POWUr NEWS
Saskatoon Chapter News
April 7, 2003

Meeting Notice

Tuesday
April 15, 2002

@ Saskatoon Construction Association

Speaker: Brian P. Monk, P.E.
Topic: Bio-Terrorism Filtration Systems

5:30 - 6:00	Cash Bar
6:00 - 6:45	Supper
6:45 - 7:15	Chapter Meeting
7:30 - 8:30	Dinner Speaker

AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR-CONDITIONING ENGINEERS

ASHRAE SASKATOON

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CURLING UPDATE

The good news about the John Ross Bonspiel is that all of the chapters, Winnipeg, Regina, Northern Alberta and Southern Alberta sent teams so we had a full house. The great news about the John Ross Bonspiel is that the Number One Saskatoon team brought the trophy home. That team was made up of Ryan MacGillivray (skip), Travis Braid (third), Doug Freeman (second), and Steve Kuzma (lead). Thanks your guys. It's been a while since the trophy's been in our possession and it's nice to have it home. The Saskatoon Number Two team made up of Jack Scott, Greg Schoenau, Bill Dean/Marc Baillargeon, and Jonathan French enjoyed the day and all attending had a great opportunity to get to know one another just a little bit. Next year's John Ross is in Calgary, so as defending champions, we'll have to send another strong team to try and retain the glory. Thanks to all the Saskatoon participants, it was a good day.

Jack Scott

NEWS:

On February 5th, Tyler Majcher presented the ASHRAE - Saskatoon Chapter Design Award at the 44th University of Saskatchewan Annual Scholarships & Awards Day. This award was presented to Mr. James Barth shown below.

The College of Engineering expressed their thanks and appreciation for establishing the award, providing support and encouragement for the students.

SPEAKER BIO

Brian P. Monk, P.E. is Vice-president, Sales / Marketing, at Circul-Aire (Dectron Internationale), Montreal, Canada, a North American leader in Air Purification and Energy Recovery equipment design and manufacturing. Mr. Monk has been a member of ASHRAE since 1988, and as Director of Engineering, has spent the last 10 years in the application and design of air filtration and energy recovery systems, in the industrial and commercial HVAC market. His academic background comprises of a college degree in Applied Science (Building Systems Engineering Technology) from Vanier College of Montreal and a Bachelor of Building Engineering from Concordia University of Montreal. Mr. Monk is a Registered Professional Engineer with the Province of Quebec, Canada,and the Association of Professional Engineers and Geoscientists of British Columbia, Canada. Affiliations include AEE (Association of Energy Engineers), ASME (American Society of Mechanical Engineers), AWWA (American Water Works Association), AQME (Quebec Association for Energy Conservation).

Guest Speaker:

Air Conditioning Contractors of America National HVAC Systems Security Summit" Examining Building Security as it pertains to outdoor air filtration requirements" (January 26, 2001, Washington D.C.)

***ASHRAE Chapter meetings*:** Various topics related to air quality /air filtration / Std.62-1999.

San Francisco, New York, Washington D.C., Nashville, Los Angeles, Seattle, Dallas,

Houston, Miami, Vancouver, Montreal, Toronto.

***American Architechtural Review*:** Interviewed on the application of filtration technologies for the George Bush Presidential Library (Aired August 1999 CNBC)

ASHRAE 1998 Summer Meeting Seminar 45 "The Application of Charged Electric Fields for the Control of Airborne Chemical Contaminants".(Toronto, June 1998)

ASHRAE 1997 Winter Meeting Seminar 17 "Gas Phase Air Filtration and the Application of Standard 62R".(Philadelphia, January 1997)

***AMIA Annual Meeting*: "**The application of gas phase air filtration to eliminate acetic acid generation in film vaults". (Montreal, September 1999)

Technical University of Nova Scotia: "Chemical and Odor Filtration" (Halifax, NS, June 1995)

ACAIRE Annual Meeting:"La Importancia de la calidad del aire en la ingenieria de la ventilacion, calefaccion y aire acondicionado" (Bogota, Colombia, May 1998)

US Army Corp of Engineers: "Gas Phase Filtration Design and Application"(US State Department, Washington, D.C., March 1996)

Dalhousie University: "Indoor Air Quality: Litigation and Compliance", Continuing education division, (Vancouver, August 1996)

Speaker BIO Continued…..

