
- Users can continue to work even if network connections between sites fail
- Automatic replication after network breakdown
- Maximum protection against data loss
- Multilingual
- Microsoft Office (Word, Excel, PowerPoint) and Outlook integration
- Web reports

# PRO.FILE PLM seamlessly integrated into your ERP

## Integrate your engineering with your ERP system

PRO.FILE PLM is the link between the technical and commercial worlds. Integrates into all major MCAD and ECAD systems, MS Office, MS Outlook, and your ERP system. With ERP integration, the data exchange can be continuous, periodic, or action-triggered.



# How do you transfer a 100 parts BOM from your CAD system to the ERP system?

Use PRO.FILE PLM and map the BOM structure from the CAD to the PDM system, then edit the BOM with the BOM editor, which allows you to reposition, renumber and move items up and down, to change quantities, append, and do fast inserts.

After that, it takes just one click to transfer the data to your ERP system without having to re-enter or check it for completeness or accuracy.

## **Bi-directional integration**

- Part information
- Revision management and traceability
- BOM
- Request for quotation (RFQ)
- Documents/drawings
- Engineering change management (ECM) process (can be started on the ERP side)
- Initial design release (IDR)
- Bill of operation (BOO)



### **Completed Structure in ERP**

The assembly as designed with all operations, materials, and BOM information is quickly transferred to ERP without additional manipulation needed.

# Go live quickly and systematically

## **Configure the Impact**

You don't want a project of mammoth proportions. We will work closely with you and take an iterative approach to gradually implement your project. You can see the results right away and get to configure any changes yourself. This also means you don't have to be an IT expert to manage your PLM solution. We call it the ISI.CON approach. It gets you where you need to be faster.



### Your benefits:

- Same effort—greater impact by focusing on your goals and delivering straightforward solutions
- Rapid implementation based on best practice project methodologies developed from more than 1,000 customers
- Reduced costs through faster project delivery and configuration rather than programming

**PRO.FILE PLM** 

 Future-proof and independent by ensuring upgradeability and user acceptance

# Why configuring instead of customizing?

	Customization specification/programming	Configuration selecting options
Philosophy product design	Customization only through software programming	Configuration by selecting options in a console
System maintenance	Can only be done by a software developer	No programming skills required
Implementation time	Longer: depends on the software customization complexity	Shorter: processes are introduced along with the software implementation
Changes flexibility	Delays the implementation of changes	Changes can be implemented right away

# Why PRO.FILE PLM?

# Investment Protection - A modular solution that can be implemented

- Product data management (PDM/PLM) and DMS<sup>tec</sup>
- Reliable ERP system integration



# Eliminate point solutions—Implement a fully integrated end-to-endsolution

- One centralized vault to manage all your MCAD/ECAD data, drawings, and product related documents
- Bi-directional BOM transfer and BOM comparison with your ERP system, ensuring seamless process flow
- A true multi-site solution that provides quick access to product data across the world
- Eliminates the need to rip and replace point solutions as your requirements grow

#### Trusted Experience—More than 1,000 PDM, PLM, and DMS Customers in production

- More than 90,000 Users
- Continuous product innovation
- 30 years of excellence

## **About Revalize**

At Revalize, we empower businesses to better design, model, develop, and sell—driving greater outcomes across the entire value chain. Our PRO.FILE platform enables you to maximize efficiency by integrating with major ERP systems, providing a robust product data backbone for product lifecycle management (PLM), product data management (PDM), technical document management (DMStec), and product-centric process automation. More than 1,300 global leaders in manufacturing have chosen PRO.FILE to increase speed-to-market, reduce costs, streamline complexity, and outpace the competition.

www.revalizesoftware.com