

Innovative solution for model-based mechatronic product development


PTC Windchill for model-based systems engineering provides an overarching view of the disciplines of hardware, electronics and software, enabling everyone involved in a project to be informed clearly and comprehensibly about every level of activity.

Reduce the risks involved in systems engineering and increase product quality

Remove the obstacles in the design process that your teams face and improve your systems engineering. With PTC Windchill, we provide you with an integrated, interdisciplinary and collaborative approach to developing and maintaining complex systems. Components, systems, system product lines and systems of systems are modeled according to specified standards and revolutionize the way in which your teams chart out and communicate ideas for designing new and successor products.

Product world

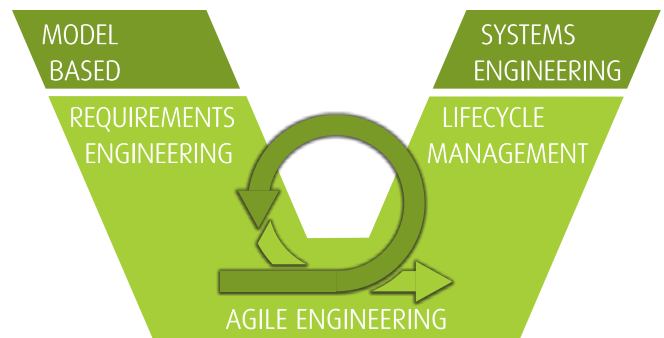
Windchill Modeler



The Windchill Modeler is a database-based SysML/UML solution that allows all the members in a team to work on a model simultaneously. The SysML functionality makes it possible to create a complete system comprising the disciplines of hardware, electronics and software. The precise transition between the disciplines is transparent to all project members. Bidirectional integration in the requirements management facility (Windchill/DOORS) supports end-to-end integrity, from the requirements to SysML/UML modeling through to automatic code generation (C; C++; C#; J, VB). The return path back to the requirements can be established with a click of the mouse.


A number of different modules are available that provide you with professional support:

- Automatic Code Synchronizer
- Design and model reviewer for standardized or customer reviews (Reviewer)
- System simulation for the very early phases in a project (SYSIM)
- Highly intelligent reuse of assets (ASSET Library)



V Model and AGILE Engineering

Windchill Process Management



The web-based process management solution is easy to use, flexible and is tailored to meet your company's specific needs (Process Director). All those involved in a project can quickly see and understand the implemented processes, and all the steps can be verified at anytime. Another focal point is user management (Process Consumer). Read permission, for example, is granted for the rolled out processes and e-mail notifications are sent out automatically. Process Check manages error, avoids expensive misunderstandings and ensures the success of the project. Project milestones, e.g. in security-critical industrial products, are monitored from the very start.

The solution's modular design provides you with easy entry to model-based system and software engineering.

- Process Director
- Process Consumer
- Process Check
- Process Perspective



Summary

Model-based systems engineering's program-independent approach provides substantial support for early, fast and synchronous collaboration. It is scalable and thus provides an enormous reduction in your time-to-market.