***VSHRAE Annual Meeting*:** "La Proteccion del Espacio Critico y de Aplicaciones Criticas"(Caracas, Venezuela, September 1996)

Publications:

Air Conditioning, Heating, and refrigeration News: "Examining Building Security" (Published February 4, 2002)

Engineered Systems Magazine: " Case in Point: Chase Manhattan Bank Air Quality" (Published October 1997)

ASHRAE Magazine (Montreal):" La Purification de L'air a L'aide d'un Media Chimique" (Published November 1996)

Engineered Systems Magazine:" Where there's smoke there's Ire": Ventilation and Filtration Practices to mitigate contaminants in a smoking permitted environment.(Published January 2000) editorial contribution.

Air Conditioning, Heating, and refrigeration News:" Gas Phase Filtration Helps Solve Airport IAQ Problems" (Published August 1998)

Seminar Presenter:	**Brian Monk, P.Eng. (Vice-President, Sales / Marketing)**

Presentation Title:	**Gas Phase Filtration for the elimination of corrosive, odorous and toxic gases**

The problem of corrosion in industrial environments such as refineries, pulp and paper plants and chemical factories is as old as industry itself. Unlike hard corrosion which causes physical degradation of equipment, soft corrosion attacks the process control systems with minimal visual signs. Operations managers have long realized that electronic components are at the mercy of the gases and acids that such environments contain. As a result, corrosion of these components causes production stoppages, increased production costs, higher maintenance budgets and lower productivity.

For more than 35 years, the use of Gas Phase Filtration has been used in the reduction of gas phase contamination, more precisely, in controlling corrosion and odor potential in industrial environments, the use of granular activated carbon (GAC) and potassium permanganate has been built on years of research and development and on a growing number of satisfied customers worldwide.

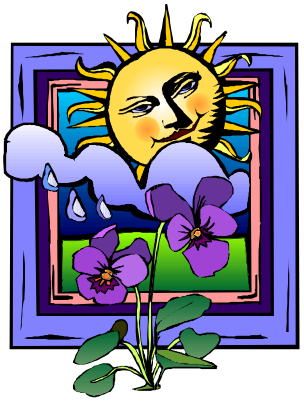
This presentation will focus on an applied engineering unique systematic method, based on experience gathered from installations worldwide, which is effective for all types of industrial and commercial environments; it comprises of: An integrated approach which utilizes four distinct stages (diagnose, measure, control, optimize) that can be undertaken progressively, with each stage constituting an integral segment of the overall solution.

Nominations:

The following are the nominations for the 2003-2004 year

President - Travis Braid
V.P. - Mike Osborn
Secretary- Tyler Majcher
Treasurer - Reg Hofman

GOLF



Date: May 30, 2003
Time: First tee time at 11:30am
Place: Willows Golf & Country Club
Cost: $80.00 for local members, $90.00 for nonmembers
Course: Lakes & Islands

Dinner to follow. If you have prizes, we need and appreciate all, please forward them to Steve Kuzma @ 102 - 2366 Ave C North. We have room for 40 golfers. Currently I have 15 people who have indicated they are going to play. So the first 40 paid, play.

Energy Answers

Rob Dumont

From Solplan Review Magazine, Box 86627, North Vancouver, BC, V7L 4L2? An annual subscription to the publication is $48.15 including GST.

In most Canadian houses, the water heater is the second largest user of energy. However, the efficiency of most gas or propane-fired water heaters is quite anemic, with annual efficiency values typically less than 60%. **What can be done to improve the efficiency of the heaters?**

Here is my "top ten" list of things to improve the efficiency of your hot water system.

1. Lower your tank water temperature. This is the cheapest efficiency measure you can employ. Some people have their water heaters set as high as 145 deg F (63 deg C). This is too high, resulting in substantial heat losses and the risk of scalding from the hot water. Conversely, some years ago there were recommendations to lower water temperatures as low as 105 deg F (41 deg C). This is too low, and will allow legionella and other bacteria to grow inside the water heater. A good water temperature is about 125 deg F (52 deg C), high enough to prevent legionella, yet low enough to limit tank losses and prevent scalding.

There is a proposal to the National Building Code of Canada to revise Part 9 of the code in connection with the maximum temperature of water supplied to fixtures. The proposal is to limit the temperature to 120 F(49 C). This change is being proposed because of the large number of scalding incidents that occur every year from too-hot water.

