

SuperChems™ for ioXpress™

A comprehensive platform for process safety

SuperChems is an integrated platform for pressure relief design, chemical reactivity assessment and management, consequence analysis and quantitative risk analysis. Combine with ioXpress™ for a complete pressure relief system data lifecycle management solution.

Features

Consequence Analysis and Fluid Flow

- Source term estimation
- Dispersion modeling
- Explosion dynamics

Emergency Relief and Flare Systems

- Pressure relief design for multi-phase, reacting systems
- Flare systems hydraulics and vibration risk identification
- Piping networks
- Vent containment design
- Deflagration venting and dynamics

Chemical Reactivity

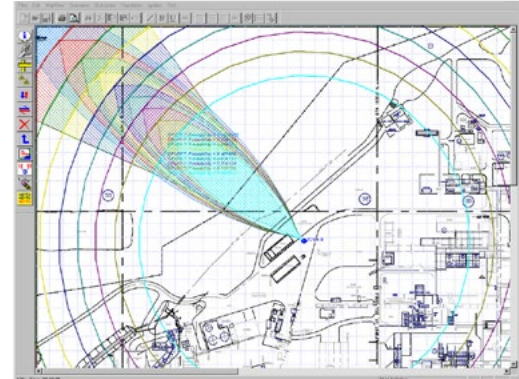
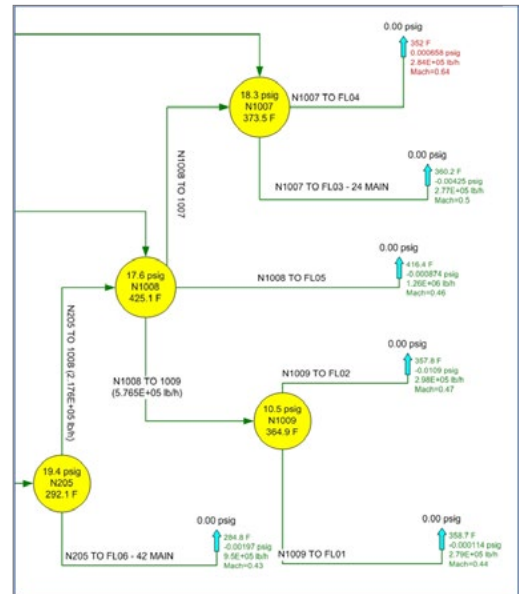
- Experimental data analysis and reduction
- Reaction kinetics and dynamics
- Thermal explosion theory (1D and 2D)

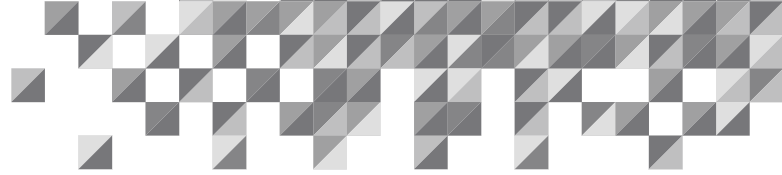
Facility Siting

- Identify structures at risk (building risk)
- Calculate maximum foreseeable loss

Quantitative Risk Analysis

- Fixed facilities QRA
- Individual and societal risk estimates
- Pipeline transportation risk
- Risk-based inspection per API-581





About ioMosaic Corporation

ioMosaic Corporation is the leading provider of safety and risk management consulting services, training, and software solutions. Whether you need pressure relief system design services, quantitative risk assessments, onsite training, or the latest in software technology, ioMosaic has the knowledge, experience, and resources to address your unique needs. At ioMosaic, we are delivering practical solutions for safety, risk, and business challenges facing our clients.

- Auditing
- Chemical reactivity management
- Combustible dust hazard analysis (DHA) and testing
- Due diligence support
- Effluent handling design
- Pressure relief and flare system design
- Facility siting
- Fire and explosion dynamics
- Incident investigation, litigation support, and expert witness
- Liquefied natural gas (LNG) safety
- Pipeline safety
- Process engineering design and support
- Process hazard analysis (PHA)
- Process safety management (PSM)
- Quantitative risk assessment (QRA)
- Risk management program development
- Software solutions
- Structural dynamics
- Training