

Bertrandt benefits from lean PDM

If you want to be at the forefront of digitalization, you also have to be well positioned internally. The leading engineering service provider Bertrandt therefore relies on the product data management technology CAD Portal provided by PDTec AG from Karlsruhe, Germany, to optimize its cross-site design processes.



“The scope of projects for our designers is becoming increasingly extensive and demanding. In order to be ideally positioned in project data management and to optimize our collaboration, we decided some time ago to use the PDM system from PDTec.”

*Bernd Funke,
Head of the Exterior Department in the Design Solutions Unit at the Bertrandt site in Tappenbeck, Germany*

Thanks to Bertrandt's support, a record-breaking trip was completed: A team drove an BEV across the USA and passed places where there were hardly any options for charging the car. The engineering partner tested the vehicle and the route in advance under real conditions

The internationally active engineering service provider Bertrandt uses its cross-industry know-how to create holistic solutions along the entire value chain. Be it for digitalization, e-mobility, or autonomous systems — about 14 000 employees at more than 50 sites worldwide are constantly working on trending topics. They have one goal in mind: to accelerate technological progress and make a relevant contribution to a sustainable future.

PDTec's PDM system optimizes the distribution and control of design data, CAD metadata and associated product structures. This also includes documents, agreements, and guidelines that are relevant to the execution of the development projects. Bertrandt decided to introduce the CAD portal, among other things, due to economic requirements. “We were aware that we needed a PDM system so that we could understand the individual design steps even better. We were concerned with the possibility of complete traceability of design statuses and with the fact that data can no longer be overwritten,” emphasizes the head of the design department.

Growing importance

The PDM system is primarily used to manage CATIA V5 data, the most widely used CAD tool in the automotive industry. “CAD Portal enabled us to implement specifications for structuring project execution. Now all colleagues work in the same design environment,” says Mr Funke.

His colleague Alexander Ruf, IT Technical Lead of the CAD Service Group with Bertrandt, adds: “Previously, when we were still working with directory structures, the employees had to be trained carefully so that no version was overwritten or files were named incorrectly.” Making mistakes is significantly reduced with CAD Portal, as he mentioned. In addition, the administration effort on the part of the IT department, which Mr Ruf represents, was significantly greater before the introduction of the PDM system.

Mr Ruf emphasizes: “Using a log file technique, we can always see which changes have been made to the system by IT. More is being logged, which was previously not possible when working at file level.” The MS SQL database used by Bertrandt also keeps the administration effort low.

CAD portal as substantial support for teamwork

The data in the PDTec CAD portal is unique for each project, the structure tree is almost identical to that in CATIA, both of which help with clarity and traceability.

How satisfied is Mr Asbeck with the performance of CAD Portal? “For technical reasons, a PDM system is slower than a purely file-based way of working. This is also known from other systems, but the advantages outweigh the disadvantages here.” The direct line to the developers at PDTec is also a big advantage: “We can arrange appointments at very short notice if we have any questions. As a rule, no other system provider responds so quickly. In this way, challenges can be overcome efficiently and quickly.” Mr Asbeck systematically goes through the LoPs (list of open points) together with PDTec at fixed intervals.

Bertrandt also has a clear answer to the question of whether the depth of integration into the CATIA V5 CAD system is sufficient. “CAD parts and CAD products are directly accessible via the CAD portal. The interface is always CATIA. Its formats can be processed directly; there is no communication between the CAD portal and other PDM systems,” says Mr Asbeck.

Bertrandt uses PDM objects in a variety of ways. A lot of metadata is also stored in the PDM system. This means that all so-called properties that are noted in the CAD components can be transferred. The CAD portal offers a few more functions in addition to those used by Bertrandt. The portal can be tailored and adapted specifically to the needs of the customer.



“CAD Portal now helps us a lot in harmonizing and precisely documenting actual processes. The Tisax certification requires dedicated access rights management, as offered by the PDM system. From an IT security point of view, it is advantageous that the CAD portal cannot be accessed from outside.”

Alexander Ruf
IT Technical Lead of Service Group CAD, Bertrandt



“My colleagues appreciate the advantages: Data stored via the PDM system is versioned and therefore has a traceable history. The name of each record in the project is unique, so it cannot appear multiple times.”

Sven Asbeck
CATIA and PDTec PDM trainer, Bertrandt

Conclusion: On course for growth

The use of further functions of CAD Portal depends on how Bertrandt’s development projects shape up in the future. So far, the CAD portal has been further developed together with Bertrandt. “The system is intuitive to use, performs well and has a clear structure,” summarizes Bernd Funke. (bv)

Reference
www.bertrandt.com

For more about lean and collaborative product data management technologies, visit pdtec.com/products/cad-portal

¹⁾ Bertrandt benefited from high research and development investments by its client base in the 2022/2023 financial year. The engineering service provider was able to increase its overall sales by 14.7 percent to a record value of around 1.16 billion euros. Further growth in overall performance is expected for the 2023/2024 financial year.