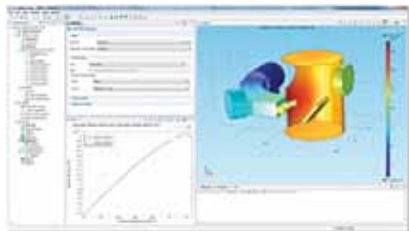


Software & Information Technology



Module Provides an Integrated Environment for Modeling Microfluidic and Rarefied Flows



The latest addition to the COMSOL Multiphysics simulation software, the Microfluidics module provides easy-to-use tools for studying microfluidic devices and rarefied-gas flows. The module is designed for such application as lab-on-a-chip devices, digital microfluidics, biosensors, electrokinetic and magnetokinetic devices, inkjet technology, and vacuum system design. It includes interfaces for single-phase flow, which can be used to simulate such applications as compressible-gas flows at low pressures, non-Newtonian flows, and laminar and creeping flows that typically occur in lab-on-a-chip systems. It has modeling interfaces for executing two-phase flow simulations using the level set, phase field, and moving mesh methods, as well as a variety of important fluid-interface effects, such as surface tension forces, capillary forces, and Marangoni effects. The module can also handle chemical diffusion of multiple dilute species, enabling the simulation of processes occurring in lab-on-chip devices and biosensors.

COMSOL, Inc.

www.comsol.com

Software Adds AutoCAD 2012 Compatibility

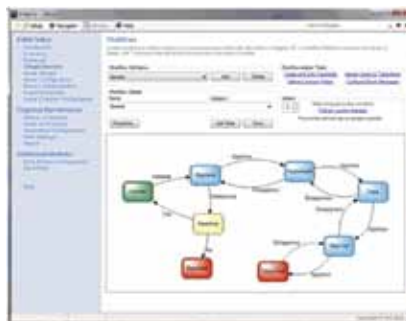
The newest version of CADWorx 2012 Plant Design Suite, which is now compatible with AutoCAD 2012, features several new performance

enhancements. CADWorx Plant Professional identifies component discontinuities and overlaps in the model and has full reporting capabilities. An improved pipe-support module provides greater flexibility in pipe-support placement and extends bill-of-material capabilities to pipe-support subassemblies. The equipment module includes a new center-of-gravity calculator for modeling equipment such as vessels and exchangers. Designers can also add stiffening rings internally and orient rings around their primary axes. In addition to live database capabilities, CADWorx P&ID Professional offers direct data export to Microsoft Excel.

Intergraph

www.coade.com

MOC Software Detects Inadvertent Changes to Automation Configurations



Integrity iMOC ensures that all changes made to a plant's automation systems are detected and reconciled through specific management-of-change (MOC) cases. A graphical environment defines MOC workflows, including a description of each state within the workflows as well as the checklists and required transitions for the states. iMOC uses the capabilities of the firm's Integrity software, which maps the configuration of more than 50 different automation systems and tracks all changes to

them. The iMOC software reduces the time required for engineers to acquire design information, since it automatically identifies all links and interdependencies for any automation entity under change management. During installation, it can be integrated with a plant's existing MOC system and configured to act as a subordinate to that system. An S95-compliant plant asset hierarchy can also be implemented to link MOC cases to specific parts of the plant, as is often done in general MOC systems.

PAS

www.pas.com

Partnership Produces EHS&S Management System Database

The Society of Chemical Manufacturers and Affiliates (SOCMA) and Gabriel Performance Products, LLC, have created a management system database that integrates SOCMA's ChemStewards program with other government-sponsored performance-improvement programs. The database provides a total approach to environmental, health, safety, and security (EHS&S) management and is available to SOCMA members at no cost. The Integrated Management System (IMS) was created by Gabriel based on the ChemStewards Management System and complies with ISO 9001, ISO 14001 and OSHAS 18001 requirements. It features an incident switchboard to track, investigate, and review incidents. A daily manufacturing report gathers data on the organization to aid in planning. Chemical information can be collected and managed using the chemical approval switchboard. In addition, the employee dashboard allows workers to see what actions, investigations, and events they are responsible for.

SOCMA

www.socma.com