

BOSTON

1973 - THE BOSTON CHAPTER - 2016 P.O. Box 111, East Walpole, MA 02032

Where Quality and Professionalism are an every day standard!

Chapters are not authorized to speak for the Society

Volume 43, Issue 7



Next Meeting

WEDNESDAY, MARCH 9, 2016

LANTANA, Randolph, MA

MARKYOUR CALENDARS!!!

June Social - JUNE 16 6-8pm NE Aquarium - West Wing Gallery

WHAT'S IN THIS ISSUE

Calendar	Insert
Crossword	8
Next Meeting	6
Legislative Report	5
Membership Report	4
Technical Report	3
President's Report	2

Society email aspe@aspe.org Society Website www.aspe.org

Boston Chapter Website www.aspebostonchapter.org



President's Report

As usual Bob Littman did a great technical session on Nitrogen Generation systems. This was great because this is a topic I knew virtually nothing

about

Now I know there are two types of Nitrogen Generators, and depending on the quality of Nitrogen the project requires you select the appropriate unit or modules you need.

ASPE National has a new group called Woman of ASPE. You can visit www.ASPE.org/WOA to learn more about the group. If you have any woman plumbing designers or engineers in your office please forward along this information to them.

We are planning our June Social with the help of Jeff Gooding. Thank you Jeff. Save the date; New England Aquarium Thursday June 16, West Wing Gallery 6:00 to 8:00.

Is there anyone out there that would like to form an ASPE Code Committee? It would be cool if we the ASPE Code Committee could come up with some common sense code revisions or additions and present them to the Board of Plumbing Examiners as a group. If you are interested in getting involved email or call us.

See you all Wednesday March 9th.

Laurence D. Johnston CPD, President, Boston Chapter ASPE

2015 Technical Symposium St. Louis

Rethinking Water Heating

- · Electric tankless 99% energy factor when in use
- · Tankless water heater has long life span
- · Endless hot water

With a tank type water heater the water is being heated and then cooling when not in use. The heating and cooling process is wasting energy.

When it is in use the water temperature drops and it starts heating the cold water entering the tank, but not as fast as it's being used.

Tankless water heater requires much more power to heat the water, because it is only heating the water as it is being used. When the power used for tank type water heater and tankless water heater are averaged out, the tankless water heater actually uses less power even though it requires more power.

April 2015 National Appliance Energy Conservation Act as increased efficiency requirements. Thus increasing cost and actual size or tank type water heaters.

Tankless water heater approach is to run cold water distribution and provide tankless water heaters near fixtures.

In colder climates a central tank type water heater could heat the cold water up to 140 as it normally would then install a tankless water heater at the fixture. Eliminating the need to recirculate the system.

Tank and booster concept is, install a smaller tank and a tankless after the tank type water heater. The idea behind this is that a small tank type heater would waste less energy.

Tankless water heaters can save space if you have the power to operate them.

That's my take on this class. Laurence D. Johnston President
Laurence D. Johnston, CPD
Cosentini Associates
Tel: (617) - 748 - 7800

e-mail: ljohnston@cosentini-ma.com

Ed Nadeau Vamderweil Engineers Tel: (617) - 423 - 7423 e-mail: enadeau@yanderweil.com

V. P. Technical

V. P. Legislative Luther Thevenin, CPD Cosentini Associates, Inc. Tel: (617) - 748 - 7800

e-mail: lthevenin@cosentini-ma.com

V. P. Membership John Callahan, CPD J. H. Pokorny Associates Tel: (781) - 762 - 2661 e-mail: johnc@jhpokorny.net

Treasurer
Richard Pokorny
J. H. Pokorny Associates
Tel: (781) - 762 - 2661
e-mail: richp@jhpokorny.net

Administrative Secretary
Paul Jappe
Viega, LLC
Tel: (603) - 475 - 2445
e-mail: Paul.Jappe@viega.us

Corresponding Secretary
Patrick J. Haney
W. P. Haney Company
Tel: (508) - 238 - 2030
e-mail: phaney656@aol.com

