

2009

AFE 74

Past Tours

January Tour – Tufts University – Grafton, MA Regional Biosafety Laboratory

This brand new 30 million dollar laboratory is a state of the art facility with all the new engineering technologies put to use and several energy efficient equipment installations. It has four floors; one for the labs and three floors to house all the mechanicals to maintain the biosafety level 3 rating. AFE 74 toured all parts of the building and



afterwards had a presentation of the construction process and the challenges Tufts faced in building this interesting facility.



2009

AFE 74

Past Tours

February Tour - Ken's Foods Inc Marlboro, MA

This 350,000 sq ft flagship facility located on 24 acres features six independent processing kitchens, which supply products to any one of 13 packaging lines. AFE 74 did a walking tour of the salad dressing manufacturing plant including utilities, water pumping station, rail car unloading, liquid bulk storage, processing, packaging, warehousing, and tour of biological wastewater treatment plant.



Afterward we had an excellent dinner, Chapter Awards presentations, meeting and networking session at the Chateau Restaurant



2009

AFE 74

Past Tours

March Tour – Simonds International Fitchburg MA

Simonds is a 176 year old Fitchburg company specializing in cutting tools for the wood and metal industries. AFE 74 toured the plant systems including HVAC systems and bandsaw manufacturing processes with technologies spanning over a hundred years.



Afterward we had an excellent dinner, presentation on the new ASHRAE 180 Maintenance Standard and networking session



2009

IFE 74

Past Tours

April Tour – St Vincent's Hospital Worcester, MA

St Vincent's Hospital is a 348 bed acute care hospital. During our tour we saw all of the mechanical systems involved in running a hospital such as; Boiler Room, UPS systems, Operating Room Air Handling Units, rooftop systems, etc. Our presentation featured best practices in Building Envelope Management.



2009

AFE 74

Past Tours

May Tour- MA Firefighting Academy Stow, MA



This is where they train all of the Massachusetts Firemen for licensing & certification. AFE was treated to a briefing of the firefighters training program and a presentation in how the state of MA handles Emergency and Hazardous Materials responses. Followed by touring all parts of the training academy including; burn buildings, tank car storage, Flammable gas training area, emergency response vehicles and the current 42 million dollar construction project for the new administration building due to be completed in 2010. Afterwards we had a great dinner and networking session at the Horseshoe Pub in Hudson.



AFE 74

Past Tours
2009

September Tour- Gillette Stadium Foxboro, MA

Our Fall season kicks off with our annual membership drive which was hosted By AFE Boston Chapter 33 and we had the ASHRAE



Boston chapter join us as well. Over 150 people attended the tour and presentation that was held at CBS scene restaurant



Our Tour included the mechanical spaces of the stadium including boiler room, pump house, chillers and service tunnels

2009

A FE 74

Past Tours

October Tour – Smith & Wesson Manufacturing MA Springfield, MA

October brought us a joint tour hosted by the AFE Springfield—Pioneer Valley chapter at the Smith & Wesson Firearms manufacturing plant in Springfield, MA. The day started off with optional access to the Smith & Wesson Firearms training center, which many of our members enjoyed. After that there was a full tour of the S&W Museum and the firearms manufacturing process proceeded by a great Prime Rib Dinner and lots of great networking.



2009

IFE 74

Past Tours

November Tour – College of the Holy Cross Worcester

Chapter 74 toured Holy Cross' newest projects including Smith Labs, which is an addition to the integrated science complex. The building is a LEED designed building incorporating several energy saving features. It is the first phase of the 60 million dollar project. The second phase is a total renovation of Haberin Hall. The 4 story building consists of labs, classrooms and lecture halls. We toured a lab and all the mechanical spaces. During a great dinner we learned about the renovation in progress and the challenges of operating the facilities department..



2010

A FE 74

Past Tours

January Tour – AC Tech/ Lenze – Uxbridge, MA Manufacturer of VFD Equipment

A FE chapter 74 and 63 toured AC Techs newly renovated 125,000 sq ft manufacturing facility where they produce variable frequency drives and associated equipment with their "Surface Mount Technology Method" and highly automated processes that bring a level of expertise and reliability to Variable Frequency



Drives never before accomplished in past generations of motor control. Afterwards we had a technical presentation on the use of VFD's and had a great chicken dinner at the Village Haven Restaurant in Rhode Island.



