

REFERENCE AUTOMOTIVE AND MOBILITY

Using PLM to optimize processes

Maturity-controlled development

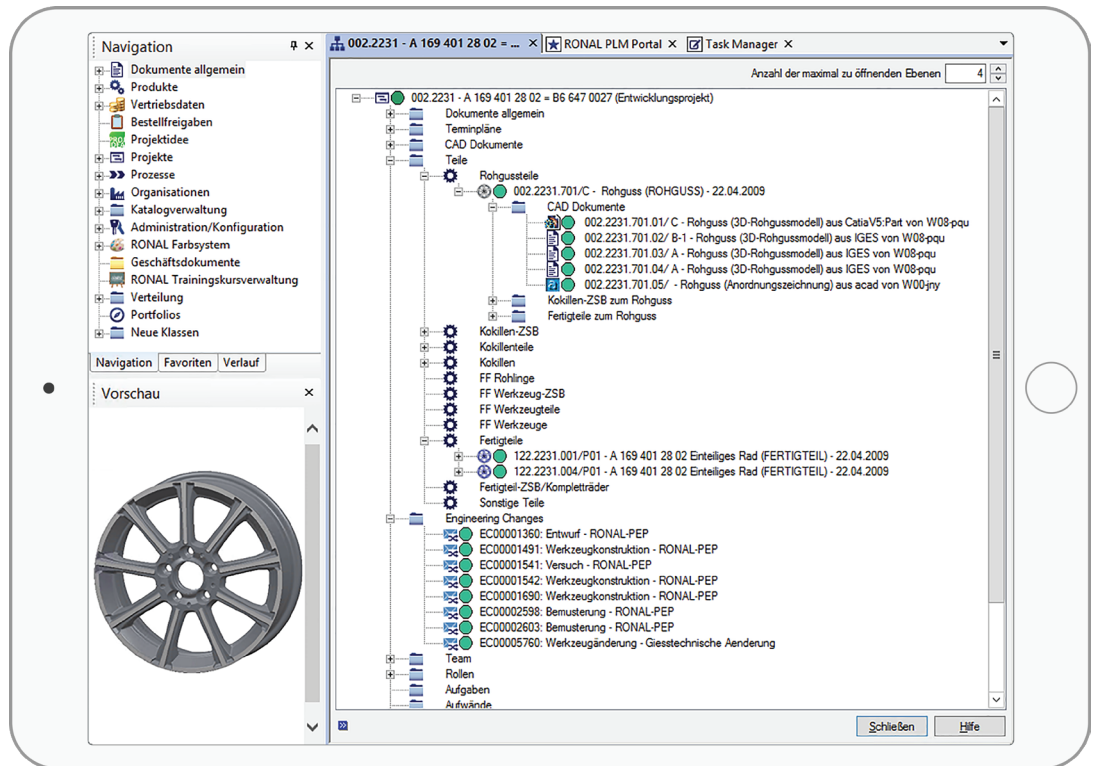


The RONAL GROUP employs over 8,000 people worldwide who all have one thing in common with their customers: a great passion for wheels. More than 21 million wheels are produced every year at 13 production sites on three continents. The use of CIM Database as the global platform for all product-related information has significantly improved the efficiency of the product development process – thanks to systematic engineering change management among other things. Approximately 1,400 users at 22 locations worldwide use CONTACT’s PLM system.

The services that the RONAL GROUP provides cover the entire process chain. All the production steps from engineering to toolmaking through to the finished product are carried out by the RONAL Group using state-of-the-art production systems. Specially developed technologies attest to the company’s power to innovate and high quality standards. The creation of a wheel is relatively complex. On the one hand, the development of the wheels and the tools used is distributed over a number of different locations. On the other hand, there are cultural differences between the disciplines. The development of a wheel involves predominantly creative activities that are highly dynamic in nature; toolmaking, on the other hand, involves highly structured work. The need for a PLM platform therefore arose primarily at process level: The aim was to support product development across all departments by mapping all the development processes in a single system.

Mapping all processes in a single system

The introduction of CIM Database allowed the RONAL GROUP to achieve this aim. CONTACT’s PLM system has since served as a platform for all product-related data, which the Group uses to map the entire product development process from the initial request for a proposal to procurement and quality control through to the start of production (SOP). The system provides global access to consistent development data and enables



largely automated process planning, process control and process handling. Combined with standard, customer-specific task structures including checklists, checkpoints, milestones and gateways in development projects, this ensures a high level of efficiency.

Engineering change management as the basis for innovation

Status and maturity level-based control mechanisms and digital change folders form the basis for the solution implemented at the RONAL GROUP. First and foremost, it ensures that certain rules are observed – without specifying all the processes in detail. This is particularly relevant when it comes to change management, as change provides the basis for innovation. A systematic change process with workflow templates and digital change folders is therefore implemented in the early phases of a project. These engineering changes (ECs) ensure consistent design levels across all departments. Interaction between disci-

“The support provided by CIM Database ensures a seamless transition from the bidding process to the product development process by automatically generating the product structure required for the finished product using information from the bid.”

Myrta Estermann, Manager Group IT, PLM / PDM Services, RONAL GROUP

plines means that interlinked design levels are “pre-released” and thus “frozen” once a certain level of maturity has been reached. The individual work items are grouped together with the help of the ECs.

Change history with all product configurations available at all times

The level of maturity determines which EC template can be used for the next step in the product development process. The template specifies which validation steps are required and which departments in the company are responsible for performing them. The saved change history contains all validated product configurations. All relevant changes and changes in the level of maturity are automatically logged. Thanks to CIM Database, all those involved in a project are kept informed about the level of maturity of the product and, if changes occur, they know immediately what they have to do and when to do it. Working with a uniform database ensures validity and minimizes the number of errors that occur during the change process.

Comprehensive bid management

The RONAL GROUP also uses CIM Database’s project management functions to organize bid management. Comprehensive planning functions, task management, the use of plant-specific roles for workflows and task objects, progress monitoring and an electronic, cross-site order release process ensure efficient preparation of the bids. An integral part of the bidding process is a feasibility analysis with multi-stage workflows which examines customer inquiries as regards technical feasibility and process engineering. The uniform database – in conjunction with the management of article data in particular – ensures that all the data used to prepare a bid is always up to date. This applies to both individual articles and the data set as a whole, including all contractual specifications. A high level of transparency as the result of standard project overviews and comprehensive controlling functions enable the RONAL GROUP to handle projects extremely efficiently.

The Company

The company, which is headquartered in Härkingen, Switzerland, is a leading manufacturer of alloy wheels for cars and commercial vehicles. As an OEM, it has been supplying all the major automobile manufacturers worldwide for years. With its customer accessibility and quality work, the RONAL GROUP also offers premium products for the car aftermarket under the RONAL and SPEEDLINE CORSE brands. With SPEEDLINE TRUCK, the Group also offers a range of products for commercial vehicles, trailers and coaches.

The Solution

- Mapping of the product engineering process from the initial request to procurement through to SOP
- Multi-CAD data management for AutoCAD, Catia and NX, including 3D viewing
- Engineering change management
- BOM management, including ERP synchronization with XXPS (Infor)
- Sample and prototyping management
- Document management, including project and document templates
- Technical and commercial project management, including task management, cost recording and resource planning
- E-learning

Benefits

- Global access to consistent development data thanks to a central platform for all product-related data and largely automated process control
- Availability of appropriate data resources across different locations and good performance at the subsidiaries
- Consistent design levels thanks to systematic change processes with workflow templates and digital change folders

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great minds***