Derek Sylvia, CPD, CET TRO JB Tel: (617) - 502 - 3546 Email: DSylvia@trojb.com

Education Chairman

Affiliate Liaison
Jeff Gooding
David Gooding Inc.
Tel: (401) - 639 - 4419

email: jgooding@goodingd.com

ASPENEWS Editor
Dawn Pokorny
Tel: (508) - 520 - 0133
e-mail: dawnp@jhpokorny.net

Board of Governors Chairman Kevin W. Lally, CET

Members Rich Dean, CPD Fredrick (Rick) Neth, EIT





Technical Report

February Meeting Wrap up

If you were not able to make the February meeting; we had a "special" guest, Cam Newton attempting to explain why he looked like a deer staring at head lights, when he fumbled during the super bowl. All kidding aside, this past month we welcomed Mr. Littman to our chapter's monthly meeting at the Lantana in Randolph; in which Mr. Littman presented Nitrogen Generation for labs. Below is a list of some of the key points that Bob covered in his presentation:

- Nitrogen (N2) is an inert gas that is colorless, odorless and tasteless
- Our bodies contain about 3% Nitrogen and the air we breathe consist of 78% Nitrogen.
- The majority of the world's nitrogen gas supply is produced in a "Cryogenic Air Separation unit" (ASU).
- Liquid Nitrogen is produced by drawing air into a compressor, cleaned, dried and rapidly expanded through a system of coolers and heat exchangers until it becomes a liquid in a distillation column. The three gases that make up the atmospheric Nitrogen (N2), Oxygen (O2) and Argon (Ar) are removed as liquids at their differing boiling temperatures -297.4 F for oxygen, -302.6 F for Argon, and -320.33 F for nitrogen. This process is called cryogenic distillation which is expensive and requires a lot of energy.
- There are two methods to generate nitrogen gas; hollow fibre membrane and pressure swing adsorption (PSA).
 - * Membrane is used for application that require between 2% and 5% remaining oxygen concentrations. The common applications are chemical blanket and fire suppression.
 - * PSA is used when an application requires 1% to 10ppm remaining oxygen concentration. The common applications are, electronics, laser cutting, and the food and beverage industry.
 - * Membrane technology uses a bundles of hollow fibre contained within a tube. The fibre walls separate compressed air by diffusing oxygen and other waste gases to the atmosphere while retaining nitrogen and allowing it to pass through the center of the fibres to the application.
 - * PSA technology uses columns of carbon molecular sieve (CMS) to separate compressed air. Oxygen and other waste gases are selectively adsorbed under pressure by the CMS, allowing nitrogen to pass through. The CMS is regenerated by releasing the pressure in the columns and venting the waste gases to the atmosphere. The reason this technology is called pressure swing adsorption is because the operating pressure "swings" from 0 bar up to 7 bar.
- The pay back on a nitrogen generation system on average is 18 months; however this depends on whether a compressor is already on site and is sized appropriately and can handle the load. Typically the specifier would work with the vendor.

March Technical Topic and Meeting

The March technical topic will be on Gas Pressure Regulators and Gas Flow Control valves. This meeting will be held on Wednesday March 09, 2016 in Randolph, MA at The Lantana. The session will focus on:

Gas Pressure Regulation

- When regulation is required NFPA 54/ANSI Z223.1
- Appliance vs. Lock up type design
- ANSI Z21.18
- ANSI Z21.80 regulator standards
- 2,3,& 5 psi application requirements
- · Vent limiting devices
- Application philosophy and theory
- · Installation requirements for venting

Gas Flow Control and Safety shutoff

- · System consideration
- · Solenoid and motorized type valves
- Automatic & manual reset types designs
- Agency listing & approvals
- Valve sizing guidelines
- Control options
- Manual and emergency PB station
- · Hazardous gas leak detection
- Riser pressure shutdown
- Communications and interface to BMS/ fire life safety
- Power outrage and battery back-up requirements

This session will be presented by Jack Accardi Jr., currently the President and CEO of Accardi Companies, LLC. He has been involved in the gas services industry for over 40 years. During this time he has influenced and authored a number of industry and utility company codes and standards for the utilization of gas booster system in fuel fired combustion for HVAC, industrial process and power generation application. He has trained many professional engineers, designers, and service technicians on the proper application and service of both natural gas and manufactured gas products. He is also a certified instructor in the Practicing Institute of Engineering division of the New York State Society of Professional Engineers continuation education program.

