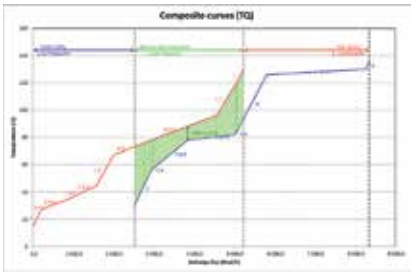
Software & Information Technology

Online Tool Assists with Fall Protection Selection

Fall protection is easier to design, specify, and select with help from the Miller online tools. Engineering specifications and computer-aided drawings (CAD) are available for a variety of systems to help make informed fall-protection selections. The fall clearance calculator allows users to determine the appropriate clearance for their application. Additional resources are provided through the Ask-the-Expert function that provides users with free online advice. The tool is free to use.

Honeywell
www.honeywell.com

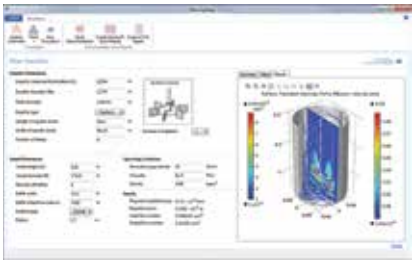
Pinch Analysis Tool Helps to Improve Energy Efficiency



Simulis Pinch improves the energy efficiency of a process through improved heat integration. It is applicable to any industrial process where utility energy is consumed for heating or cooling process fluids. It finds the most-efficient configuration for the process and balances investment and operating costs to reach the objective of energy consumption reduction. Before it recommends a solution, the software runs energy diagnostics to determine whether a better energy integration scheme would significantly reduce energy consumption or if the current energy plan of the industrial site is already efficient. This provides engineers with information to explain to management why resources and time should be dedicated to energy improvement. They can then use this tool to determine what network of heat exchangers is most effective and efficient, given a set of user-defined criteria. This approach can handle a complex network of streams and avoids tedious manual calculations that can often produce unrealistic solutions.

ProSim
www.prosim.net

Modeling Software Expands Access to Simulation Capabilities



COMSOL Multiphysics 5.0 features extensive updates and add-on products. The new Application Builder allows the model developer to eliminate superfluous functionalities and information to create a personalized application that can be tailored to their colleagues' and customer's needs. The easy-to-use application can be shared to enable others to manipulate the model within a restricted and simplified window, which reduces the need to rely on experts for conducting individual model simulations. The existing product suite has been expanded with the inclusion of the ray optics module, which can compute the trajectory of rays in graded and ungraded media, and model polychromatic, unpolarized, and partially coherent light. The design module now includes 3D CAD operations such as loft, fillet, chamfer, midsurface, and thicken, in addition to import and geometry repair functionalities. Version 5.0 also introduces enhancements to more than 25 application-specific modules available with previous versions, including a new chemistry interface that can be used as a material node for chemical reactions in the chemical reaction engineering module.

COMSOL
www.comsol.com

Simulation Software Provides Process Lifecycle Results

The chemical process industries (CPI) can benefit from the fast, easy, flexible, dynamic plant operation and lifecycle simulations provided by this software. Mimic Simulation Software Version 3.6 includes additions to the modeling library and enhancements that simplify and expedite model development, as well as the ability to integrate with automation systems, among other changes. The new bioreactor advanced modeling object helps with biotech facility simulations and the development of biotherapeutics. The petroleum and chemical industries can select new modeling objects such as the advanced turbine and updates to the furnace and pressure-flow solver. This version also comes with the bulk generation utility, which generates a simulation directly from project design data for any control system platform and allows users to develop the simulation prior to configuration of the control system. The component database has been expanded to include 1,500 compounds. Version 3.6 can be integrated with numerous automation systems.

MYNAH Technologies
www.mynah.com