



SOCIETY OF PIPING
ENGINEERS AND
DESIGNERS

SPED Update January 2009

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SPECIAL POINTS OF INTEREST:

- **DaraTech Plant Conference, February 23-25, Hilton Americas, Houston, TX**
- **SPAR 2009 March 30-April 1, Hyatt Regency Denver, Denver, CO**

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SPED First Corporate Member Showcase Successful at 2008 Annual General Business Meeting

The SPED 2008 Annual General Business Meeting was a resounding success. This meeting featured a timely speaker, plenty of networking opportunities and lots of goodies for members to take home. Perhaps the biggest change was the new Corporate Member Showcase.

Corporate Member Showcase

For its 2008 Annual General Business Meeting, the Society of Piping Engineers and Designers invited Corporate Members to exhibit new software and EPC Projects. SPED wanted to provide a new venue for Process Pipers to interact with the companies who support the Process Piping Industry. SPED Corporate Members AVEVA, Bechtel, COADE, Foster Wheeler, SNC-LAVALIN Engineers and Constructors, and Piping Technologies and Products exhibited.

Due to the success of this event, SPED 's 2009 Annual General Business Meeting will include the Corporate Member Showcase and is considering a call for papers, PPD Level I and III testing, short seminars, and software and technical demonstrations.



Randy Johnson (left), Bechtel, shows Bechtel's latest projects to attendee.

"Meetings of this type gather the Process Piper and Industry together. Its success proves that Pipers want to know what is happening in the market and continue developing themselves through education. In a competitive market the educated and certified Piper is even more valued because they help secure project success through efficiency for their employers. Employers are always looking for the best technically skilled not warm bodies.

We are very proud to provide a venue specifically for the Piping Designer and Engineer. We are already examining how

to make the event a multi-educational experience for 2009. Our mission is to promote quality piping design. We wanted to gather our Corporate Members to show their products and services to our members and the Process Piping Industry and allow them to interact," stated Andrea Macejak, SPED Manager of Operations.

The Corporate Member Showcase is a perfect complement to the Annual General Business Meeting where SPED informs its members of the past year's events, financial report and future planning.

2008 Annual General Business Meeting

The event speaker was James F. Davis, P.E., Senior Director, Midstream Services, SNC-LAVALIN Engineers and Constructors. The topic "Capital Project Activity Amidst the Market Turmoil" touched on the driving forces impacting



Jack Belden (right), SNC-LAVALIN Engineers and Constructors and SPED President, talks with Bob Belden (left), SNC-LAVALIN Engineers and Constructors.

SPED First Corporate Member Showcase Successful at 2008 Annual General Business Meeting—Cont



James Davis, P.E., Senior Director Midstream Services of SNC-LAVALIN Engineers and Constructors showing slide to meeting attendees on "Traditional Market Drivers" for light sweet crude.

the capital project market and forward looking scenarios.

Mr. Davis quoted <http://trendlines.ca/monthlyreport.htm#barrel> for trending on the cost breakdown and profit analysis on the price of oil. A very interesting point of his talk was the premise that OPEC desires the price of a barrel of oil to be \$50-80 USD in order to keep level demand and maintain a stable market. Mr. Davis discussed in depth how OPEC gains more from stable demand which allows stable production and use versus probable diminished demand from high prices which could have permanent consequences on the light sweet crude market by a shift to alternative fuels and new domestic sources. SPED thanks Mr. James Davis and SNC-LAVALIN Engineers and Constructors for their support of the meeting.



A special thanks to our Corporate Members who exhibited and participants for their contribution to the success of the 2008 Annual General Business Meeting and Corporate Member Showcase.

We are currently finalizing efforts to secure and restore a section of the line that the CEP (Crude Expansion Project) team would like to donate to the refinery museum.

Wooden Pipeline Discovered At PAR

SPED received the following article through a SPED Member. This article is published without the permission of the author. Attempts were made to locate the author. SPED felt the value of the article and its distribution through the internet allowed for dissemination to our readers.

