



## Plant Engineering Services

**P**lease pick  your choice, by clicking on the appropriate square. And you can even select the application software of your choice!!

### Plant Models

Equinox offers multi-level steady-state models, from individual equipment to full site models. Our clients employ these models for capacity augmentation study, debottlenecking study, quality and performance improvement study, etc.

### Reactor Operation

The simulation of chemical reactors is always a challenge due to limited availability of design data. Equinox has developed expertise in building good quality reactor models, from plant operating data.

### Utility Optimization

Steady-state simulation of Power and Steam Systems provides very useful information about the cost of energy of the plant. And triggers ideas of how to save such cost, which is typically the second highest cost after the cost of raw material.

### Dynamic Simulation

Process safety, like pressure relief, controllability – like compressor startup, corrective steps in an emergency are important learnings, which often takes a life time in plant. This service provides valuable application of pressure-flow theory to the real life plant environment

### Polymer Process Modeling

Polymer processes are generally more difficult to simulate due to scarcity of engineering data. Equinox has developed skills and methodologies to represent polymer species as well as specialized polymer processing equipment, like polymerization reactors.

### Flow Assurance Studies

Petroleum oil fields and oil wells need to ensure successful and economical flow of hydrocarbon stream from reservoir to the point of sale. Multi-phase steady-state and transient flow analysis is carried out to identify flow impediments, like solid deposition, hydrate formation etc.

### Cost and Economic Analysis

This service enables companies to rapidly and confidently evaluate capital investment projects early in the design process, understand the economic implications of engineering decisions, and effectively manage the project.

In case you have any other requirement, please write to us with your problem definition.

Write to:

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