A MORE EFFICIENT PRODUCT DEVELOPMENT CYCLE USING A PRODUCT DATA MANAGEMENT SOFTWARE

When you are working in an organization with many users involved, it is essential to have a well-organized data base to grant access, allow for saving, changes and approval of design amendements under a controlled and safe environtment. A product data management (PDM) software ensures that everyone has access to the last version and even to be able to access the design history keeping track of the whole project evolution from its start.

Another advantage of using a PDM is that this software makes working with assemblies easier thanks to the building relationship automatically formed between components by its own ID, so that if we need to rename or relocate a file, other files remain linked.

Moreover, the PDM storage does not permit any duplicates, reducing unnecessary memory usage.

At REGNER®, we rely on Solidworks Enterprise PDM which provides us with these beneficial features. The PDM has a complete history of every REGNER® product design.

Inexperienced users of PDM will find that familiarity with Windows Explorer interface is quite helpful to get started with PDM storage system. This software simplifies the organization of each design into files and in addition it allows for easy-management through tracking and advanced searches. Thanks to this type of storage, every aspect of easch project is made accessible:

The author of last update

- Which changes were made

- That Stage the project is in

- The structure of every new project follows the natural workflow as illustrated in the chart below:
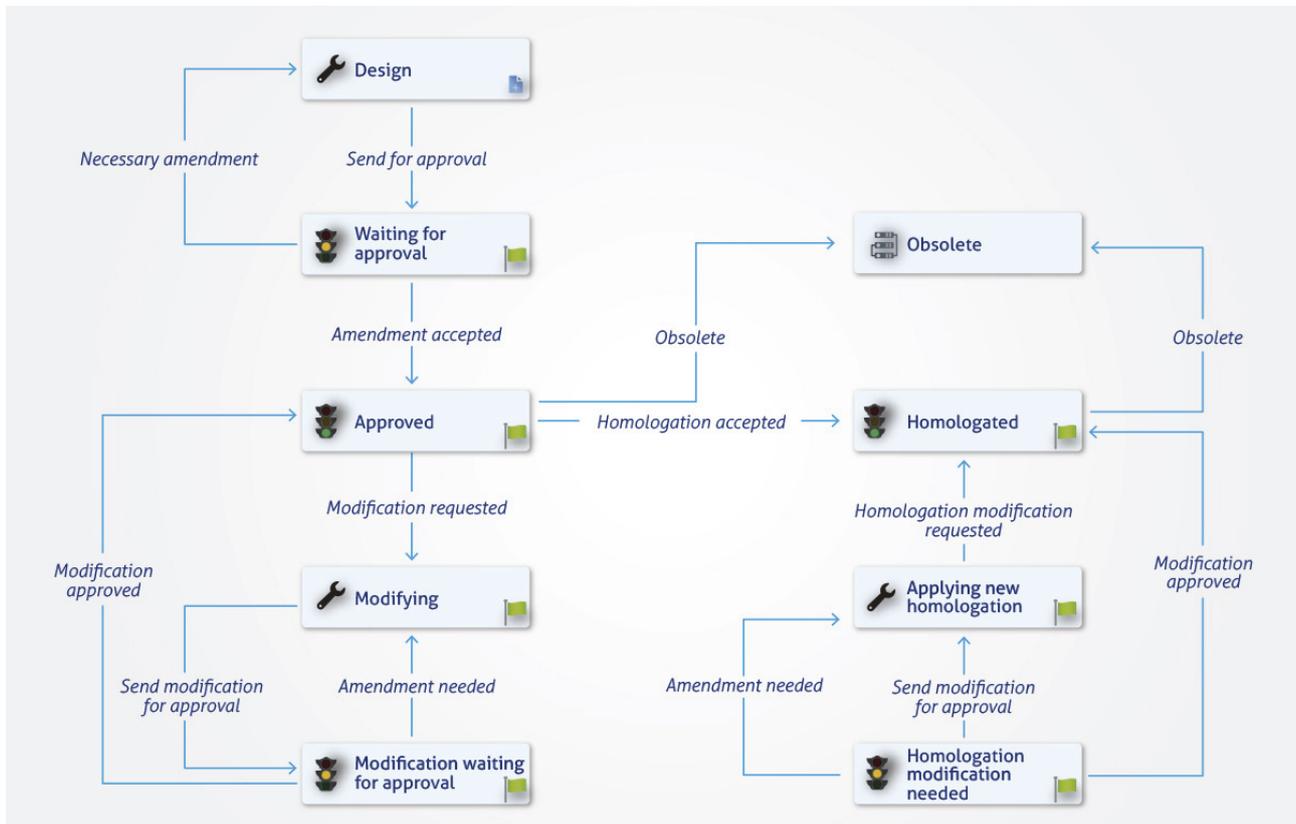
Firstly, the product designer creates a file in the design phase. Once the designer is satisfied with the initial design or even if they are aware that it is not the final version, the file must be checked in to the PDM.

When we check in the document in the memory, we create versions. These versions are not relevant document-wise for the project, but rather they allow for follow-up on the progress of the design.

Furthermore, any file that has been checked in does not allow modifications which therefore is protected against any unintentional changes.

After a file is checked in, the PDM provides the user with many features such as creation of new versions when saving changes, warning messages to avoid losing information, moving file location and permits the user to write comments to identify changes. Automatically the software keeps a register of changes made and identifies the users involved and prevents multiple users from working on the same file simultaneously.

When all changes are applied the user can approve this last version and the PDM changes the status of the file to "approved" that can be sent to suppliers and customers.

Once the file has the "approved" status, it cannot be modified without some limitations. To make further changes, new steps need to be taken, starting with a modification request which changes the status of the file to "changing". Similar procedure needs to be carried out to change the status to "homologated" for products subjected to regulations or set standards. Finally, we can also modify the status to "obsolete" when the file is outdated.

To summarize, the PDM system provides the user with the assurance that no document can be altered and no information is lost, reduces file organizing time, improves productivity and enhances collaboration.