

RENAULT TRUCKS DEFENSE

An End-to-End PLM Project: Virtual Modeling, PDM and EDM

Renault Trucks is a leading European manufacturer of civilian trucks and military vehicles. Co-contracting with GIAT Industries, it has developed a new vehicle for the French army: the VBCI (Véhicule Blindé de Combat d'Infanterie – Infantry armored combat vehicle).



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VBCI project participant and user project manager for CATIA V5 deployment

INDUSTRIAL CO-CONTRACTING

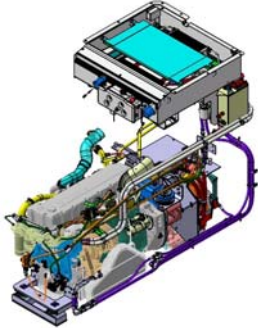
Equipped with 8 motorized wheels of around 1m30 in diameter, the VBCI will demonstrate exceptional performance in terms of mobility. A 30-ton class vehicle carrying 11 people, it is designed to carry troops to the theatre of operations. The vehicle's designer and integrator GIAT Industries is responsible for the bodywork, protection, the equipped turret and arms, as well as communication and information systems. Renault Trucks Défense has designed and manufactured all the mobility-related parts, from the steering wheel to the wheels, engine and electrical network.

TOTALLY DIGITAL DESIGN

“Due to the very tight schedule, we decided to produce a virtual model to design the parts, using CATIA V5, which GIAT had used in the past. It is the first time Renault Trucks Défense has designed a vehicle entirely digitally. We are very satisfied with the result: very few parts had to be modified on the first physical prototype, allowing us to dramatically reduce costs and lead times,” explains Michel Sausset, VBCI project participant and user project manager for CATIA V5 deployment at Renault Trucks Défense.

SINGLE MANAGEMENT OF DATA AND DOCUMENTS

The VBCI has around 10,000 parts just for Renault Trucks' part of the project. Design data includes 2,000 different item references, grouped into 400 nomenclatures, added to which are item developments and the different versions of the vehicle. “CAD data could not be included in the company's product data management system. We also needed to manage all deliverable documents, such as management plans, minutes of meetings, schedules, specifications, etc. We had to provide the customer with



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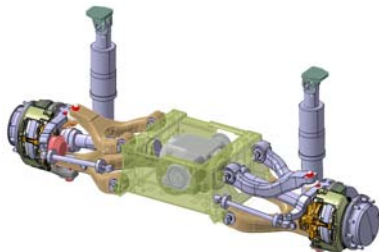
Oliver Vandendriessche
Project Manager, Volvo IT

electronic document management with centralized archiving and a traceability system. We wanted a tool that was able to manage both product data and documents. After analyzing four potential solutions, we chose SmarTeam, which MDTVISION helped us to deploy to suit our needs,” says Michel Sausset.

A MOTIVATED AND EFFICIENT TEAM

This project is a major challenge for the three parties. People from the different businesses had a consistently professional and positive attitude, which greatly contributed to the success of the project. “The steering committee did not notice a period of slowing during the project, which is rare. Each week all the internal and external people concerned participated in a conference call to discuss progress and draw up the action plan, etc. We appreciated MDTVISION’s SmarTeam expertise as well as its capacity to listen to our needs. Its consultants are also able to provide compromises if necessary. This approach allows fast progress to be made,” says Olivier Vandendriessche, Project Manager, Volvo IT. Part of the Volvo group, Renault Trucks Défense benefits from the support of IT business unit Volvo IT concerning project management, development and choice of suppliers.

MDTVISION: A MAJOR PARTNER



For this large-scale project, MDTVISION provided CATIA V5 licenses, deployed the software and trained users. It helped to evaluate SmarTeam in the customer context, then integrated and installed a customized solution. “MDTVISION was a major partner for us in this project. The ultimate goal is a solution that allows everyone involved to share and update information,” concludes Oliver Vandendriessche.

RESULTS:

- Greatly reduced number of physical prototypes thanks to digital modeling
- Reduced costs and lead times
- Information sharing and updating
- Single management of data and documents