

Software & Information Technology

Tool Calculates Energy Savings Afforded by VFDs

This program calculates the potential energy savings that may be realized using variable frequency drives (VFDs) to power pumps and fans. It allows users



to compare the costs of conventional methods, such as valves for pump control and dampers for fan control, to those of VFDs. Energy use can be calculated based on built-in sample data, or by entering the minimum pump or flow percentages, annual operating hours, cost per kilowatt, and other site-specific information. The tool is available as an online calculator or a mobile application for an iPad, iPhone, Blackberry, or Android system.

Rockwell Automation www.rockwellautomation.com

Program Streamlines Heat-Tracing Design

TraceCalc Pro Version 2.5 provides a step-by-step process to design an effective and efficient heat-tracing system for pipes and vessels. Users input system design parameters, such as pipe size and material, insulation type and thickness, service voltage, maximum exposure temperature, pipe length, and the number and sizes of valves. The software then provides the information needed to complete the heat-tracing system design process, such as the amount of heat loss from the pipe, types of heat-tracing products required, number of circuits used, and electrical and thermal performance of the system. Users can also change input design parameters and compare alternative design scenarios. Detailed reporting capabilities allow

users to choose a standard or customized report and apply advanced filtering options.

Tyco Thermal Controls <u>www.tycothermal.com</u>

CFD Software Delivers Advanced Capabilities

Improvements to the FieldView 13 family of computational fluid dynamics (CFD) post-processing and visualization programs aim to help practitioners carry out high-fidelity CFD. The recently released FieldView 13.1 provides a new direct reader that allows FieldView to be used seamlessly with the OpenFOAM CFD solver. Open-FOAM users can rely on FieldView to create transient animations with a single click, perform simultaneous post-processing tasks while generating new solutions, numerically compare solutions with those from other solvers or experimental data, and more. Upgrades include a new graphics core, a unified graphical user interface, and data management via an extract database (XDB)-based workflow. The data-management system drastically reduces the data read-in times and storage requirements, enables interactive 3D transient animations, and can be

run in the background or overnight for the fastest path to analysis. The program offers new user interfaces for Windows and Linux platforms. Intelligent Light www.ilight.com

Software Eases the Sizing of Pressure-Relief Valves

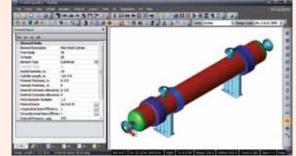


The Pressure-Reducing Valve (PRV) Sizing Software Module, Phase 1, is designed to help process engineers specify and size PRVs. It includes a variety of useful features based on user feedback. For instance, its visual product range selection option allows full product descriptions and code numbers to be viewed, which makes sizing charts unnecessary. Additional features include velocity and noise predictions, automatic pipe sizing, and more. **Spirax Sarco www.spirax.com**

Code Updates Streamline Pressure Vessel and Exchanger Design

Part of the CADWorx and Analysis Solutions family of products, the PV Elite 2012 pressure-vessel and exchanger design and analysis software has been updated to reflect recent revisions to ASME Codes. This release incorporates updates to ASME Section VIII Division 1 and Division 2 2011a; the

material databases in Tables 1A/1B and 5A/5B; the ASME pure-metric yield stress database; PD 5500:2009; and several wind/seismic codes. Intergraph www.intergraph.com



Latest Version of Dynamic Simulation Software Eases Model Building

MiMiC v3.4 simulation software includes many advances designed to reduce the engineering time and effort required to build simulation models. For instance, three new base modeling blocks (Generator, Turbine, and Conveyor) and an Advanced Modeling Furnace Object have been added. The Advanced Models Dynamic Pressure/Flow Solver provides realistic pressure and flow coordination across an entire flowsheet and avoids many instability issues seen in other flow solvers. The system can be used for operator training and automation system testing, and it is scalable for small to large projects.

MYNAH Technologies

www.mynah.com

Particle-Analysis Software Provides Custom Graphing

A companion to the FlowCAM particle-analysis instrumentation, which automatically detects, images, and identifies particles and microorganisms, VisualSpreadsheet V3.0 enables custom graphing and lets users evaluate and display the data from numerous different perspectives. For instance, users can create custom scattergrams and histograms, without re-running the sample, simply by choosing the variables to be plotted on the x and y axes from a menu of 32 different measurement parameters. By allowing key characteristics about the particle - such as size, length, width, perimeter, roughness, intensity, fluororescence, and more — to be quickly switched during and after processing, VisualSpreadsheet V3.0 enables more than 1,000 different combinations to be visualized and analyzed. The system comes with all of the company's new FlowCam instrumentation systems, and is backwards compatible with existing systems already in the field.

Fluid Imaging Technologies www.fluidimaging.com

Process Control System Now has 'Virtualization' Capabilities

For many manufacturers, the process control environment requires separate servers to support different applications. Virtualization resolves this issue by allowing a single server to simultaneously run multiple operating systems and applications. This improves reliability by insulating these operating systems from hardware changes. This company now offers virtualization support for its core product line (Experion Process Knowledge System), for both DCS and SCADA applications. This helps industrial facilities reduce PC hardware requirements and simplify overall system management and improve availability, reliability, and disaster recovery. **Honeywell**

www.honeywellprocess.com

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