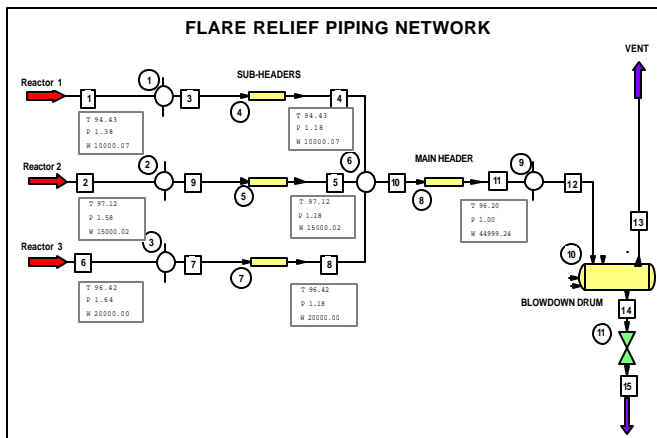


# CHEMCAD™ SAFETY NET

*Focusing the power  
of CHEMCAD on  
plant safety and  
piping networks.*

**CC-SAFETY NET** is an engineering software tool designed to simulate the steady state behavior of pressure relief devices and piping systems under actual flowing conditions. It also provides powerful facilities for environmental audits in the prediction of volatile organic compound (VOC) emissions to atmosphere at equilibrium conditions.



## FLARE SYSTEMS:

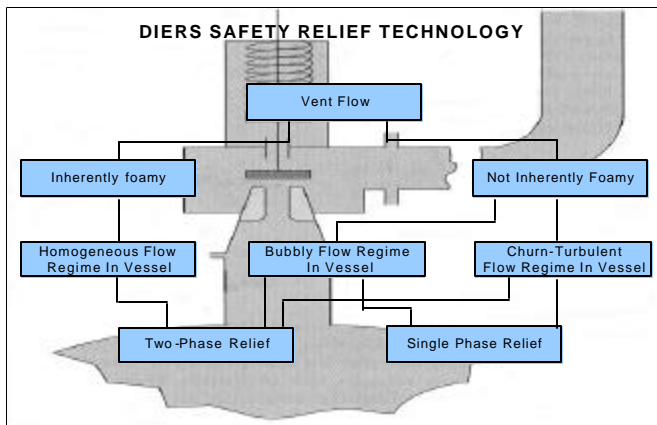
**CC-SAFETY NET** provides facilities for the design and analysis of flare relief systems including all system components. These facilities include:

- Simulation of the piping network including the blowdown drum. Flow can be vapor, liquid, or two-phase, and critical flow is computed and limiting.
- Identification of the worst relieving case using case studies.
- Optimization of the system using the of sensitivity analysis.
- Sizing (and costing) of system equipment including pipes, relief valves, and pressure vessels.

## SAFETY RELIEF VALVES AND RUPTURE DISKS:

The **DIERS** (Design Institute for Emergency Relief Systems) facility of **CC-SAFETY NET** provides the user with the latest technology in the sizing and analysis of safety relief vents in emergency situations. This technology is complex and difficult for the average engineer to understand and apply. **CC-SAFETY NET** ensures that you get reliable results because:

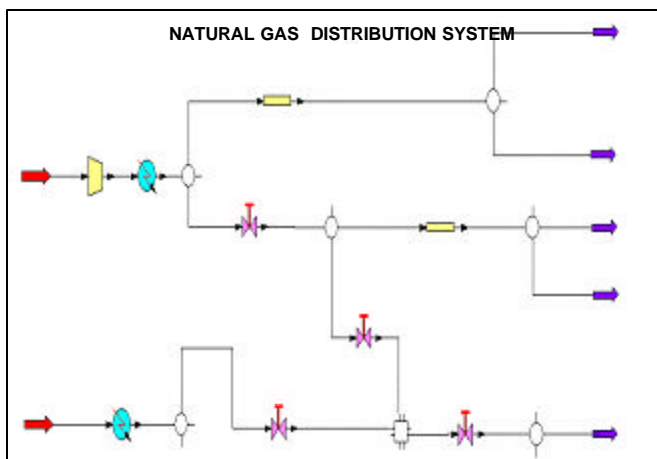
- Chemstations has spent years studying DIERS and consulting with experts in the field. We are thus able to provide you with a tool which is not only comprehensive and accurate, but which also separates the useable from the purely theoretical providing you with a practical, real world tool.
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## PIPING NETWORKS:

