

SPED Newsletter

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B31.3 Undergoing Constant Revision

ASME B31.3 Code is undergoing constant revision by its oversight committee. Standards development is governed by protocols designed make public participation possible while avoiding domination by any one interested party.

The accompanying table shows only the approved revisions. Additional revisions are pending. Members of the B31.3 Subcommittees, Subgroups and Interested Parties have been invited to the Spring B31.3 meetings scheduled for May 5-7, 2003 at the Hilton Westshore Hotel in Tampa, FL.

B31.3 is cited by API 579 as one of many analysis available to analyze process equipment and piping in order to determine "Fitness for Service". The standard is also considered as one of the "bibles" for piping analysis:

- Kellogg's book, 'Design of Piping Systems';
- Crocker's 5th edition of 'Piping handbook';
- ITT Grinnell's Piping Design and Engineering Book';
- ASME B31.3;
- 'Crane's Technical papers 410';
- 'Cameron's Hydraulic Data book';
- Paul Smith's, 'Piping and Pipe Support Systems'

(Source: www.pipingnews.com)

SPED will review some of the latest developments in its upcoming B31.3 course. Aker Kverner will host the May-June '03 offering of SPED's ASME B31.3 class. The class is a locally taught, reasonably priced review of the. Kverner will host the class at their Houston office at 7909 Parkwood Circle.

The course is recommended for all practicing piping design and piping analytical personnel. It is also an excellent course for supervisory

personnel requiring a review of current design and analysis techniques.

The course is taught by Glynn E. Woods, P.E. Mr. Woods is a Senior Piping Engineer with more than 20 years experience in the field of piping design, stress, supports, and failure analysis as well as piping component design, analysis and testing. Mr. Woods is a member of the ASME B31.3 Mechanical Design Committee.

The course covers such topics as:

- Piping Code History, Basic Philosophy and Organization
- Piping Design Criteria: Design conditions, design loads (pressure, gravity, thermal, seismic, wind, vibration, hydraulic, anchor movement), failure modes, primary and secondary stress categories, load categorization, allowable stresses
- Pressure Design: Wall thickness calculations, area replacement, pressure-temperature ratings
- External Loads Design: Flexibility, fatigue, stress intensification, combined load, simplified analysis methods.
- Pipe Support Design: support types, assumptions, load combinations, variable supports, lugs and attachments
- Systems Piping, Pressure Relief Piping, Hazardous Material Piping
- Materials, Fabrication, Examination, Inspection and Testing
- Questions and Answers

Classes Begin May 13 and meet through June 12 for a total of 28 contact hours. A certificate is awarded for successful completion of the course

Cost: \$995 for SPED members or employees of corporate members of SPED and \$1,195 for nonmembers. Includes course textbook, CASTI Guidebook to ASME B31.3 - Process Piping, by Glynn E. Woods and Roy B. Baguley. For enrollment call Nan Bentz 713-661-6578

B31.3 Changes Approved by Standards Committee

For more detailed information please contact
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Tracking#	Subject
02-02168	B31.3 Footnote 5, page 18
02-02170	B31.3 302.2.6 Modifications to Listed Components.
02-02171	B31.3 302.2.2 Listed Components Not Having Specific Ratings.
02-02173	B31.3 K302.3.2 Bases for Allowable Stresses
02-02174	B31.3 K345.2.1 Limitations on Pressure
02-02175	B31.3 Table 326.1 COMPONENT STANDARDS
02-02176	B31.3 302.3.5
02-02177	B31.3 X302.1.2
02-02178	B31.3 301.5.2 Wind 301.5.3 Earthquake Appendix E
02-02180	B31.3 K302.3 Allowable Stresses and Other Design Limits
02-02259	B31.3 302.3.5, 302.3.6, A302.3.4, K302.3.5
02-02260	B31.3 Table 326.1
02-03099	B31.3 302.3.2(a)(3) Table A-2
02-03100	B31.3 A314.2.1 Thermo plastic Piping
02-03101	B31.3 A328.5.3 Solvent Cemented Joints in Thermoplastic Piping
02-03121	B31.3 Table K-1 Allowable Stresses in Tension for Metals for Chapter IX
02-03123	B31.3 K304.1.2 Straight Pipe Under Internal Pressure.
02-03127	B31.3 K302.3.2 Bases for Allowable Stresses
02-03164	B31.3 Personnel actions
02-03188	B31.3 341.4.1 Examination Normally Requires 2002 Edition
02-03204	B31.3 K328.2.1 Qualification Requirements
02-03242	B31.3 Appendix J
02-03327	B31.3 Personnel Actions from Mtg No 115
02-03330	B31.3 F-300 General
02-03343	B31.3 302.3.2 Bases for Design Stresses (d)(8)
02-03629	B31.3 Table 323.2.2 2002 Edition
02-03631	B31.3 328.4.2 2002 Edition
02-03632	B31.3 345 2002 Edition
02-03634	B31.3 331.1.3 2002 Edition
02-03683	B31.3-2002 Para. 345.4.3
02-03819	B31.3-1999 Edition, 328.2.2(i), Welding Qualification
02-03895	B31.3-2002 Errata
02-04046	B31.3, Table K-1; Allowable Stresses in Tension (G-01-04)
02-04049	B31.3, K304.1.2; Straight pipe under internal pressure; Footnote 4 (G-01-07a)
02-04050	B31.3, New Appendix P - Alternative Rules for Evaluating Stress Range (B-00-01a)
02-04051	B31.3, Proposed Para. 302.3.5 Weld Joint Strength Reduction Factor W (B-99-03b)

