

CAE Solutions



Let's create value to your design



Unique Features

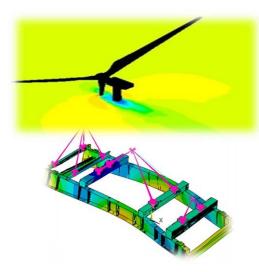
End to end virtual prototyping to speed up your product development process.

Benefit from high-end CAE technology with our experienced engineers who can validate and optimize your products helping you innovate better.

Shorten development cycle with virtual prototyping so as to keep you ahead in the market.

Enhance quality and reduce cost by improved product development methodologies and process.

Improve knowledge with our expertise CAE training program to demand innovation and improve product development.



FlowXplore Pvt Ltd. is a highly experienced consulting firm, we provide engineering simulation, analysis and design optimization that enables product development to Industries and Researchers and we also provide comprehensive CFD & FEA corporate training.

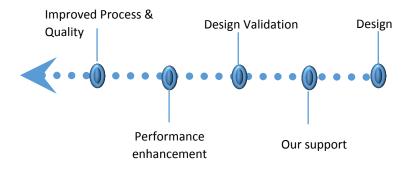
Overview

CAE is used by progressive companies around the world to make the product development process more innovative, faster, and lower in total design and production costs. Engineers and designers can simulate, validate, test, and optimize designs, materials, and components without actual physical prototyping or testing, both early in the design cycle and throughout every stage of the development cycle. This allows forward-thinking companies to save precious time, money, and resources while improving the design process. They greatly reduce major redesigns, warranty costs, and expensive product recalls through the use of powerful analytical and visual tools that result in better solutions through improved insight and problem solving. With CAE, one can easily validate designs at every stage of the development cycle, problems are caught, quality gets built in, manufacturability is insured, and customer satisfaction is achieved.

Our Direction

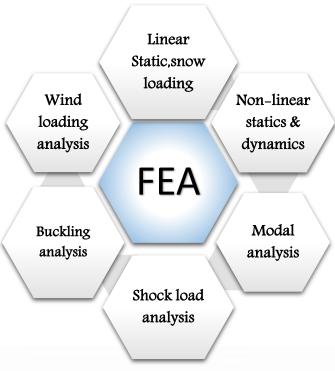
The FlowXplore Team of Professional Engineers has unique vision in taking the simulation industry into the future by making high level design technology available and affordable to every Industry and Individual. Our Vision is implemented by applying principals that focus on Innovative Simulating Techniques, Responsive Technical support, Comprehensive Documentation and Professional Training. Design Optimization of the products is driven by client feedback that is used continuously to refine the product design. Our focus on commitment to the customer makes sure your demands are satisfied.

Creating value to your design



Capabilities in CAE





Infrastructure

The FlowXplore Team can take your toughest problems and provide analysis results as solutions in your new product development cycle.

Workstations with latest High Performance computing equipments our engineers can work in CFD and FEA projects simultaneously.

Our comprehensive technical training is provided in – house and off – site training. Our training center can hold upto 20 students at a time with individual computer to each trainee.

Documentation and Support

FlowXplore is recognized for the dedication, professionalism, and efficiency of its support team. Our Support team provides technical support through in – person and telephone so that you have the help you need to keep the critical projects on schedule.

We also provide access our vast knowledge base of tutorials, journals and additional documentation as an indicator of excellent technical support we offer for our clients.

Partnerships

FlowXplore is proud of its reputation for listening to customers and working with them. Our Highly experienced team can define and implement core CAE technology with consistency and openness for the clients.

We also offer short and long term consultants and project engineers from our talent pool. This covers a complete package including deputing the engineers for a specific period, managing their pay roll and training.

Application areas

Automotive

- External Aerodynamics
- Engine Cooling
- Inlet and Exhaust manifolds
- Under– hood Analysis
- Brake Cooling
- In-cylinder combustion
- Pollution control.

Aerospace

- Combustion
- External
 - Aerodynamics
- Inlets and Nozzles
 - Instrumentation
- Missile systems -
 - Propulsion

Turbo machinery

- Axial and Centrifugal
 - **Pumps**
- Fans and Blowers
- Gas and Steam
 - **Turbines**
- Wind Turbines
- Cavitation analysis.

Chemical

- Drying technology
- Filtration
- Heat and Mass Transfer
- Mixing simulation
- Chemical reactors

Heat Exchangers

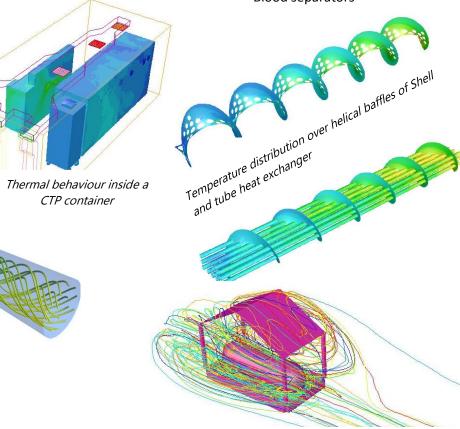
- Shell and Tube Heat
 Exchangers
- Heat Pipes and Pumps
- Spiral and Compact Heat
 Exchangers
- Energy Recovery Systems

HVAC

- Passenger cabin comfort in heavy and light vehicles
- Building ventilation
- Thermal stability inside

Bio-medical

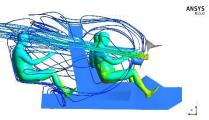
- Blood handling equipments
- Surgical analysis
- Sterilization equipment
- Blood separators



Dispersion of liquid chlorine into atmosphere upon leakage from storage tank



Temperature variation inside a vortex tube



Flow and thermal behaviour inside a passenger cabin