**CC-SAFETY NET** will simulate any type of steady state piping network. Flow loops, distribution systems, and collection networks can all be assembled and simulated in any combination. These networks can also include:

- Pumps, compressors, expanders, valves, pipes, fittings, heat exchangers, and pressure vessels.
- Performance curves for pumps and compressors.
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## GENERAL FEATURES

- Graphical user interface with "Coach" facility for guided input.
- Extensive on-line Help available.
- Extensive drawing facilities
- Fully integrated with CHEMCAD and all other CHEMCAD modules.
- OLE, COM, and Visual Basic compatible.
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The CHEMCAD thermodynamics system has been applied to a very wide range of processes and thermodynamic applications ranging from gas plants and refineries to fine chemicals. The methods and techniques available in the program are summarized below.

- **Hydrocarbons**: Peng-Robinson, Soave-Redlich-Kwong, API Soave, Grayson-Streed, Maxwell-Bonnell, BWRS, K-Charts, Regular Solution
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## OTHER THERMODYNAMIC FEATURES

- Pure component physical properties databank of 1900 compounds (from DIPPR)
- Handles multiple liquid phases
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- Data fitting facilities provided
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## UNIT OPERATIONS

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## AVAILABILITY

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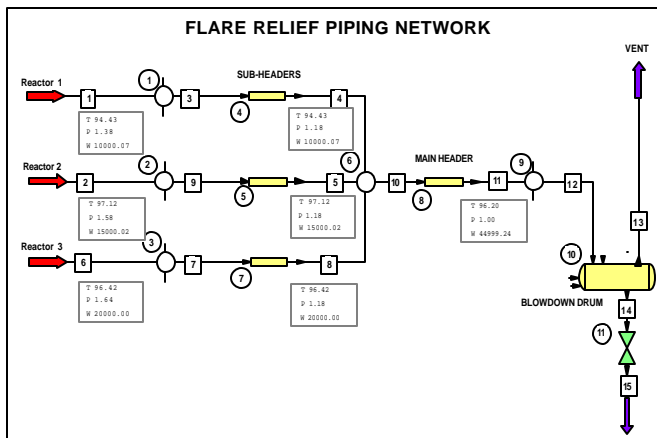
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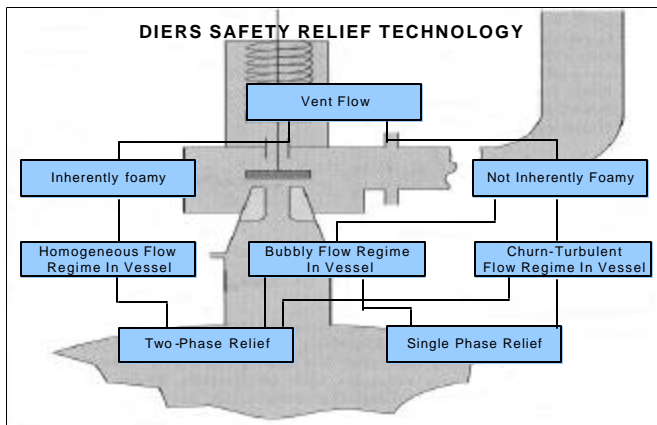
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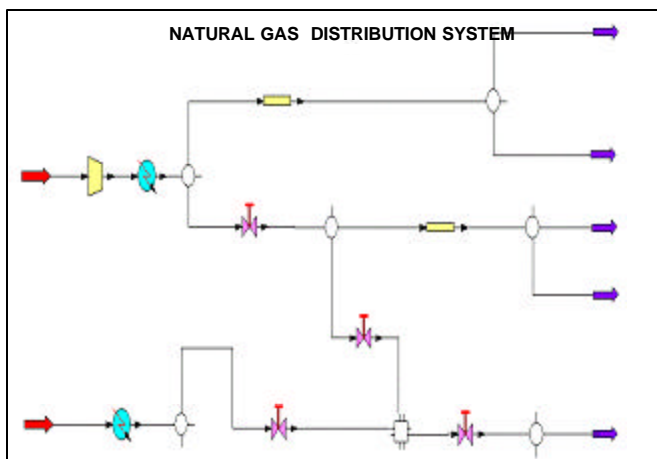
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