2. Reduce your use of hot water by installing water conserving shower heads, aerating taps, and a horizontal-axis (side-loading) clothes washer. Horizontal-axis clothes washers use less than half the water of the standard vertical axis (top-loading) machines. The smaller the demand for hot water, the lower the bill.

3. Insulate the water heater to limit heat loss from the jacket. Most water heater blankets on the market are only about one or two inches thick. A better insulation thickness can be achieved by adding R-20 (6-inch-thick) batts. The trick is to place the batts vertically against the water heater, and to cover the batts with an aluminum or vinyl-backed blanket insulation material. The batts need to be cut like barrel staves so that they fit properly. With any of the natural gas, propane, or oil-fired water heaters, it is VERY IMPORTANT that the air supply to the burners and to the draft hood at the top are not obstructed.

I used this insulation technique on an electric water heater, and the standby heat loss was reduced from 100 watts (341 Btu per hour) to 25 watts. I have found that a thin wire is the best for holding the insulation against the tank. Most duct tapes do not have enough staying power.

4. Put the water heater near the end uses. This, of course, is easier to do in a new house. By having only a short distance for the water to travel, the heat loss from the piping is reduced. Even if the pipes are insulated, the water in the pipes will cool quickly and the heat from the standing water in the pipes is lost.

5. Install an uninsulated preheat tank (30 or 40 gallons) upstream of the water heater. This preheat tank will absorb heat from the air in the house throughout the year. Although you are ‘robbing’ heat from the house during the heating season, the tank will draw heat from the house during the summer period. Incoming water temperatures can be quite cold. In Saskatoon, the groundwater temperature is as low as +3 deg C (38 deg F) in the late winter months, rising to about +18 deg C (65 deg F) in the summer.

Energy Answers - Continued……..

6. Place insulation on the cold water inlet and the hot water outlet piping. Most water heaters have the piping at the top of the heater. Considerable thermal convection can occur on the pipes. You can notice this on water heaters that do not have pipe insulation. Quickly touch the pipes near the top of the water heater. Even if there has been no water draw in the last half hour, they will be hot.

7. Install anticonvection loops on the water heater. The easiest anticonvection loop to make is to use a soft copper loop about 6 inches in diameter on the inlet and outlet pipes.

8. Consider an instantaneous water heater. Several companies now offer tankless water heaters. The annual efficiency or energy factor of these heaters is considerably higher (approximately 80%) compared with conventional tank type water heaters (approximately 50% to 60%). The units are based on European and Japanese designs, and generally do not have the instantaneous capacity of the tank type water heaters that we are accustomed to in North America. For a small family, however, the instantaneous heaters can be satisfactory.

9. Install a condensing water heater. There are several companies that produce condensing water heaters for domestic water heating. These units are not cheap, and tend to be quite large in capacity. However, the units can also be used to provide space heating. At least two companies (Viessman and NY Thermal) produce instantaneous condensing water heaters.

10. Install a solar water heater. These are not cheap, but are attractive in most parts of Canada where electricity is the energy source of choice.

ASHRAE® American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

ASHRAE Chapter 102
Saskatoon

Monthly Meeting Minutes
DRAFT COPY
For March 11, 2003 Meeting

Bob Daniels called meeting to order.

Motion to adopt minutes as posted in newsletter by Jack Scott.
2nd by Robert Bergen

Passed unanimously.

Old Business

Mike, Travis & Jeff to attend Seattle CRC. Please forward any motions or nominations to them.

Reports

Treasurer (Tyler Majcher)

Tyler report account balances.

Programs (Travis Braid)

April speaker will be Brian Monk. Meeting will be on April 15th.
Travis to confirm construction association is available that night.

Research (Mark Vanbeek)

Not present.

Membership (Jeff Frie)

There are still copies of roster available.

Membership advancement forms sent to those who are eligible.

Tega / Refrigeration (Vacant)

History (Jack Scott)

Local chapter play downs held.

Meeting Minutes Continued……

Brad Chisan, Steve Kuzma, Ryan Macgillivray & Travis Braid won.

Jack Requested prizes for John Ross Tournament.

Student Affairs (Paul Khanna)

There are 21 new student members.

CRC Report (Jonathon French)

Jonathon held first CRC general chair meeting. Next meeting will be April 16th.

New Business

Board of governors should forward CRC reports to Travis.

Steve has booked golf tournament.

Motion to Adjourn by Bill Dean.