2010

IFE 74

Past Tours

February Tour – Abbott BioResearch Center



Abbott has grown over the years to a 525,000 sq ft state of the art manufacturing and R & D center. The chapter had a behind the scene look at the infrastructure that enables this facility to meet its global commitments and deadlines. Tour encompassed

mechanical equipment in the GMP basement that is associated with operations of production suites and we visited the Penthouse where 95% of the air handlers are located.



After the tour we had an excellent dinner, Chapter Awards presentations and technical meeting by Steve Neveu , P.E who gave us a presentation on Process Piping Installations

2010

IFE 74

Past Tours

March Tour – USPS Distribution Center

The United States Postal Service Distribution center in Shrewsbury serves Worcester and Central MA. Processing equipment reads and sorts 35,000 pieces per hour from the 300 daily inbound trucks that arrive at one of 35 dock bay doors. Over 600 people work at this 260,000 sq foot processing center.



There was a presentation on the applications and use of the three phase motor. With a dinner and networking at Tweeds restaurant in Worcester, MA



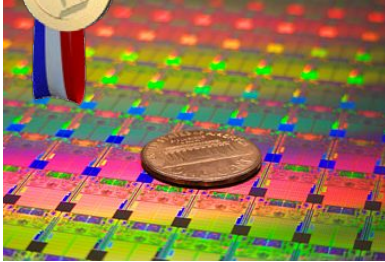


2010

AFE 74

Tour of the Year!

April Tour – Intel Corporation Hudson, MA



The Intel Hudson site includes 1.3 million square feet of building space and employs 2,200 people

Chapter 74 was treated to a viewing of the Fab 17 semiconductor manufacturing plant and toured the chiller plant, boiler plant and central

utility building water treatment areas. We enjoyed an excellent dinner at Intel followed by a pure water presentation by Mr. Bob Livingston, President and Chief technical Officer of Arion Water, Inc. covering the quality requirements, system size, design requirements, construction and costing specific to ultra pure water systems.



Voted 2010 Tour of the Year – Congratulations Intel Corporation!

2010

A FE 74

Past Tours

May Tour- UMASS Medical - ACC Center

In May AFE 74 toured the newly built ACC center at The Worcester UMASS Campus . The Ambulatory Care Center is a seven-story, 258,000-square-foot building that will house a mix of ambulatory clinical care centers, clinical and translational research programs.



After a great dinner we had a presentation on BIM; Building Information Modeling and how it interactively tied in with the design, construction and future maintenance management of the ACC center.





AFE 74

Past Tours
2010

September Tour- Fenway Park, Boston, MA

Our Fall season kicked with our annual membership drive which was hosted By AFE Boston Chapter 33 and we had the ASHRAE Boston chapter join us as well. Over 120 people attended the tour and membership benefit presentation that was held at Fenway Park



AFE members get a first hand view of what it's like to be on Fenway's Green Monster

Our Tour included the architectural aspects of building & renovating this historic ballpark which opened in 1912 and seeing all the great moments of our beloved world champion Red Sox.



2010

A FE 74

Past Tours

October Tour – Rolls Royce Naval Marine, Walpole, MA



October brought us a unique opportunity for a tour of Rolls Royce where they make propellers and associated equipment for our US Navy ships. We were treated to a engineering overview of what goes into design, fabrication and testing of the quality equipment RRNM produces.



Followed by an operations tour, then a fun dinner and networking at the Eagle Brook Saloon. Another great example of the places you can see only as an AFE member. Where we Learn, Lead and Influence.

