

PERMAS Component Generator

PCGen is a modeler for PERMAS, specialized in quasi axisymmetric shell structures such as fluid tanks. For this class of geometries,

PCGen

- generates complete simulation models, including solver dependent models e.g. for multiphysics or optimization models, and commands.
- requires no CAD input since it relies on a library of parametrized parts (but it exports STEP files and can be extended to read custom formats from in-house tools). So PCGen can be used in early design phases, even before CAD is available.
- is easy to use,

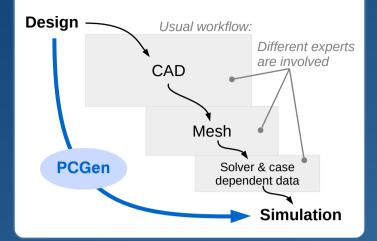
PCGen users can create complex models without PERMAS expertise. The output models are commented, so the user is still in control. PCGen also comes with context help and tutorials.

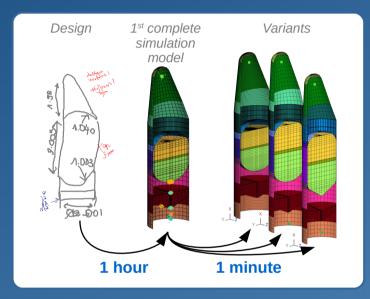
- generates qualified models...
 PCGen provides various feedbacks to the designer, such as model consistency and analytical masses.
- ... quickly!

Therefore

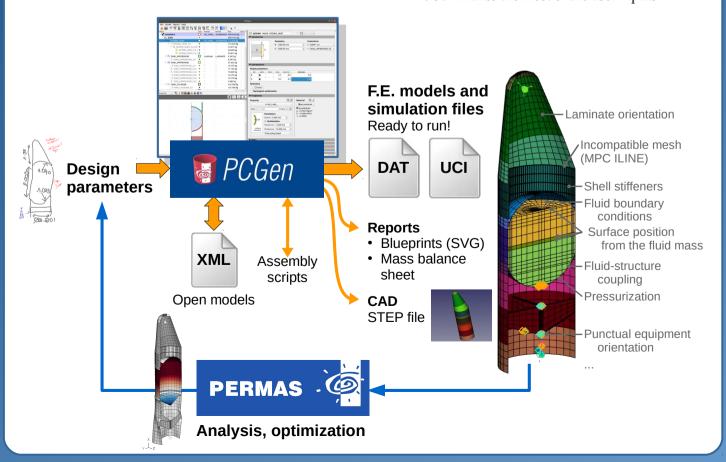
PCGen is an effective (pre)design tool.

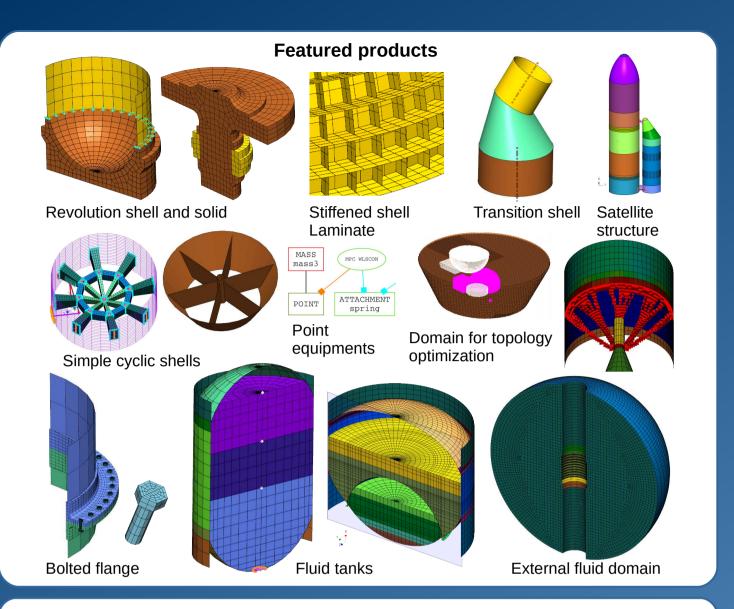
PCGen is a shortcut from design to simulation.





PCGen makes the most of the user inputs.





User interface

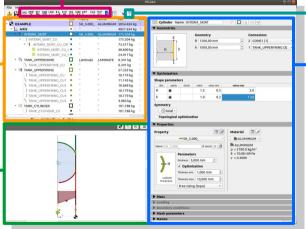
Model databases From materials to simulation cases and optimization scenario Tree view of the model hierarchy • Selection • Quick assignments • Mass balance • Consistency check

Documentation and tutorials

Item specific editor Organized along modelling tasks (geometry, material, loads and boundary conditions, optimization...)

Interactive viewer

- Selection
- Zoom, pan
- Distance measure





PCGen is developped by INTES France. For more information about PCGen, contact us at **point-contact@permas.fr** or visit our website: **www.intes.fr**

