

Process Technology Evaluation and Assessment

The Need for Process Technology Evaluation and Assessment

Companies in the process industries often need impartial evaluations of process technologies for making strategic and tactical business decisions. Some of the situations that force this need include outside technology acquisition (licensing), benchmarking internal technology developments, screening toll manufacturers, assessing scale-up potential and risk, and process selection for projects. ioMosaic provides comprehensive process evaluation solutions using the experience of our senior process professionals and dynamic process simulation capabilities.

Evaluation Criteria

Technology Robustness: Robustness addresses process vulnerabilities to the variations and conditions encountered in a real processing environment.

Technology Maturity: We couple our process development experience with knowledge of the potential vulnerabilities of the process steps to weigh the risk of unproven technologies.

Scale and Scale-Up: Scale of operation becomes an issue when the process under consideration has not been operated at the capacity required for a new project. ioMosaic is the developer of sophisticated simulation software for evaluating scale-up problems. Our SuperChems™ computer program is a dynamic simulator capable of characterizing reaction kinetics and thermodynamics of scaled-up systems based on thermochemical test data.

Operability/Maintainability: Our professionals have experience in preparing reliability/availability/maintainability studies that allow quantification of the expected up-time and annual production capacity of process design configurations.

Process Economics: We have considerable experience with preparing manufacturing cost structures for a large range of chemical and refinery processes, which is typically the equalizing factor that accounts for all the known and suspected items that affect processing costs.

Process Simulation Studies: Maintaining up-to-date, accurate process simulation data is paramount to the safe, efficient operation of a plant and is a valuable aid to process optimization. ioMosaic can include development of heat and material balances for existing operations, sensitivity analyses to identify the optimal design based on operating and business targets, assessment of equipment deficiencies, equipment sizing verification and recommendations, and evaluation of feed changes, upsets, and equipment downtime.

Licensing Considerations: Licensing arrangements can be critical aspects of process technology. Important features worth considering include company experience and credibility, technical support capability and licensing terms.



About us...

ioMosaic Corporation is the leading provider of safety and risk management consulting services, training and software solutions. Our first-hand knowledge of industry standards and regulations, coupled with decades of experience, provides us the rare ability to understand an issue from both the client's and regulator's perspective. We have industry-adopted tools and methodologies that we can apply to your most basic or complex problems and challenges.

For more information, please visit our website at www.ioMosaic.com or contact us at sales@ioMosaic.com or F 603.386.6522.

Contact Us

Salem
Corporate Headquarters
93 Stiles Road
Salem, NH 03079
T 603.893.7009

Houston
2401 Fountain View Drive
Suite 850
Houston, TX 77057
T 713.490.5220

Minneapolis
401 North 3rd Street
Suite 410
Minneapolis, MN 55401
T 612.338.1669