2010

LIFE 74

Past Tours

November Tour – Polar Beverages – Worcester, MA

Chapter 74 toured Worcester's Polar Beverages Inc. The Polar plant is 550,000 sq ft and has been in business over 120 years. We toured the plant to see how Polar Beverages were



made, bottled and shipped. Afterwards we had an environmental presentation on "Understanding and Achieving Environmental Compliance" at the Webster House where we enjoyed an excellent dinner and networking

2011

A FE 74

Past Tours

January Tour – DCU Center – Worcester, MA



A FE Chapter 74 toured the DCU center's new ice making process, formerly 100 Tons, now a 240 Ton Ammonia Ice Making Process w/Condenser Fan Towers. We were treated to a birds eye view of the rink from the catwalks above.



Afterwards we had dinner and Awards ceremony in the Shark tank followed by premier seats to the Worcester Sharks hockey game.



2011

AFE 74

Past Tours

February Tour – Quabaug Manufacturing- W. Brookfield

The Quabaug manufacturing process can be described as a giant bakery, except they bake rubber soles instead of cookies or pastries. We saw the factory process from start to finish that is involved in manufacturing the world famous Vibram boot sole, I'm certain we all own or have owned a pair of boots with the Vibram sole, so to see the process from pure gum rubber to a finished sole was an amazing thing indeed.



and hydraulic pumps required to accomplish this task

After the tour we had an excellent dinner at the Spencer Inn and a presentation on Emergency Generators by AFE Fellow, Norm Faucher, CPE.



Pres. Don Juozaitis thanks presenter Norm Faucher, CPE



Networking at the Spencer Inn

2011

AFE 74

Past Tours

March Tour – Verallia - Milford, MA



The Milford plant just recently completed (Nov 2010) a \$35 million upgrade for one of its two giant furnaces. The new furnace utilizes a "oxy fuel" system which produces a better "burn," and also helps the environment by reducing the plant's nitrogen oxide and carbon dioxide emissions. A furnace of this size takes several weeks to reach its 2,800-degree production temperature. The two furnaces in Milford together can produce 300 to 350 tons of molten glass each day. The local plant has more than 200

employees and can turn out 2.4 million beer bottles each day.

Afterwards we celebrated St Patrick's Day with a dinner, chapter meeting and networking event at Pinz Entertainment center. In recognition of our Chapters 45th year anniversary we reserved the private King Pin Suite which gave us our own bowling alley's, pool table and 22' wide screen to see some great pictures of AFE events and watch the bruin's game.

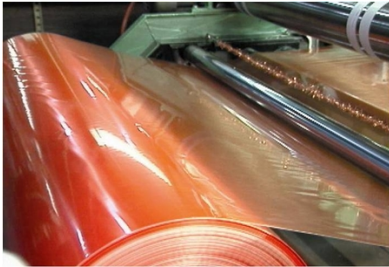


2011

AFE 74

Past Tours

April Tour – FLEXcon - Spencer, MA



FLEXcon is the leading global polymeric coating resource with sales of \$300 million annually and more than 1,000 employees worldwide. FLEXcon's corporate headquarters in Spencer, Massachusetts encompasses five

manufacturing plants with more than one million square feet of space, including a secure facility where products for security applications are produced.

Flex con is one of Central Massachusetts largest privately owned companies, with more than 700 employees dedicated to the manufacturing of Pressure Sensitive and Laminated Fabrics and coatings. Our



tour took us thru their impeccably clean and well maintained humidity controlled manufacturing and warehouse facility where we



saw their operations and inventory management. Afterwards we had dinner, networking and a presentation on the practical application, use and benefits of Vibration Analysis for Facility Engineers by member Peter Houle.



2011

A FE 74

Past Tours

Voted 2011 Tour and Presentation of the Year

May Tour- Milton CAT – Milford, MA



The Milford location encompasses 60+ acres and is Milton CAT's Headquarters. They service and sell a multitude of equipment , Including emergency generators, engines, earth moving equipment, etc. Chapter 74 had the unique opportunity to walk thru their Earth moving repair facility where they service , repair and overhaul large Caterpillar machines and see how they recycle the oil from the machines to heat their facility.

A FE Chapter 74 saw Milton Cat's newly designed “ Sand Box” a live demonstration area that allows customers to test drive equipment. As a bonus all attendees were given a chance to test drive the earthmoving equipment. Afterwards we were treated to a BBQ dinner at Milton CAT.