Article by: Steve O'Donnell

The Wood Stave Line that is pictured in the photos below was installed in 1917 on Estimate 1636. Drawing Y-1745 depicts the route of this line, which was from the West Side Coke Stills (which were located generally where FCCU 1 & 2 were later built) along South "R" street between Ninth Avenue and First Avenue. The line was a condenser water overflow line from the WSCS to Alligator Bayou (which in those days was along the route of Flare Road in that area).

We are currently finalizing efforts to secure and restore a section of the line that the CEP (Crude Expansion Project) team would like to donate to the refinery museum. This wooden pipeline was in the way of a new pipe rack along



Wooden Pipeline Discovered At PAR

"O" Street. Helping to make this artifact recovery was Retirees Glenn Cornwell, Jimmy Davis and Willie Lafleur, as well as New Construction's "Bo" Doyle. Conex crews were involved with site exploration and clearance for the CEP.

Here are some facts about wood stave pipe from US Patent 4897140:

Wood stave pipe is "composed of a plurality of longitudinally straight but transversely curved wood-staves, the longitudinal edges thereof being provided with a tongue and groove configuration and being glued together, while being mounted in a sidewise engagement in a cradle-like mounting means. The pipe-shaped bodies are later processed by milling, grinding or polishing internally and externally..."



Most likely the wood used in PAR's wood stave pipes was cypress. It is in very good condition, considering that it was probably cut in 1916. The craftsmanship in the line that we found is almost unbelievable. The joints are meticulous.

The craftsmanship in the line that we found is almost unbelievable. The joints are meticulous.

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Reduced Rates for SPED Corporate Members.

Contact the SPED Office for Details.

Intergraph® Releases New Piping Design Solution for Small Projects

Multi-purpose piping design and editing tool is easy to use and learn; provides rapid return on investment

HUNTSVILLE, Ala., Dec. 9, 2008 – Intergraph® has released its newest SmartPlant® Enterprise solution for quickly and efficiently producing industry-standard pipeline isometric drawings for small piping projects. The most recent version of Intergraph's industry-leading piping isometric sketching software increases engineering productivity with expanded capabilities, including a SmartPlant-style user interface, concurrent engineering of multi-pipelines, instant 3D visualization, display of dimensions, and enhanced selection and editing tools.

SmartPlant Isometrics is a next-generation tool offering many new features and improvements, making it more productive and superior to its predecessor. The new SmartPlant Isometrics solution for small projects is complementary to SmartPlant 3D, which is suited for larger, more complex piping design projects. Both piping design solutions are powered by ISOGEN®, the de facto standard solution used to generate piping isometrics completely and automatically.

Formerly known as I-Sketch, SmartPlant Isometrics now enables users to:

Design several unconnected pipelines within one session and produce pipeline isometric drawings for each

Create an instant 3D scaled view of pipelines, enabling new pipelines designed in a confined location to be visually clash checked with existing pipelines

Design complete connected piping systems and produce piping system isometrics

SmartPlant Isometrics is an ideal tool for a small plant-based engineering office. It can be used to implement small piping design projects, to bring existing designs up to as-built status and to maintain accurate plant documentation.

Based on ISOGEN technology, the industry standard for automatic generation of piping isometrics, SmartPlant Isometrics helps users to sketch piping systems in only minutes and generate isometric drawings with full bills of materials (BOMs) in seconds. This is a quick and easy improvement alternative to conventional 2D CAD packages or paper and pencil where drawing isometrics usually takes several hours and BOMs are frequently inaccurate or missing. The results provide substantial cost savings and productivity gains in piping isometric production. Once designed, the digital data (drawing, materials, welding, pipe cut lengths, etc.) can be transferred to the pipe fabricator – where it can be processed to define the fabrication spools and drawings using its companion product SmartPlant Spoolgen®.

