

CLIENT: Kraton Polymers

LOCATION: Confidential

SCOPE OF WORK: Design and Fabricate

YEAR: 2007

PROJECT TYPE: Process Module

CONTACT: Craig Stevens



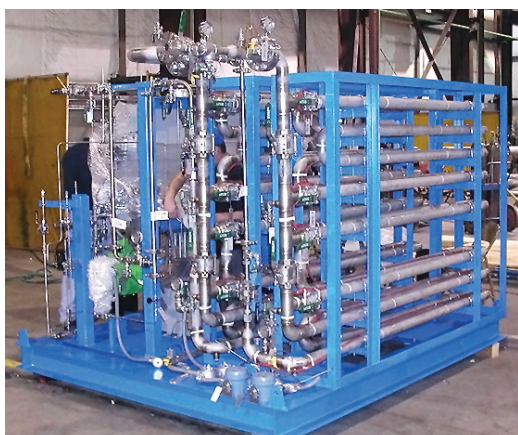
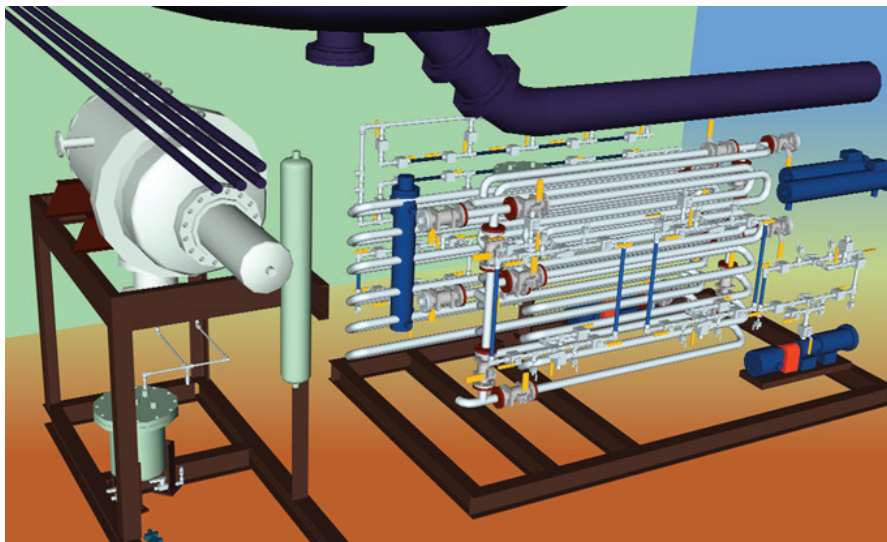
PROCESS DEVELOPMENT SYSTEM FOR POLYMER PROCESS

Working closely with the client, *IDEA* Engineering provided turnkey supply of a pilot scale polymer process development system. *IDEA*'s client needed to demonstrate proof-of-concept at a representative scale, and to collect engineering data from test runs. Data collection and flexibility of purpose were the design criteria given highest priority.

The system developed utilized a modular, 2-skid design which included pressurized liquid/liquid and liquid/gas in-line mixing systems with flow, temperature and pressure control systems. Chemicals included flammable liquids, anhydrous ammonia gas and multiple acids. The process equipment chosen included pumping systems, static mixers, custom designed residence tubes, separation vessels and an acid recovery system.

The project required a fast-track, design-build approach with close coordination between the client and engineering/fabrication teams. Furthermore, limited space availability at the client's testing site demanded a customized, compact design. *IDEA* purchased all long lead items, specifically selected to meet both the process need and the project's aggressive schedule.

Factory Acceptance Test (FAT) protocols were developed and the Client witnessed a 2-day debug period with only a few minor changes needed to pass the stipulated tests.



IDEA Engineering, partnering with a specialty vessel and modular system fabricator, executed the turnkey supply in a record 24 weeks time from Conceptual Design through to FAT.

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