Just a few reminders:

The April monthly meeting will be a joint meeting with the Greater Boston Plumbing Contractors Association (GBPCA). This meeting will be held on the third Thursday of the month (4/21/16) located at Lombardo's Restaurant in Randolph. The technical topic will be Update and Discussion with the Plumbing Board.

The May monthly meeting will be held on the second Tuesday of the month (5/10/16) located at The Chateau in North Andover. The technical topic will be on Sovents.

* Please note these topics are subject to change. For a more up-to-date schedule please refer to our monthly newsletter and the website. http://www.aspebostonchapter.org/

Best Regards, Ed Nadeau, VP Technical, ASPE Boston Chapter



Membership News

New Boston Chapter Members

The Boston Chapter ASPE would like to welcome the following 6 new members:

Jens Meinig Finn Chappell Joseph Screnci Luis Moreno, G.E. Antonio Giacalone, P.E. Michael Zoccolante, G.E. Tighe & Bond RW Sullivan Cash Acme Symmes Maini McGee

Associate Member Affiliate Member Full Member Associate Member TRO/Jung Brannan Associate Member

Pending Renewal List

Members about to be dropped

Kailash Jain Melville J. Mossman P.E. Frederick S. Neth EIT

Pending March Renewals

Jonathan Boie Mark Brady Kien Diep John Dodge John Kitsalis, P.E. William Lentz, G.E. James Nadeau, CPD Robert Nesselle Peter Rogers, P.E. Derek Sylvia, CPD, CET Paul Taylor III CET, CPD Luther Thevenin, CPD Joseph Vela, CPD Shane Wise, CPD

Upcoming April Renewals

Thomas P. Bowman P.E. Thomas W. Bryant Gilbert Castera P.E. Joseph Roy Cinco Robert E. Handschiegl Jr. Laurence D. Johnston CPD Michael F. Kessler P.E, LEED AP, CPD Philippe Lauture Alfred J. Melchionda P.E. Saro Minassian P.E. John O'Neill P.E Samoundisvary Oumabady John H. Pokorny Andrew Powers Patrick Shea Frederick M. Thomas Robert Wilkinson P.E. Gregory B. Wozny P.E.

Full Member

By John Callahan, CPD, V. P. Membership, Boston Chapter ASPE



Special Membership Deal for Past ASPE Members Are you a past member of ASPE?

ASPE is offering a cost-savings membership program to help past members reinstate their ASPE membership.

To take advantage of our "We want you back!" offer, call 847.296.0002 x227 or e-mail skidd@aspe.org for more details.

Hurry, this promotion ends soon!

Well we want you back!

*This one-time opportunity cannot be combined with any other membership promotional offering, transferred,

See What You've Missed

ASPE has been actively developing programs and services that will help you elevate your career status and give you the knowledge, tools, and resources to become a leader in the industry, including:

- An online plumbing system design certificate program with UCLA Extension
- An associate degree curriculum and certification program for plumbing design
- American National Standards on rainwater
- harvesting and siphonic roof drainage ASPE/IAPMO roof drain and Hunter's curve research
- The new Green Plumbing Design certificate program
 ASPE Tables Book mobile app
- ASPE Young Professionals special-interest
- Regional workshops on plumbing system design techniques



Legislative Report

The State Board of Examiners for Plumbers and Gasfitters is currently working on some pro-

posed changes to the 248 CMR Plumbing Codes. (No dates have been released on when the board will vote to accept the proposed changes.)

The followings are a summary of some of the proposed code changes:

Section 10.02: Basic Principles

Principle No. 1 -- All Occupied Premises Must Have Potable Water: Proposed wording change "habitable buildings" in place of current wording ("premises intended for human habitation, occupancy, or use")

Section 10.06: Materials

Sub-paragraph 2 will be deleted in its entirety. All Standard Reference numbers will be deleted.

Product-Approval: The wording Product-Approval will be deleted throughout the entire 248 CMR and will be replaced with "Product-Accepted".

We will keep you all posted on other proposed code changes as they become available.

Section 10.09 Interceptors, Separators and Holding Tanks: subparagraph (1)(b) will be revised in its entirety to include Proposal for new Requirements and Exceptions for Separation or containment of gas, oil and other petroleum distillates. The Proposal would require MA Water Resources approval of all Separation or containment of gas, oil and other petroleum distillates.