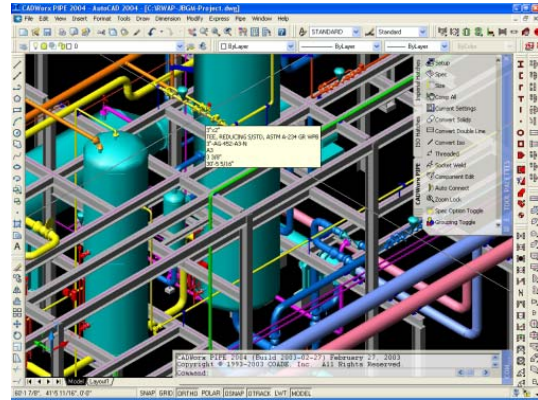
COADE Releases CADWorx® 2004

COADE, Inc. has released CADWorx/PIPE Version 2004, the next version of its AutoCAD-based Plant Design Suite will be fully compatible with, and will ship simultaneously with Autodesk's new release, AutoCAD 2004. CADWorx 2004 not only offers process industry designers the ability to take advantage of the groundbreaking enhancements in AutoCAD 2004, but also provides many new features compared to the current version, CADWorx 2002.

By leveraging Autodesk's investment in the next release of AutoCAD, COADE's new version of CADWorx greatly increases the size of plant models that teams of designers can work on simultaneously, while making it much easier to learn and use the program, even for beginners. These dramatic improvements in both performance and functionality are made possible by significant file size reduction, faster load and save times, enhanced management of external references (XREFs), and user interface refinements such as the new tool palette system.

In addition to offering compatibility with AutoCAD 2004, CADWorx 2004 offers many other new features. The CADWorx PIPE 2004 module provides improved integrated steel capabilities, integrated HVAC/cable tray components, automatic weld gaps, and layering by line number. New capabilities in CADWorx P&ID 2004 include enhanced copy procedures, an auto repeat feature, and a dropdown list for instant data entry.

Thomas Van Laan, president of COADE, believes that the improvements offered in AutoCAD 2004 are exactly those for which the plant design industry has been hoping. Says Van Laan, "Our customers are always concerned with three things - speed, size, and how to manage them - so we think our customers will love this new version of AutoCAD. We've found that a 22-megabyte project created under CADWorx 2002 drops to less than 6 megabytes under CADWorx 2004, a dramatic 70%+ reduction in project file size." Van Laan continued, "CADWorx has always taken maximum advantage of AutoCAD's XREF capabilities to



the hilt. The new XREF management features, including improved load speed and change notification, are perfect complements to the way that our customers manage large projects."

John Sanders, Vice President Platform Technology Division for Autodesk, agrees that COADE has done a great job leveraging the best features of AutoCAD 2004. Sanders says "We are very pleased that COADE was able to develop a 2004-compatible version of CADWorx so quickly. Autodesk has been working very closely with COADE to determine what AutoCAD enhancements that would be most valued by the plant design community. We're impressed by how they have leveraged the strengths of AutoCAD 2004 - speed, teamwork and management - and translated these strengths into productivity improvements for process plant designers. CADWorx 2004 is a great tool for anyone involved in the design of process plants."

CADWorx offers intelligent drawing to database connectivity, advanced levels of automation and easy-to-use design techniques. Because of these distinct advantages, it has been rapidly adopted by EPC firms and owner operators in the process, power, water treatment, pharmaceutical, food, beverage and semiconductor industries. CADWorx also offers the industry's first and only true bi-directional integration between CAD and stress analysis, linking CADWorx with COADE's industry-leading software programs for pipe (CAESAR II) and pressure vessel (PVELite) analysis and design.

For more information, contact: David Diehl,
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About SPED

The Society of Piping Engineers and Designers (SPED) is only professional organization devoted exclusively to the betterment of Plant Design Professionals. SPED members are involved with the design and assurance of petrochemical plant mechanical containment and fluid flows. SPED advances the profession through publications, training and other professional development activities.

This publication is mailed free of charge to all SPED members. Annual individual membership dues are \$35 for professionals, and \$20 for full time students. Corporate memberships for companies with fewer than 75 employees are \$300 per year (includes 3 individual memberships). Corporate memberships for companies with 75 or more employees are \$500 per year (includes eight individual memberships).

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