A sincere thank you and Congratulations to MiltonCAT!

2011

A FE 74

Past Tours

September Tour- New England Aquarium



Our Fall season kicked off with our annual membership drive which was hosted By AFE Boston Chapter 33 and we had the ASHRAE Boston chapter join us as well. Over 180 people attended the tour and membership benefit presentation that was held

at the New England Aquarium.

Our Tour included a strolling dinner buffet with a private showing of the Aquarium followed by a presentation by the aquarium facilities engineering staff on the challenges of operating an aquarium.



During the event AFE Chapter 33 awarded scholarships to three Massachusetts Maritime students. Another great AFE chapter benefit!

2011

IFE 74

Past Tours

October Tour – Worcester Recovery Hospital



October brought us a unique opportunity to tour the largest state of Massachusetts construction project in 2011. Which is the 320 bed Worcester recovery center and hospital.

The hospital will provide a state-of-the-art, high quality, safe and respectful environment for patients, promoting active rehabilitation as a key component of therapeutic care. Expected completion is March 2012.

Gilbane Construction Company allowed chapter 74 a great tour of the construction project which currently employs 300 people on site. It's a LEED building project encompassing 428,000 square feet at a cost of \$302 million. Afterward we enjoyed a great dinner and networking at Leo's restaurant



2011

A FE 74

Past Tours

December Tour – Mt. Wachusett Ski Area



Mt. Wachusett may be close to home, but with a 2,006 foot elevation, they still get mountain weather. They have snow even when there's none in your backyard. And, when Mother Nature doesn't give them enough snow, they love to help her out! Chapter 74 toured the Mt. Wachusett Ski area and saw the snowmaking system of advanced HKD Tower Guns that blanket 100% of the terrain with huge mounds of natural-feeling snow. With the technologically-advanced guns and new state-of-the-art compressor system operation 100 million gallons of water are converted into machine-made snow each season, equaling an average of 3 feet of snow covering all the trails.

Only at AFE do you get these great behind the scenes tours of all types of industries. We hope to see you all in 2012!

2012

A FE 74

Past Tours

January Tour – DCU Center – Worcester, MA



AFE Chapter 74 toured the DCU center's new ice making process, formerly 100 Tons, now a 240 Ton Ammonia Ice Making Process w/Condenser Fan Towers. We were treated to a birds eye view of the rink from the catwalks above.

Afterwards we had dinner, networking and an Awards ceremony in the Shark tank followed by premier seats to the Worcester Sharks hockey game.



AFE Presents Mike Kolakowski of Kens Foods 2011 CPE of the year



AFE Presents Milton Cat the 2011 Tour and Presentation of the year



Enjoy some good networking and dinner in the Shark Tank



Our Immediate Past President gets friendly with Finz.

2012

IFE 74

Past Tours

February Tour – UMASS Medical School- Worcester

The UMASS Medical school's power plant recently received an upgrade to support some new campus science buildings. Chapter 74 toured the new state of the art Taurus 70 jet turbine electric generator and HRSG located in the Central Power Plant with tour host Joe Collins. The new 7.5 megawatt gas-fired combustion turbine and associated equipment was installed to boost the plant's capacity to generate steam, electricity and chilled water.



After the tour we had an excellent dinner at [Buca diBeppo restaurant](#) followed by a technical presentation provided by Frank I Rounds Company on Boiler Water Treatment.

*Voted 2012
Tour of the
Year*



2012

IFE 74

Past Tours

March Tour – Wyman Gordon- Grafton, MA



Founded in 1883 in Worcester, the Grafton, MA Plant was built almost 60 years later in 1946.

Our Tour brought us through the die shop with a stop near an open die, continuing over to the 18,000 ton press, the smallest of the 3 large

closed die hydraulic presses. The tour then explored over to Sack Press, an open die cogging press used to convert the billet stock to a rough shape vaguely resembling the final part. From this point we walked passed the large rail mounted billet grinders, it's quite the light show! Our next stop was the 35kT press, installed by the US Air force in the 1950's as a part of the Large Press Program which included the highlight of the tour the 50,000 ton press which is shown above. Pictures do not do justice to this amazing plant.

