PASSAGE®/FLOW Software

OVERVIEW

PASSAGE®/FLOW is a general purpose three-dimensional finite element program used for the solution of fluid dynamics and heat transfer problems.

• Together with PASSAGE®/SYSFLOW, it can be used to provide a solution of component and system design issues for product and process design.
• Together with PASSAGE®/DEM, the software can be used to provide a solution of problems where micro- and macro-scale issues are combined.

INDUSTRIES

Product Design:
• On and Off-Highway Vehicles
• Equipment (Electrical, Hydraulic, Pneumatic)
• Electric motors, generators
• Appliances
• Refrigerators, air-conditioners
• Ink jet and electro-photographic printers
• Semiconductors

Process Design:
• Food
• Pharmaceuticals and Chemicals
• Metals, Plastics, Glass, Ceramics
• Powder

APPLICATIONS

• Process Modeling: heating, cooling, pollution control, casting, molding, forming, mixing, wetting, filtration, fermentation and filling,
• Product Design: energy efficiency, noise, performance
• Flow of liquids, gasses, and powders with free surface, mixing, melting/freezing,
• Flows in magnetic and electrical fields coupled with structural deformations,
• Flows through complex stationary and rotating passages; pressure losses and flow induced noise problems.
FEATURES

• Coupled equations of motions are solved for flow and heat transfer equations with a variety of nonlinear material properties.
• A user-friendly pre- and post-processor is provided for the input of geometry and material properties, as well as displaying a variety of results in time.
• Graphical user interface enables review of complex unsteady flow fields in detail.
• **PASSAGE®/FLOW** runs on PC-based workstations,
• Software has been validated and utilized for the design of many real-world problems. It is supported by numerous case studies.
• Technalysis provides design experience complementing the software.
• **PASSAGE®/FLOW** software was developed and is offered exclusively by Technalysis, Inc..

BENEFITS

• **PASSAGE®/FLOW** software can minimize the cost and time of traditional prototype building and testing, thus shortening product/process design cycles.
• Designs can be analyzed and modified on the computer before prototypes are built or decisions are finalized when design changes become costly and time consuming.
• Technalysis offers software customization of **PASSAGE®/FLOW** software to meet specific customer needs for complex product/process designs,

Technalysis has extensive experience since 1985 for incorporating simulation to design process.