Section 10.10 Plumbing Fixtures:

(18) Minimum Facilities for Building Occupancy Other Than Residential. Sub-paragraph (r) will be add to read the following: Use of Gender neutral toilet rooms. For purposes of the minimum fixture requirements of 248 CMR, wherever the code requires two or more toilet fixtures designated by gender, those facilities may be replaced with single use Gender-neutral toilet rooms pursuant to one of the following options:

- 1. Every gender designated toilet fixture is replaced with an equal number of single use gender-neutral toilet rooms (such that there are no gender designated fixtures); or
- 2. Where the code requires four or more toilet fixtures combined for males and females, gender designated fixtures may be replaced by single use Gender-neutral toilet rooms in increments of two such that for every male designated fixture replaced by a Gender-neutral toilet room, a female designated fixture must also be replaced by a Gender-neutral toilet room, and vice-versa (e.g. instead of three men's toilets, four female toilets, there may be installed two men's toilets, three female toilets, and two single use Gender-neutral toilet rooms).

Luther Thevenin, CPD, VP Legislative



Piping/Valves ApolloXpress American Standard ApolloBackflo Circuit Solver Uponor

Wardflex

Fixtures Aquatic DXV Grohe Steamist

Water Heating American AO Smith John Wood STATE Takagi

Pumping Systems ACT D'Mand Grundfos Boosters Grundfos Circulators PACO Pumps Zoeller Sump/Swg

info@urell.com

617-923-9500

www.urell.com



Proud to Represent



173 Spark Street, Brockton, MA 02302 Phone: 508-894-2000 | Fax: 508-894-2001 Inside@goodingd.com | www.goodingd.com Inside@goodingd.com | www.goodingd.com



Manufacturers' Representative

Tower Hill Sales Associates, Inc.

Servicing New England Since 1992

American Valve • Anaco/Husky • Elbi • Kingspan Solar/Rainwater Lawler Manufacturing • PVI Industries • Proceptor • ProVent Systems Riverside Hydronics • SIME • Speakman Company • T-Drill • Thermon Manufacturing • TracPipe • Tyler Pipe • Willoughby Industries

800-542-5554 • sales@towerhillsales.com • www.towerhillsales.com



Next Meeting

WEDNESDAY, MARCH 9th, 2016

The Lantana, Randolph, MA

MAIN PROGRAM

Gas Pressure Regulators & Gas Flow Control Valves

SPEAKER

Mr. Jack Accardi Jr From Accardi Companies,

PROGRAM SCHEDULE

 Social Hour
 5:00 - 6:00

 Dinner
 6:00 - 6:45

 Chapter Business
 6:45 - 7:00

 Speaker / Technical Session
 7:00 - 8:30

MENU

Creamy Clam Chowder Chicken Nichole German Chocolate Cake

MEETING RESERVATIONS

\$20.00 ONLINE Reservation

(Please use the electronic invitation sent to you) \$35.00 W/O Reservation

Retired & Currently Unemployed Members Free

Please reserve by Friday, March 4, 2016

All Sloan Faucets are Lead-Free

Engineers know when they specify sensor faucets from Sloan, they are specifying leadfree. Sloan faucets meet all commercial lead-free needs by meeting the following codes:

- · Section 116875 of the California Health & Safety Code
- NSF/ANSI 372-2011
- Vermont Lead Reduction Law (Vermont Act 193)
- Federal Lead Plumbing Law (U.S. Senate Bill No. S.3874)

Any Application. Any Environment. www.sloanvalve.com

J.H. Pokorny Assoc. 781-762-2661



Smart Just Got Smarter

★RL Stone

RL Stone Company Inc. Toll Free: (888) 404-8882 Fax: (315) 479-5402 www.rl-stone.com





Learn more at: armstronginternational.com/brain



Robert N. Littman Vice President

6 Norfolk Avenue, South Easton, MA 02375 © (508) 230-9445 Fax (508) 230-9446 Cell (617) 921-1017 rlittman@airenergy.com



- Air Compressors
- Vacuum
 Pumps & Systems
- · Air Treatment Products
- Sales/Service/Rentals
- Dryers Filters
- 24-Hour Service

