

Why Thermal Systems Group?

Thermal Systems Group (TSG) uses the latest engineering tools, including advanced 3D Solid Modeling capabilities and Computational Fluid Dynamics (CFD) software for flow and heat transfer simulations. Not only do we have the software, but also the technical staff with years of experience to use it effectively.

TSG has a proven track record serving multiple and varied industries. Our technical staff experience ranges from designing and engineering avionics electronics packaging for Aerospace/Military Systems to system integration of glycol heating loops for building and process air heat recovery.

This experience is tapped into to provide optimal design solutions and thermal/fluids analysis in the most cost effective manner for our customers.

CFD - What can it do for you?

Remove the guess work from expected system performance and wisely allocate capital investments to get the most performance from systems and products.

“See” the system/product performance before it is even built and make changes to improve performance! This is the beauty of developing virtual prototypes.

Industrial Ventilation and Process Air Systems

Heat Transfer and Fluid Flow applications vary from system level impacts of building ventilation and process air systems on air, vapor, and heat migration to performance of

individual systems and components.

Specific applications include:

- Next Generation Air Surveys
- Indoor Air Quality/Dust Control
- System Optimization
- Winder Trim Conveying
- Separator Design/Optimization
- Fan Performance Requirements
- Distribution/Pick-up Plenums
- PV and Felt Purge Nozzles
- Heat Exchanger Performance
- Glycol/Water/Steam Piping



Building ventilation with air migration patterns.

Product Development and Electronics Packaging

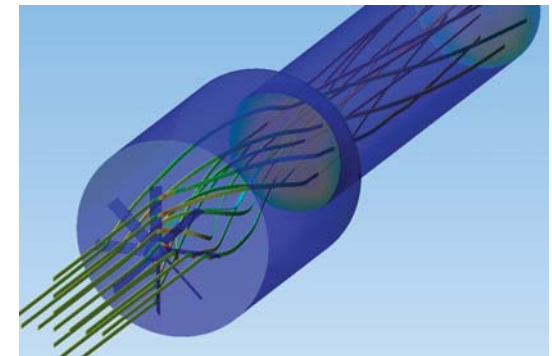
Reach the market quicker by reducing physical prototypes. Design optimization by simulating flow and heat transfer performance of virtual prototypes.

High reliability electronics require efficient thermal management systems. Our technical staff has experience with air cooled (direct and indirect), liquid cooled and passive (natural convection and conduction) systems to keep junction temperatures at required levels.

Architectural, Engineering & Construction Applications

HVAC air flow simulation for critical air distribution and exhaust applications. Detailed smoke simulation, human comfort, air quality, solar loading and overall air systems design.

Take your building designs to the next level.



Flow through a centrifugal separator.

THERMAL SYSTEMS GROUP
A DIVISION OF SEI

Principal Consultant: Cory Postle, P.E.
Phone: (850)944-0013
E-mail: cpostle@sei-group.com

Senior Consultant: Joe Taormina
Phone: (518)222-2146
E-mail: jtaormina@sei-group.com
www.sei-group.com