

VMGSim™ Integrated Steady State and Dynamic Simulation.



Easily create process models of refining, chemical and oil/gas processing to troubleshoot, design or optimize your plant. Create steady state models, size and rate vessels, columns and heat exchangers. Add your control system to the model and click a button to run dynamically. Use the dynamic wizards to create and run dynamic depressuring and blowdown studies and model multistage compressors and antisurge control. Create custom unit operations and economic models embedded in your process model by dragging the Excel operation onto your PFD. Graphical User interface driven by embedded Visio. Completely Interactive, bidirectional simulation solver.

For more information
visit our website at
www.virtualmaterials.com



www.aiche.org/cep or Circle No. 150 on p. 64

Mixing Solutions for Multiple Tank Configurations

Expect Engineered Excellence



*"Loders Crokian's new
Pulsair equipped state-of-the-art
Palm Oil Refinery Rotterdam,
Netherlands. 2006"*

Pulsair pneumatic mixers are the undisputed leader in Process Control Management. Our systems are designed to operate on minimal nitrogen, thus eliminating temperature fluctuation and specific gravity stratification in tanks. The Pulsair System operates multiple tanks exceeding one million gallons each or more, with one programmable controller, creating a consistent viscosity every time.

For further information, contact
425.455.1263
800.582.7797
sales@pulsair.com
www.pulsair.com

www.aiche.org/cep or Circle No. 153 on p. 64



Designed to monitor high, intermediate or low point-level detection on dry bulk solids as well as liquids or slurries, the **Dynatrol®** Level Detectors are available in corrosion-resistant coatings. The compact, rugged detectors are built in the USA and are solidly constructed for a long operating life. They have no moving parts, require no adjustments and are virtually wear-free – delivering a worry-free solution for your demanding service conditions.

Request your copy of
the latest **Dynatrol®**
catalog - on CD!



Covers the complete **Dynatrol®** line of level switches & detectors, on-stream process analyzers, measurement & control instruments and a new line of accessories. Includes detailed drawings, wiring diagrams, and examples of proven uses.

Automation Products Inc
3030 Maxroy St
Houston TX 77008
800 231-2062
sales@dynatrolusa.com
www.DynatrolUSA.com

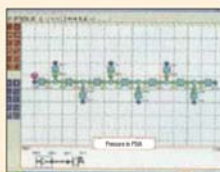
www.aiche.org/cep or Circle No. 151 on p. 64

DESIGN FLOW SOLUTIONS

Free downloadable demo

DFS Version 4

is the most comprehensive, cost effective engineering aid available for complete hydraulic analysis of complex piping; effective solutions to fluid flow problems; and fast, reliable reference information



ABZ

See our website,
www.abzinc.com for
more information and
to download a free
demo today.

ABZ, Incorporated
4451 Brookfield Corp. Dr., Suite 107
Chantilly, VA 20151
Phone: 800-747-7401
Fax: 703-631-5282
E-mail: sales@abzinc.com

www.abzinc.com

www.aiche.org/cep or Circle No. 154 on p. 64

Traveling Gangway Fits Any Car or Truck



Track mounted gangway can be moved back and forth along the elevated track and extended as necessary to provide safe and easy access or egress from the vehicle no matter what the spotting or configuration.

HEMCO Industries, Inc.
2408 Karbach

Houston, Texas 77092

Tel: 713/681-2426

Fax: 713/681-2427

Web: www.hemcoind.com

Email: sales@hemcoind.com

www.aiche.org/cep or Circle No. 152 on p. 64

Free COMSOL Conference CD



COMSOL®, Inc. is now offering a free copy of the 2008 edition of the User Presentations CD! The CD is a compilation of over 250 user contributed slides, papers and models presented at the Boston and Grenoble Conferences. This unique presentation and proceedings CD covers a wide variety of applications including Chemical Engineering, Fluid Dynamics, Heat Transfer, Reaction Engineering and much more.

Request your complimentary copy at
www.comsol.com; Tel: 781-273-3322

 **COMSOL**

www.aiche.org/cep or Circle No. 155 on p. 64

Measure Color...Measure Quality

Color Measurement Systems

Stop using subjective visual methods of reporting color, the lack of color or yellowness.

Start using objective instrumental methods and gain the benefits of sensitivity, precision and accuracy.

- ♦ Measure metrics such as Saybolt, APHA/PtCo/Hazen, Gardner Scale, ASTM D1500, yellowness/whiteness and haze.
- ♦ Measure reflected or transmitted color for materials in the form of solids, sheets, films, pellets, granules, tablets, powders, paste and liquids.
- ♦ Portable, Benchtop and On-line Systems



www.hunterlab.com info@hunterlab.com
Tel: (703) 471-6870 Fax: (703) 471-4237



Midland Engineering, Ltd.

Specializing in.....

- 4 Early Stage Process Evaluation
 - Process Definition
 - Preliminary Design
 - Process Flow Diagrams and Material Balances
 - Process Optimization
 - Early Stage Capital Estimates
 - Preliminary Economics
- 4 Process Safety Analysis
 - Process Safety Management
 - Process Hazard Analysis
 - Individual Element Expertise
 - Responsible Care
 - Reactive Chemicals Expertise
 - LOPA
 - Auditing Services
 - PSM
 - RCMS
- 4 Project Management
- 4 Process Control
- 4 Process Reliability
- 4 Process Optimization
- 4 Waste Reduction

Engineers with EXPERIENCE.
We get the job done right and on time!

Ph. 989 837 2296 or www.mideng.com

TANK CLEANING EQUIPMENT

Chemdet has 35 years experience supplying a full line of quality equipment to clean or passivate the interiors of open or closed, large or small containers, tanks & vessels.



- Portable Tank Washers
- Clean-in-Place Tank Washers
- Drum and Barrel Washers
- Passivating Equipment
- Passivation Testers



For the Chemical, Pharmaceutical, Bio-Tech, Food, Dairy, Beverage, Nuclear and Transportation Industries.



TOLL-FREE 800-645-1510

TEL: 772-388-2755

FAX: 772-388-8813

E-MAIL: INFO@CHEMDET.COM

WWW.CHEMDET.COM

CHEMDET, INC

**730 D COMMERCE CENTER DRIVE
SEBASTIAN, FL 32958**

www.aiche.org/cep or Circle No. 156 on p. 64

www.aiche.org/cep or Circle No. 157 on p. 64

www.aiche.org/cep or Circle No. 158 on p. 64

86,604 data points and counting,

Accuracy. In chemical engineering it's not only important, it's essential. The DIPPR 801 database sets a new standard for accuracy with complete, evaluated, cost-efficient data. Data so accurate it can help you avoid setbacks and reduce over-design costs.

Containing 1,793 components that have been rigorously evaluated, DIPPR 801 provides the thermophysical property data you need. You get 33 fixed-value and 15 temperature-dependent properties for each evaluated component. That's 86,604 data points.

And the list of components that have been evaluated keeps on growing, making DIPPR 801 the best choice for meeting your on-going data needs. Developed by committed industrial sponsors of AIChE's DIPPR technology alliance, DIPPR 801 is the only source of physical property data available with the powerful, user-friendly DIADEM interface.

For more information on DIPPR 801 visit:
<http://dippr.byu.edu> or email salesdippr@byu.edu.

DIPPR® 801

Setting the Standard for Evaluated Data.

© 2004 AIChE #936 10.04

www.aiche.org/cep or Circle No. 122 on p. 64