Web: www.airenergy.com

The Fire Pump Testing Company

Evaluation, Testing and Certification of Fire Suppression Systems
Fire Pump Testing, Standpipe Testing and Building Commissioning
Hydrant Flow Testing and Water Supply Analysis
Residential and Commercial System Installation and Service
Fire Protection Design and Engineering - System Hydraulic Analysis

Tel: (617) 971-0700 Fax: (617) 524-7171

Cell: (617) 592-4236

11 Varney Street http://www.thefirepumptestingcompany.com
Boston, MA 02130-4109 Email: tom@thefirepumptestingcompany.com
Thomas Duross CPD Member: ASPE, NFPA, AFSA, FCCCHR, BBB



77 GREEN STREET • FOXBORO, MA P: (800) 888-1922

F: (800) 888-1942





















Joe Myers

Regional Manager 603-223-0107 - Direct 603-223-0108 - Direct Fax 603-496-9031 - Cell Phone jmyers@milwaukeevalve.com

Milwaukee Valve Company 16550 West Stratton Drive New Berlin, WI 53151 262-432-2800 - Phone 262-432-2701 - Fax www.milwaukeevalve.com





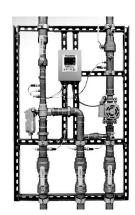






Patrick J. Haney

Represented by: WP Haney Co. 51 Norfolk Ave. South Easton, MA 02375 Phone (508) 238-2030 Fax (508) 238-8353 Cell (508) 326-7056



IntelliStation

Digital Water Mixing System

Contact: Emerson Swan 781-986-2000



65 YEARS OF UNPARALLELED EXPERIENCE AND EXPERTISE IN THE DESIGN AND FABRICATION OF COMMERCIAL AND INDUSTRIAL NATURAL GAS FUEL DELIVERY SYSTEMS:

- · SAFETY SHUTOFF
- · PRESSURE BOOSTING
- · FLOW CONTROL/ METERING
- · PRESSURE REGULATION

JACK ACCARDI JR.

(617) 379-0900 · JACCARDI@ACCARDICOMPANIES.COM www.accardicompanies.com



INDUSTRIES SERVED:

- · LAUNDRIES
- · OFFICE BUILDINGS · SPORTS COMPLEXES · SCHOOLS
 - RESTAURANTS





· MULTI- FAMILY APARTMENTS





APPROVED FOR INSTALLATION BY NYC DOB, CON EDISON, NATIONAL

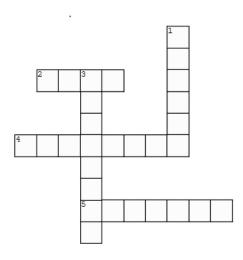
GRID AND MASSACHUSETTS PLUMBING BOARD.

www.accardicompanies.com

· HOSPITALS

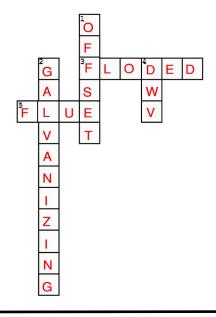
(617) 379-0900

ASPE CROSSWORD PUZZLE Mar. 2016



Answers will be posted in the Apr. 2016 news letter

Answers from Feb. 2015 crossword



Across

- 2. A device for a plumbing drain, sewer, etc. consisting of a tubular bend in which a liquid settles a forms a seal preventing sewer gasses, vermin, stench from coming back into a building
- 4. An accessible opening that is placed in a drainage line at a convenient location to accommodate drain cleaning equipment in the event of a line blockage
- 5. A short piece of pipe threaded on both ends used to join two threaded fittings

Down

- 1. The lowest point of the inside of any type of horizontal waste, vent or water piping
- 3. Any substance that in solution gives a pH of greater than 7, as in the case of lye, baking soda, and lime



www.krossco.com sales@krossco.com



















GOURLEYCO

HOT WATER BY DESIGN

80 FELTON STREET, WALTHAM, MA 02453 Phone: 781-894-9500 Fax: 781-894-2301 Website: www.gourleyco.com



Raupak Gas Water Heating Boilers Hydronic Heating Boilers

Gas Fired Booster Heaters Commercial Pool and Spa Heaters



Semi-Instantaneous & Factory Packaged Water Heaters



Tank-type Water Heaters Gas and Electric

Residential and Commercial







J. H. Pokorny Associates LLC

www.jhpokorny.net getinfo@jhpokorny.net

1502 Providence Highway Norwood, MA 02062 Tel (781) 762 - 2661 Fax (781) 762 - 5949 Proud to Represent: Sloan Valve Co. Leonard Valve Co. WaterSaver Guardian Georg Fischer Just Oasis Metcraft Kaldewei

Karp

Quantum Engineering, Inc.

