

Agenda

Presented by Daniel Karpen

Pipe and Boiler Insulation

Cost of fuels, oil, gas, electric
Heat losses from uninsulated piping
Heat losses from insulated piping
Case study – cost of insulation
Payback periods

The Low Pressure Steam Heating System

High pressure goes to low pressure - always
Water seeks its own level - sometimes
Near boiler piping – the place where problems are born
What you should know about the Hartford Loop
How to size replacement steam boilers
One-pipe steam – a matter of detail
It's all in the venting
Two-pipe steam – a matter of control
A steam heating trap primer
What you need to know about condensate and boiler feed pumps
Vacuum: friend or foe?
Controlling the boiler water level
Water hammer – know thy enemy
Vapor systems
Cleaning the internals of a steam heating system

Improving the Energy Efficiency of Steam Heating Systems
New York, NY - Tuesday, January 23, 2018

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Learning Objectives

You'll be able to:

Evaluate cost savings of boiler and pipe insulation.

Learn about one-pipe and two-pipe steam heating.

Evaluate problems in near boiler piping.

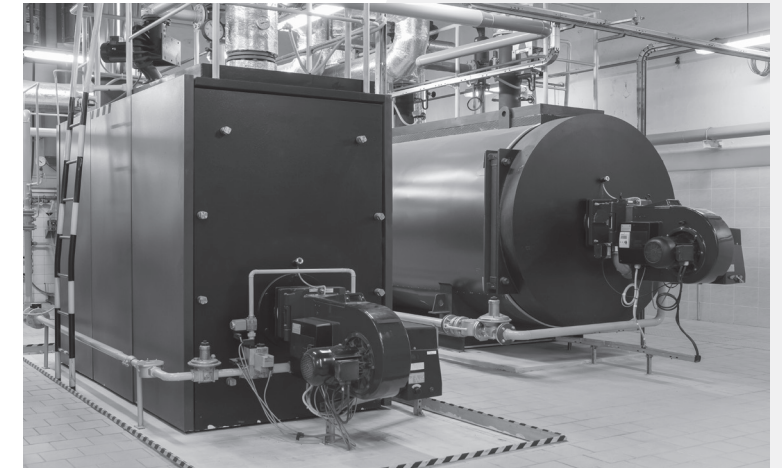
Get tips on sizing replacement boilers.

Learn about cleaning steam heating system internals.



Improving the Energy Efficiency of Steam Heating Systems

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Examine cost savings from boiler and pipe insulation

Get a primer on steam heating traps

Solve water hammer problems

Learn how to size replacement steam boilers

Diagnose problems with steam system venting

Continuing Education Credits

Professional Engineers

6.0 Continuing Ed. Hours

Architects

6.0 HSW Continuing Ed. Hours

6.0 AIA HSW Learning Units

Contractors

Non-Credit Continuing Ed.



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Faculty

Daniel Karpen *Professional engineer and consultant in Huntington, NY*
Mr. Karpen is a licensed professional engineer in New York. He has more than 20 years of experience in HVAC and energy conservation consulting. His strong background in the physical sciences and technology, combined with a knowledge of government procedures, provides a foundation for getting practical results quickly. Mr. Karpen is recognized nationally for his innovations in a wide range of energy conservation areas. Much of his work has been in the development of energy conservation management plans in both the public and private sectors. Mr. Karpen has a B.S. degree from the University of Washington, an M.A. degree from the State University of New York at Stony Brook and an M.B.A. degree from Adelphi University. He has eight U.S. patents and two Canadian patents relating to lighting and energy conservation. Mr. Karpen is an experienced energy conservation engineer, and he has worked on making changes to engineered plans and specifications for both residential and commercial work to make structures and their systems more energy efficient.

Attendee comments from earlier presentations of this seminar taught by Mr. Karpen:

- “Very interesting and informative.”
- “Excellent content and speaker. He knows this topic very well. Highly recommended.”
- “Very good for problem solving.”
- “He was very bright and informative.”
- “Excellent case histories.”

