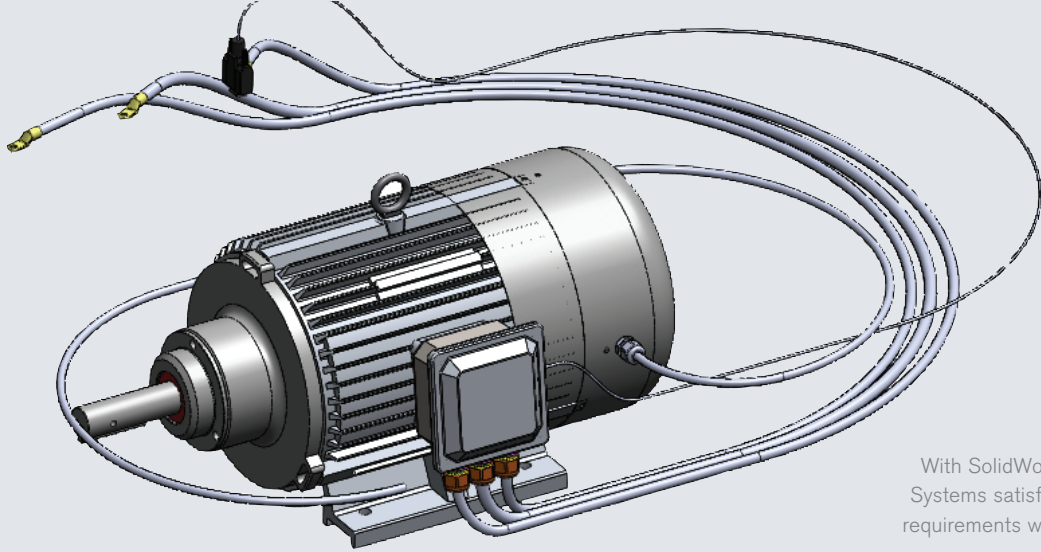


# BluWāv Systems

STREAMLINING THE MANAGEMENT OF AUTOMOTIVE HYBRID-ELECTRIC DESIGN DATA WITH SOLIDWORKS ENTERPRISE PDM



With SolidWorks Enterprise PDM, BluWāv Systems satisfies its design documentation requirements while supporting a faster pace in product development.

- Decreased product time-to-market by 25 percent
- Cut design cycles by 50 percent
- Improved accuracy by streamlining handling of BOMs and ECOs
- Satisfied documentation requirements for automotive and military contracts

BluWāv Systems is a leading developer of next-generation electric and hybrid-electric propulsion and drive systems for automotive applications. With the acquisition of Wavecrest Laboratories, BluWāv Systems focuses exclusively on the design of automotive propulsion and drive systems for commercial and military markets. The strategic decision to concentrate on automotive applications created a whole new set of data management challenges, according to Vice President of Vehicle Systems Todd Kendall.

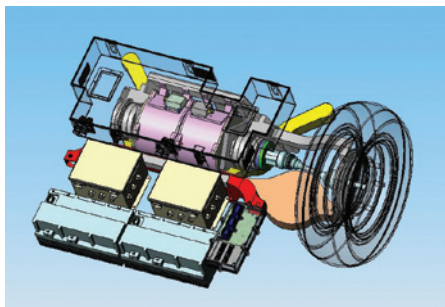
“The increased speed of our development effort resulted in exponential growth in our overall part count,” Kendall explains. “The volume of our design data, combined with the stringent documentation requirements associated with automotive and military contracts, exceeded the capabilities of our previous data management system. In order to integrate with Tier One OEM suppliers, we had to do more than control design changes. We needed a complete product data management (PDM) system that was both easy to use and easy to implement.”

Because BluWāv Systems uses the SolidWorks® 3D CAD system, the company evaluated data management applications that have some level of SolidWorks integration, including SolidWorks Enterprise PDM, SmarTeam®, DBWorks®, Agile™, and Microsoft® Great Plains® software. BluWāv Systems chose SolidWorks Enterprise PDM – implementing five seats – because it is simple to use and implement, handles all data file formats, and will support future growth.

“The implementation of SolidWorks Enterprise PDM was almost off-the-shelf,” Kendall recalls. “It was the only application that gave us the total package without extensive training or implementation regimens – and the integration with SolidWorks Standard is phenomenal.”

**“Now we can go from a napkin-drawn concept to a prototype in just 12 weeks – compared to six months before implementing a PDM system – and with a far higher degree of accuracy.”**

Todd Kendall, Vice President of  
Vehicle Systems



SolidWorks Enterprise PDM software gives individual users at BluWāv Systems the quality control, workflow, and data management capabilities they need to automate product development.

## Improved data management accelerates time-to-market

Since implementing SolidWorks Enterprise PDM, BluWāv Systems not only has satisfied its more stringent design documentation requirements, but also has compressed its design cycles by 50 percent, reducing its product time-to-market by 25 percent overall. “We rely on the SolidWorks Enterprise system to support our current product development pace,” Kendall explains. “Now we can go from a napkin-drawn concept to a prototype in just 12 weeks – compared to six months before implementing a PDM system – and with a far higher degree of accuracy.”

“Because Enterprise PDM is so easy to use and implement, we were able to achieve a jump in productivity, completing a full design cycle in just three months,” Kendall adds. “I have done a lot of implementations, and this was one of the easiest. Without SolidWorks Enterprise PDM, we would never have been able to sustain this pace.”

## Robust capabilities drive product development

Before implementing SolidWorks Enterprise PDM, BluWāv Systems had to devote two full-time resources to the tasks of managing engineering change orders (ECOs), coordinating design approvals/signoffs, controlling revisions, compiling bills of materials (BOMs), organizing non-CAD design data, and otherwise supporting the documentation needs of the company’s product development process. SolidWorks Enterprise PDM gives individual users the quality control, workflow, and data management capabilities they need to perform these important functions in an automated fashion.

“We secure all of our design data in our vault, and can easily find any piece of data by searching by part number, description, or category,” Kendall notes. “Finding data is much easier with SolidWorks Enterprise, and the email notifications are a big help as well. As soon as a change is made to a print, the system notifies whoever needs to review and approve it.”

## One company, one system

In addition to managing SolidWorks part and assembly CAD files, BluWāv Systems uses SolidWorks Enterprise PDM to manage all design-related data, including OrCAD® electrical CAD files, SolidWorks design analysis files, Excel spreadsheets, and any other file associated with product design. The ability to manage diverse design data under a single umbrella creates natural synergies, while encouraging greater collaboration between electrical and mechanical engineers.

“Since our market changes very quickly, we need to be fast to stay ahead. Otherwise, we risk being left behind,” Kendall stresses. “To succeed in an emerging market, we must maintain a rapid product development pace, operating as one company using a single PDM system. We cannot afford to have the baggage of excess data systems, which is why we have tied SolidWorks Enterprise PDM back into our financial system by exporting Excel files for import into our ERP software.”

Kendall says he anticipates additional productivity gains because BluWāv Systems has yet to utilize the full potential of SolidWorks Enterprise PDM. “We have only tapped into about 25 percent of the productivity enhancements provided by SolidWorks Enterprise,” he points out. “Our next step is to integrate our Asian supply base into the system.”



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