Nancy K. Bonnetti Medical Gas Specialist 121 Camelot Drive, Unit 4 Plymouth, MA 02360 Office: 508.747.6800 Fax: 508.747.6803 Cell: 781.389.2060 nbonnetti@quanteng.com

An authorized representative for:





Represented by

J.H. Pokorny Assoc., LLC

781-762-2661

www.jhpokorny.net



KIRSCHNER ASSOCIATES, INC.

8 Abbey Lane, PO Box 312 Middleboro, MA 02346-0312 Tel: 800-752-1588 Fax: 508-947-0850 www.kirschnerassociates.com

PATTERSON-KELLEY
AMERIDEX PHX •WENDLAND TANK
RITE BOILERS •NATCO HEATERS
SECURITY CHIMNEYS



Heat-Flo Anvil Panasonic Armstrong Ideal Recor Cambridge Lee Jacuzzi Roof Top Blox Endot Lyall Vilco/Superior Tanks тото Fernco Myson Gruvlock Navien TPI Hansgrohe NIBCO Tundra HeatFab NA Pipe Corp.

Phone: 508-894-2000 www.goodingd.com



Index of Paid Advertisers

Accardi	7	K Ross Co.	8	scнотт	4
Air Energy	6	Kirschner Associates, Inc.	9	Sloan Valve Company	6
David Gooding	9	Leonard Valve	7	T & S Brass	7
Emerson Swan	7	Lubrizol Advanced Materials, Inc.	9	Toto	10
Environmental Air Specialties	10	Milwaukee Valve	7	Tower Hill Sales	4
Fire Pump Testing Company	10	Navien	5	Urell	5
Gourley	8	New England Combustion Products	10	Victaulic	7
Guardian Equipment	9	Practical Applications, Inc.	2	Viega	2
Gustavo Preston	9	Quantum Engineering, Inc.	9	W.P. Haney / Watts	7
J. H. Pokorny Associates	8	RL Stone Co. New England	6	Walter F. Morris	6

From:

A.S.P.E. P.O. Box 111 East Walpole, MA 02032



Next Event

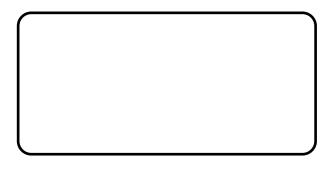


WEDNESDAY

9th

MARCH

Send to:



FIRST CLASS MAIL

The Spencer Turbine Company Manufacturer's of:

Chapter - AMERICAN SOCIETY OF PLUMBING ENGINEERS

Boston

- UL-Listed Hermetic Natural Gas Boosters
- · Central Vacuum Systems for Housekeeping
- Oral and Surgical Laser Smoke Evacuation

Represented By Spencer.

Represented By: Environmental Air Specialties

P.O. Box 541, Grafton, MA 01519 T: 508.839.6157 F: 508.839.4431 W: www.easne.com

Maurice Brodeur - Sales/Engineering C: 508.958.6346 E: mbrodeur@easne.com Standard UL-Listed & Custom Natural Gas Boosters & GasCube[®] Skid Packages Featuring:

- Standard Boost Pressures to 83" WC/ Volumes to 240,000 CFH (Higher Available)
- · Simplex & Duplex Designs
- Pre-Engineered, Pre-Piped, Factory
- Smallest Footprint in the Industry
- Innovative Design Cools Motor & Extends its Life



NEW ENGLAND COMBUSTION PRODUCTS,

781 337 8888 www.necombustion.com



Instantaneous, Tankless Hot Water Heaters. Cycle-Proof, Scale-Free Expandable 316L Floating HE.



RBI Heaters & Boilers, one of the MESTEK product lines.



Customized packaged pump systems, Touch Screen Controls, 304SS Header &Frame.



Proud to Represent



173 Spark Street, Brockton, MA 02302 Phone: 508-894-2000 | Fax: 508-894-2001 Inside@goodingd.com | www.goodingd.com