Following the tour there was a dinner meeting at the Grafton Inn featuring Dave Schmidt, former Sustainability Coordinator at Clark University and current Senior Special Programs Coordinator/Chair, Energy Management Department at Mount Wachusett Community College who will gave a presentation on the hot topic of sustainability.



2012

LIFE 74

Past Tours

April Tour – CSX Railway Yard - Worcester



Chapter 74 was treated to a great civil engineering project overview of the newly designed CSX railway yard and an education of the freight train business. Afterwards we had an excellent presentation on online Business Networking featuring the LinkedIn web site given by Mark Clark, CPMM.



May Tour- Pine Tree Power – Fitchburg



The Fitchburg Power Station is a 17 MW waste wood and Landfill gas-fired power facility. The facility burns whole tree chips, derived locally from forest management and land clearing operations, clean recycles pallet wood, paper derived fuel and landfill gas generated naturally in the City of Fitchburg Landfill. Electricity generated is delivered to Unitil (the Fitchburg Gas & Electric Company).



Following the tour AFE Chapter 74 had a networking dinner at Wachusett Mountain Restaurant in Princeton followed by an Emergency Ready Profile presentation provided by John Kelliher of Servpro.

2012

A FE 74

Past Tours

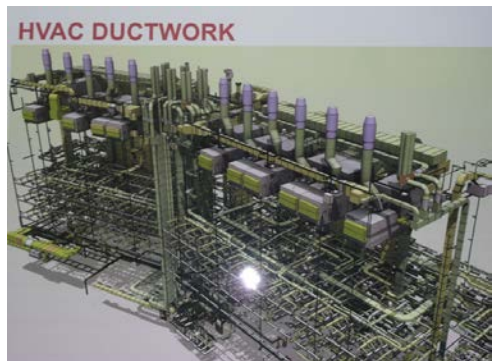
September Tour- Sherman Center



Our fall season kicked off with a tour of the UMASS Medical School's new LEED certified life science center. The Sherman center is a 11 story 520,000 sf' facility which features wet research space, clean rooms, research core space, 350 seat amphitheater, fitness center and cafeteria.

The tour was followed by the AFE award winning BIM presentation provided by Mr. Tom Watson of Suffolk Construction, where they virtually walked us through this exciting project. We learned how the team achieved the highest level of LEED Certification practicable while maintaining a reasonable cost/benefit profile.

Notwithstanding the LEED Certification goal, the building will maximize the use of all feasible green building attributes. One attribute to mention is that all lighting, heating and cooling is controlled via occupancy sensors which will greatly reduce energy costs.



2012

A FE 74

Past Tours

October Tour – Worcester Water Plant



A FE 74 had the opportunity to see a water filtration plant with a storage capacity of 10+ billion gallons that serves all of Worcester, Paxton and parts of Holden, Millbury and Auburn.



Afterwards we had a great dinner at the Webster House followed by a presentation by VHB outlining how commonly-used storm water management technologies are sized, constructed and more importantly, maintained. New regulations in many communities require that facilities managers conduct and document periodic monitoring and maintenance of all storm water facilities.

2012

A FE 74

Past Tours

November Tour – Access Northeast Data Center



A FE 74 was able to go behind the scenes and see how the facilities side of a data center operation.

Access Northeast Data Center in Marlboro, MA provides services that maximize the

efficiency of a corporation's technology resources by providing a redundant, secure, and reliable platform to deliver network applications, both on the public internet and private cloud. Access Northeast's Colocation, Hosting and Managed Services deliver value to many organization with the expertise of 24x7x365 Network Operations Center (NOC) featuring fault-tolerant Gigabit Ethernet IP Backbone, and robust fiber facilities.



Following the tour we enjoyed a networking dinner in the Tuscany Room at the Chateau in Westboro. Afterwards AFE Chapter 74 member and tour guide Eric Kagan presented on the evolution of a data center start-up from a facilities perspective and how it takes a 5 million ton cooling tower to keep up with their chiller load!