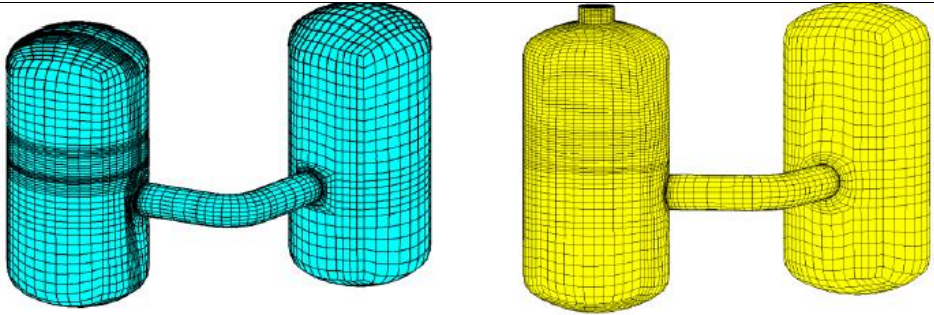


SUpport to SAfety ANalysis of Hydrogen and Fuel Cell Technologies

Verification type	Sensitivity Studies (Grid and Parameter sensitivity)
Database reference	SEN-7
Topic / Application	Nuclear safety
Physics	Hydrogen release Stratification Spray cooling Thermal-hydraulics
Summary	Primarily concerned with validation of complex multiphase flows with heat transfer, but with some sensitivity analysis of CFD simulation.
Description	Sensitivity variables included 2D to 3D representation; grid refinement, turbulence modelling, and timestep. However no formal verification work is undertaken, and both the physical phenomena and flowfields are very complex so it is challenging to transfer learning to distinct applications.
Case Title	CMFD SIMULATION OF ERCOSAM PANDA SPRAY TESTS PE1 AND PE2
Authors	Filippov et a, Nuclear Safety Institute of Russian Academy of Sciences (IBRAE RAN)
Year	
Online reference	
Case image	 <p style="text-align: center;">Coarse and fine meshes for PANDA model</p>
Governing equations	
Results	Study indicated weak dependence of results on meshing.