

Software & Information Technology

Tools Integrate Instrumentation and Electrical System Design

CADWorx E&I V2014 includes enhanced tools for the engineering and design of electrical equipment and instrumentation for all plant lifecycle phases. Consistent and efficient detailed electrical engineering can be realized through seamless integration with the CADWorx P&ID application, as data on instruments and electrical loads can be directly imported from CADWorx P&ID. A log file containing detailed information is automatically created, and can be assigned a customer-specific format. Support for both the DXF binary and DWG formats in all versions of AutoCAD 2012 and AutoCAD 2013 provides flexibility for importing and exporting graphic documents. Additional features include enhanced evaluation of geometric objects, automatic symbol creation for blocks and for adopting title block data, and user-defined custom attributes for loops and other elements. Intergraph

www.intergraph.com

Weighing Transaction Software Updates Databases in Real Time



WeighSync DC helps integrate weighing transaction data into PC databases, and allows users to collect data and create reports to meet compliance tracking and tracing requirements. Compatible with Windows 7 and 8, the software collects data in a Microsoft SQL Express database. Users can map the data to predefined fields and tables, where weighing transactions are automatically updated, and can schedule data transfers with the software's calendar function. Although the software is preloaded with templates specific for connecting to the manufacturer's industrial weighing terminals, it also allows custom data structures for other types and brands of equipment to be defined. It communicates with older generations of terminals via a serial connection, and is compatible with newer, Ethernetenabled products. Mettler Toledo, LLC

www.mt.com

Modeling System Aligns Business Plans with Plant Operation



With improvements to model building and maintenance, case management, and optimization, the RPMS 500 refinery and petrochemical modeling system helps to maximize plant profitability. It incorporates analytics software based on the company's Intuition process management software for better planning results. Refining and petrochemical firms will benefit from the software's ability to help assess long-term investment options and the differences in potential yield and value of various feedstocks, as well as to help determine optimal plant operating conditions. This updated version includes web-based tools that make access and analysis of key information easier for the overall organization. Other features include support for Windows 7/8 64-bit platforms,

an updated graphical user interface, HTML-based reporting, improved optimization capabilities, and tools to simplify the transition to using RPMS 500. The software helps improve profitability by enabling effective planning, as well as critical development and analysis of advanced mathematical programming models, linear programming (LP) optimization, product specification, plant operation, and distribution and logistics.

<u>Honeywell</u>

www.honeywell.com

Safety Integrity Level Tool Designs and Analyzes Safety Systems

By taking a systematic approach to complying with relevant standards and ensuring the safety of the plant and personnel, SafeGuard Profiler software speeds up and simplifies safety system engineering and design. It gives process automation professionals the information and tools they need to conduct engineering failure analysis, safety integrity level (SIL) determination, SIL verification/validation (SIL-V), SIL optimization, and other related tasks. The software uses a layer of protection analysis (LOPA) module and a SIL-V module as part of a twopronged approach to the design and evaluation of SIL-rated systems. The LOPA module simplifies the complex process of sifting through spreadsheets and data tables; a bowtie visualization tool graphically displays this information and shows how causes and consequences of hazardous events are connected. The SIL-V module helps with the design and optimization of safety instrumented functions (SIFs), and can reduce design time to as little as half the time required for traditional design techniques. The software modules can be purchased separately, or purchased as an expert-level package that includes all of the functionality

required to meet the needs of senior automation and controls professionals. ACM Facility Safety www.acm.ca

Display Library Streamlines Control Systems into a Single Interface



The Interface Dynamics Version 3 display library reduces the number of display libraries and provides a single, consistent, and unified operator interface at processing plants that utilize multiple control systems. Situationaware and task-oriented displays can be built to increase operator awareness and reduce error. Expandable objects allow additional information to be shown only when necessary, which further eliminates operator distractions. This display library includes all of the objects needed for chemical, petrochemical, refining, and oil and gas upstream applications. With a single style sheet for determining color and style, the user can standardize interfaces across a site and across the corporation. This allows training to be carried out on a single platform, which benefits operators and the

organization. The software is integrated with AgileOps alarm management software, which helps operators manage alarms and enables them to bypass nuisance alarms directly from the process display. With the ability to access AgileOps boundary and alarm information, the software can display recommended actions, time to respond, and other fields documented in the alarm rationalization strategy. The software runs natively in Emerson Process Management's DeltaV Operate and Honeywell Process Solution's Experion, and the company plans to expand its applicability to other leading control systems.

ProSys, Inc. www.prosys.com



WASTE HEAT RECOVERY SYSTEMS

BORSIG Process Heat Exchanger GmbH is one of the world's leading manufacturers in the field of waste heat recovery systems for the high temperature and high pressure sectors of the petrochemical industry.

Each of our waste heat recovery systems is unique and designed individually to meet the customer's specifications. The waste heat recovery system can be used for gas pressures of up to 350 bar (35,000 kPa), gas inlet temperatures of up to 1,500°C and steam pressures of up to 160 bar (16,000 kPa) for the following applications:

Ammonia plants, methanol plants, hydrogen plants, ethylene plants, coal gasification plants, gas-to-liquid plants, nitric acid plants, caprolactam plants, formaldehyde plants and partial oxidation of oil or natural gas.

BORSIG Process Heat Exchanger GmbH

Egellsstrasse 21, D-13507 Berlin/Germany, Phone: ++49 (30) 4301-01, Fax: ++49 (30) 4301-2447 E-mail: info@pro.borsig.de www.borsig.de/pro



CEP July 2014 www.aiche.org/cep 19