Andreas Böing, Project Manager at Hertel-Enning, one of the leading German companies in the piping systems and plant construction sector, said, "We look forward to the additional features that SmartPlant Isometrics will provide us. After comprehensive tests Hertel-Enning is convinced that our company group can certainly benefit from the ability to handle multiple pipelines and piping systems from the P&ID through design, fabrication and construction into plant operations."

Gerhard Sallinger, president, Intergraph Process, Power & Marine, said, "This release represents the culmination of a dedicated effort to provide new functionality and integrate SmartPlant Isometrics into the SmartPlant Enterprise. We are fully committed to developing industry leading technology, and SmartPlant Isometrics fits that role quite well for sketching piping systems and generating piping isometrics and BOM's."

SmartPlant Isometrics is a seamless upgrade to existing I-Sketch users and will be free of charge to customers with current maintenance agreements.

SmartPlant Isometrics is an ideal tool for a small plant-based engineering office. It can be used to implement small piping design projects, to bring existing designs up to as-built status and to maintain accurate plant documentation.

Intergraph® Releases New Piping Design

Solution for Small Projects—Continued

About Intergraph

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction and operation of plants, ships and offshore facilities. Intergraph SG&I provides geospatially-powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries. For more information, visit www.intergraph.com.

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15th Annual daratechPLANT Plant Industries Conference

Meeting the Challenges: Technologies & Processes in the New Plant World

The 15th Annual daratechPLANT Industries conference will be held at the Hilton of the Americas, February 23-25 in Houston, Texas. This event could prove to be the best daratechPLANT yet as at the conference is newly being managed by TradeFair Group, Inc.

daratechPLANT offers a premier meeting place for business development executives—people with C- and V-titles in engineering, operations, maintenance and information technology, project engineers and others looking to network with, and learn from, their peers. It brings together experts in the areas of business development, asset creation, lifecycle management, instrumentation, real-time operations and plant maintenance. As ever, daratechPLANT is a showcase of the most innovative ideas, practices and technologies from around the world. The conference program has been specifically designed to provide ample opportunity for individuals to meet informally one-on-one, or in the context of the many topical discussion groups conducted at the conference. Ample breakout session time has been built-in to insure that all conference attendees can attend the cutting-edge, unique and highly informative demonstrations and presentations for the technology co-sponsor.

This years conference will have seminars on topics on Global Design, Collaboration and Construction, Practices with Modern Tools, Human Resources in the Hyper Project World, Information Management Strategies, Macro/Micro Economic Trends, Plant Asset Management, Plant Management in a Global Project World, Interoperability through Standardization Efforts, and Application of Modern Design Systems to Construction.

Keynote speakers will be:

Dan Keuter, VP, Planning and Innovation, Entergy Nuclear Inc., discussing *the Future Opportunities and Challenges of Nuclear Energy*
Geir Ramleth, CIO, Bechtel, *Harnessing IT for Global Operations*
Aidan Chopra, Project Evangelist Google, discussing *Making Information Universally Accessible*

Workgroup project topics will be ISO 15926 Data Exchange for P&ID, 3-D Modeling and live RDS/WIP.

For more information on daratechPLANT and to register for the conference, visit their website at <http://www.daratechplant.com/>.

SPED Calendar of Events—January—May 2009

Date	Day(s)	Time	Location	Cost	Membership
PDS I Dates: Spring 2009 TBA			TBA	\$1095	Members Only
PPD Piper BootCamp Dates: Spring 2009 TBA			TBA	\$1450	Members Only
daratech Plant Conference, February 23-25, 2009 www.daratechplant.com	M-W		Hilton Americas Houston, TX		
SPAR 2009 March 30-April 1 http://sparllc.com/spar2009.php	T,W		Hyatt Regency Denver Denver, CO		
FIATECH 2009 Technology Conference and Showcase, April 6-8 www.fiatech.org	M-W		Green Valley Ranch Henderson, NV		
2009 Offshore Technology Conference May 4-7 http://www.otcnet.org/2009/	M-TH		Reliant Park Houston, TX		
2009 SPED Annual General Business Meeting and Corporate Member Showcase November 2009			TBA		



**New project?
Staffing issues?**

THE SPED PIPER VIDEO SERIES IS YOUR ANSWER.

