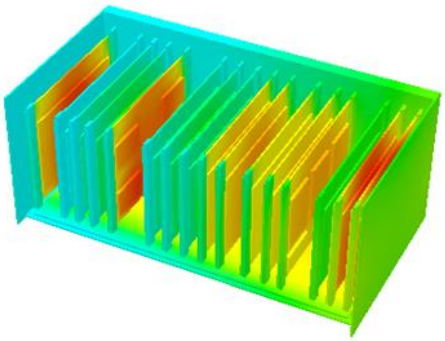
TESuite – Aircraft Industry

Thermal-management challenges in aircraft systems require sophisticated strategies aimed at the platform, subsystem, and component levels. TESuite software package is designed to provide the system designers the most advanced design and simulation tool for efficient thermal analysis and assessment of thermal management system capabilities. TE Suite is the first package to truly bring together the simplicity of drag and drop system thermal and fluid modeling and the power of 3D CFD and Heat Transfer.

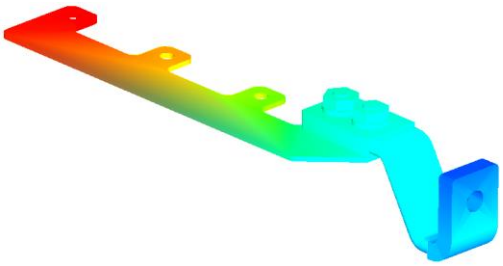
Electronics and Power Systems

- Ideal package for modeling and simulation of aircraft electronics components, boards, boxes and racks with any level of complexity.
- Perform thermal/CFD/electrical analysis of extremely complex models of electronic boxes involving millions of elements with ease.



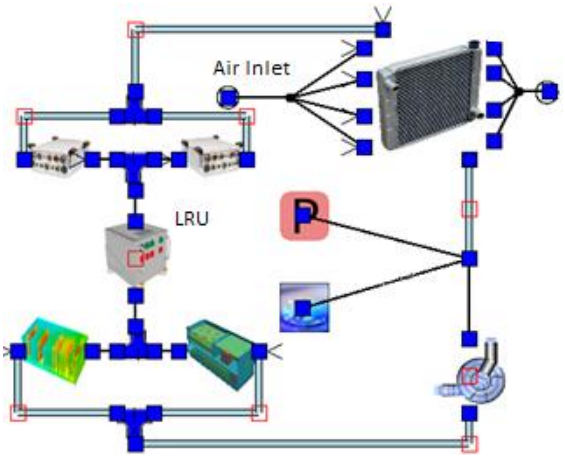
Electric Bus Current Carrying Capacity

- Coupled Electrical-Thermal analysis allows design of complex electric bus system to study effects of geometry, material and connection losses.
- Perform transient simulation on electrical conductors in extremely high-current scenarios to evaluate “time to Failure”.



Environmental Control Systems (ECS)

- The ultimate environment for the design and analysis of integrated thermal management strategies at the platform, subsystem, and component levels.
- Variable-fidelity approach consisting of a wide range of modeling capabilities including 1D network based and full 3D CFD component modeling.
- Allows integration and direct coupling of air, liquid and refrigerant loops with full thermodynamics analysis capabilities.



Aircraft Engine Primary and Secondary Flow Circuits

- Design and simulation of aircraft propulsion system primary and secondary cooling paths.
- ”Embedded Flow-bar” modeling functionality allows analysis of air/liquid cooling channels in 3D solid components.