Seminar Information

NYC Seminar & Conference Center
71 West 23rd Street
New York, NY 10010
(800) 326-5494

Tuition
\$299 for individual registration
\$279 for three or more registrations.

Each registration includes a complimentary continental breakfast and printed seminar manual.

- How to Register**
- Visit us online at www.halfmoonseminars.org
 - Mail-in or fax the attached form to 715-835-6066
 - Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar. You may also send another person to take your place.

Continuing Education Credit Information

This seminar is open to the public and offers up to 6.0 continuing education hours to professional engineers and 6.0 HSW continuing education hours to architects in most states, including New York and New Jersey.

HalfMoon Education is deemed a New York-approved continuing education provider for architects via its affiliation with the American Institute of Architects. HalfMoon Education is an approved continuing education provider for New York engineers (NYSED Sponsor No. 35) and New Jersey engineers (Approval No. 24GP00000700).

The American Institute of Architects has approved this event for 6.0 Learning Units (Sponsor No. J885). Courses approved by the AIA qualify for New Jersey and District of Columbia architects.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Louisiana, Maryland, North Carolina, and North Dakota.

This event offers a non-credit continuing education opportunity to construction contractors, but it has not been approved by any state with a continuing education requirement for contractors.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Additional Learning

Webinar Series

- Cogeneration System Principles and Practice**
- **Understanding the Benefits of Cogeneration**
Thurs., Nov. 16, 2017, 11:00 AM - 12:30 PM CST
 - **Laws, Regulations and Building Codes Impacting Cogeneration**
Thurs., Nov. 16, 2017, 1:00 - 2:30 PM CST
 - **Examining Cogeneration Technologies**
Fri., Nov. 17, 2017, 11:00 AM - 12:30 PM CST
 - **Moving to Cogeneration: Analysis, Modeling and Case Studies**
Fri., Nov. 17, 2017, 1:00 - 2:30 PM CST

- Flood-Resistant Buildings**
- **Floodplain Development under NFIP Standards**
Wed., Nov. 29, 2017, 11:00 AM - 12:00 PM CST
 - **Building Design under NFIP Standards**
Wed., Nov. 29, 2017, 12:30 - 2:00 PM CST
 - **Designing and Constructing Flood-Resistant Buildings**
Fri., Nov. 30, 2017, 11:00 AM - 12:00 PM CST
 - **Designing and Constructing Foundations and Above-Grade Flood Resistance**
Fri., Nov. 30, 2017, 12:30 - 2:30 PM CST

- Solar Photovoltaic Project Design and Development**
- **Solar Photovoltaic Project Design and Development, Part I**
Thurs., Nov. 30, 2017, 11:00 AM - 3:15 PM CST
 - **Solar Photovoltaic Project Design and Development, Part II**
Fri., Dec. 1, 2017, 11:00 AM - 2:15 PM CST

- Construction Cost Estimating**
- **Introduction to Cost Estimating**
Thurs., Dec. 7, 2017, 11:00 AM - 12:30 PM CST
 - **Cost Components - A Closer Look at the Estimates**
Thurs., Dec. 7, 2017, 1:00 - 3:00 PM CST
 - **Cost Estimate Organization**
Fri., Dec. 8, 2017, 11:00 AM - 1:00 PM CST
 - **Cost Estimating Topics**
Fri., Dec. 8, 2017, 1:30 AM - 3:00 PM CST

For more information visit:
www.halfmoonseminars.org/webinars/

Registration

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How to Register		Registrant Information
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Complete the entire form. Attach duplicates if necessary.		Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.

() I need special accommodations. Please contact me.

Tuition
() **I will be attending the live seminar.** Single Registrant - **\$299.00**. Three or more registrants from the same company registering at the same time - **\$279.00** each.

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