"It's the Piper's resource for Information and Just-in-Time Training."

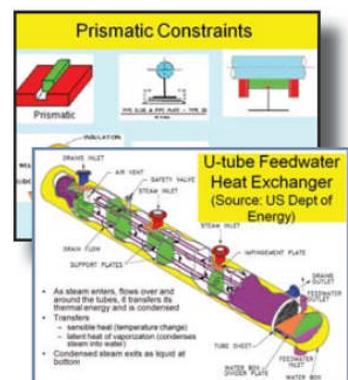
PIPER BOOTCAMP covers equipment and fittings necessary for routing pipeline from nozzle to rack to nozzle.

PROCESS PLANT LAYOUT covers knowledge and skills required for plant equipment and layout. Targets pipers already familiar with in-line pipe routing.

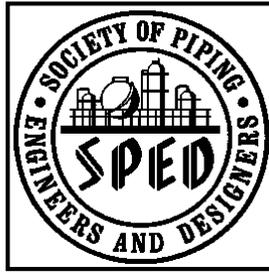
Version I contains original video recordings of live presentations by industry leaders.

Version II contains newly recorded videos with additional topics, and extended notes.

Designed for the new Piper and as a useful resource for experienced Pipers, the SPED Piper Video Series is considered the Industry Standard for piping training.



For more information, call 832.286.3404 or email videos@spedweb.com



Executive Director's Notes, Dr. William Beazley

Now is the time to be a professional.

I fear that many pipers see themselves as having a job as a piping designer not the profession of Piping Design.

Ask yourself the following questions:

Did I take any piping-related courses this year?

Did I attend any meetings, conferences or shows?

Did I initiate any new skill development (rather than being selected for training by others)?

Did I discuss my development with a boss or mentor, i.e., how should I grow as a piper?

Did I teach anything else to another or help them develop?

If not, you may see your job as a paycheck and not a career path.

Beware of this attitude. First of all, it is unwise to be seen as a taker and not a partner in your job. Everyone knows someone like this: They gripe about their pay. They leave for a few bucks more at another job. They are win-lose and not win-win. A Professional Piping Designer or Engineer is developing himself AND his peers at every opportunity and brings resources back to his employer and/or client to develop them too.

Second, it is unhelpful to close the door to growth. Except for the lucky few who have had generalized training, most have acquired their knowledge on-the-job. As a result, their knowledge is a patchwork of expertise and not a broad base of integrated information. The only way to fill the gaps is to attend meetings and take courses. A Professional Piping Designer or Engineer is always learning.

Third, it is uncompetitive for you and employer to have stale skills. To be sure, a resume with leading edge projects helps get work and projects. It is also helpful to have courses, professional memberships, papers and other professional activities to show you are keeping up. Don't overlook professional conferences and trade shows. There are vendors and peers who have a lot to teach you about what works and what doesn't. Folks with fresh skills advance faster in good times and stay around longer in bad times. A Professional Piping Designer or Engineer is always seeking to move to the front of his field.

Finally, it is dull not to be learning. It's no fun to have nothing new to talk about. It is like having your first year's experience over and over and over again. How boring! A Professional Piping Designer or Engineer is maturing his knowledge and skills through study and challenging work.

SPED, ASME, ISA, NEMA, NACE, and other professional societies have spent a considerable amount of effort to bring professional development opportunities to you but you must do your part. Attend meetings. Take courses. Read books. Get trained. Talk to vendors. A Professional Piping Designer or Engineer is active in SPED and other societies.

You need to get out more.

Bill Beazley