



Heat Exchanger Design and Optimisation

The optimisation applications provide PetroPlat with versatile tools for optimizing heat exchanger design and simulating their performance. Sophisticated optimization logic enables us to select the optimum design for the specified process conditions, resulting in typical savings of 10 % -30 % on the capital cost per heat exchanger. The applications can also be integrated with the Aspen Plus(R) and Aspen HYSYS(R) process simulation tools, allowing evaluation of heat exchanger performance as part of an overall plant or process. This approach can deliver optimized operations with higher productivity and lower operating costs, in addition to significant capital savings at the design phase for new and upgraded processes.

With this integrated approach collaboration between engineering groups improves and thus enables PetroPlat and in turn our clients to:

- Reduce capital equipment costs up to 30%
- Reduce engineering man-hours by up to 50%
- ♦ Reduce energy costs up to 50%
- Increase production from process improvements

Tools

Aspen TASC+ for Shell & Tube Heat Exchangers

Aspen TASC+ provides a comprehensive tool for the thermal design, rating and simulation of shell & tube heat exchangers. The optimisation application integrates the features from AspenTech's shell & tube heat exchangers, Aspen Hetran(R) and Aspen TASC(TM), and is designed for service across the process industries including oil & gas, chemicals and power. A bi-directional interface with Aspen Teams(R) enables PetroPlat to perform the complete mechanical design for all shell & tube types.

Aspen Acol+ for air-cooled heat exchangers

Aspen Acol+ uses the best features of Aspen ACOL(TM) and Aspen Aerotran(TM) to provide a complete application for the thermal design, rating, simulation and optimisation of air-cooled and other cross-flow heat exchangers. This versatile tool can be applied in a wide variety of process industries. The application can handle a broad range of exchanger services, from multi-component condensing to boiling heat recovery and de-humidifying.

HTRI Xchanger Suite

HTRI **X**changer Suite provides tools for a wide variety of heat transfer equipment including shell-and-tube and non-tubular exchangers, air coolers and economizers, heat recovery bundles, fired heaters, and more. These programs are regularly updated as we obtain and analyse new research data.