NABO NOW

2019, No. 2

Affordable, Safe Power for our Future

Energy is essential to every element of our lives.

Energy use can be divided many ways but the most common is through the end product.

Residential use of energy is the most basic use of energy. This includes watching television, washing clothes, heating and lighting the home, taking a shower, working from home on your laptop or computer, running appliances and cooking.

Commercial use of energy is what energy is used for in the commercial sector. This includes heating, cooling and lighting of commercial buildings and spaces, power used by companies and business throughout our cities for computers, fax machines, workstations, copiers just to name but a few.

The uses of energy in the commercial sector is more or less similar industrial use.

There are some experts that believe we are currently at our peak for fossil fuel production

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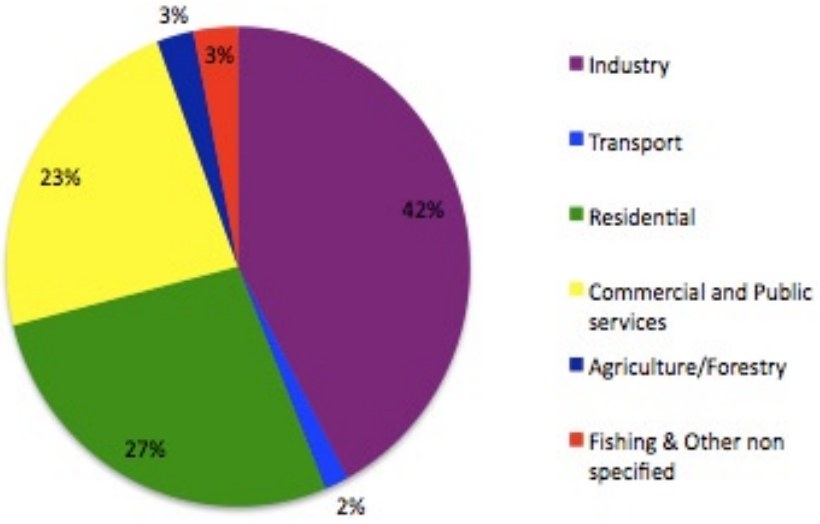

Source: IEA, 2007

and it will gradually start to decline. Based on this we should be looking more into renewable sources of energy such as Wind, Hydro Electric, Solar, Biomass, Hydrogen and Geothermal.

Regardless of the end use, we should take steps to conserve energy and reduce waste.

There are a few steps that can be taken to reduce cost and conserve energy.

Develop a management team to monitor energy usage throughout the facility and implement ways to reduce waste.

Energy audits can be performed in-house using an energy audit guidebook and assistance from facility experts

consider which machinery requires the most energy to run. If possible, schedule operation of these machines outside of peak hours.

Industrial air compressors are to blame for huge amounts of energy consumption and waste. Some are poorly designed, while others are improperly maintained.

To ensure your facility is getting the most from its HVAC system, conduct an HVAC audit. Based on the findings, take the time to conduct maintenance or consider upgrading the system.

Why are Boiler and Pressure Vessel Inspections Necessary?

Boilers, storage tanks and other pressure retaining items are potentially dangerous. While operating, they contain large amounts of energy, which can fail instantaneously, usually with devastating results. The purpose of the inspection is to help prevent such accidents from happening.

The standard requirement for most States in the US are as follows:

1. Power and high temperature water boilers:
   a. An annual internal certificate inspection and an external inspection while under operating conditions;
   b. An internal inspection if the inspector determines from an external inspection that there is danger to public or worker safety.
   c. A triennial (36-month) internal inspection and annual external inspection when fully attended by qualified attendants.

Direct fired jacketed steam kettles: inspection every two years.

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Heating or process boilers, not exceeding 15 psi (steam or vapor):

- A certificate inspection every two years;
  a. An internal inspection where construction permits.

Hot-water heating, and supply boilers and lined (potable) hot-water heaters operating at pressures not exceeding 160 psi and temperatures not exceeding 250°F: An initial certificate inspection at time of installation with no further inspections required (may be an external inspection).

Lined (potable) hot-water heaters are exempted when none of the following limitations are exceeded:

- Heat input of 200,000 BTU per hour;
  a. Water temperature of 210°F;
  b. Nominal water-containing capacity of 120 gallons

Your boiler inspector should be consulted for specific requirements to your location.

Common Causes of Failures:

Errors in design, construction, and installation

- Improper installation, human failure, and inadequate training of operators
- Corrosion/erosion of construction materials
- Failure or intentional defeat of safety devices; failure or override of automatic control devices
- Failure to inspect and test thoroughly, properly, and frequently
- Improper application of equipment; overfiring
- Lack of planned preventive maintenance
- Operator error is a major contributing factor in boiler accidents.

As anyone who follows incident reports knows, low-water condition and operator error or poor maintenance have stood atop the list of boiler accident causes.

States do vary to some degree, boiler only states exist and do not require inspections of Pressure Vessels.

Watts TP Valve Recall

Recall of Temperature and Pressure Relief Valves of Large Water Heaters by Watts Regulator Due To Rupture and Burn Hazards.

WASHINGTON, D.C. - The U.S. Consumer Product Safety Commission, in cooperation with the firm named below, today announced a voluntary recall of the following consumer product. Consumers should stop using recalled products immediately unless otherwise instructed.

Name of Product: One-inch 140X-9 Temperature and Pressure Relief Valves
Units: About 900
Manufacturer: Watts Regulator Co., of North Andover, Mass.
Hazard: The relief valve can fail to reduce pressure and avert failure or rupture of the

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water heater tank and associated valves, posing rupture and burn hazard to consumers.
Incidents/Injuries: None reported.
Description: This recall involves the one-inch 140X-9 Temperature and Pressure Relief valves, which are typically used in large water heaters for commercial buildings or possibly for large homes. The valves bear item codes 0259844 (75 psi/210°F); 0259924 (100 psi/210°F); 0259708 (150 psi/210°F); 0259925 (125 psi/210°F); and 0259930 (150 psi/210°F). The affected date codes are 0641R through 0930R. The date code is printed after the model number "M15" on a green metal tag fastened to the pressure relief valve.
Sold by: Authorized distributors nationwide from October 2006 through July 2009 for between $250 and $280. The valves were typically sold as replacement parts for large water heaters used in commercial locations or possibly large homes.
Manufactured in: United States
Remedy: Consumers should immediately contact Watts Regulator to schedule a free repair.
Consumer Contact: For more information, contact Watts Regulator toll-free at (888) 272-4649 between 8 a.m. and 4:30 p.m. ET Monday through Friday or visit the firm's Web site at www.watts.com.

Carrier Recalls Carrier and Bryant-Branded Heat Pumps Due to Fire Hazard

Carrier 1.5 ton multi-zone model: 38MGQC18---3

Name of product: Carrier- and Bryant-branded 1.5-ton multi-zone, 4-ton multi zone and 4-ton single-zone ductless heat pumps
Hazard: The fan motor on the heat pumps can fail, causing the units to overheat, posing a fire hazard.
Remedy: Repair
Recall date: October 10, 2019
Units: About 5,350 (in addition, about 450 were sold in Canada)
Consumer Contact: Contact the dealer locator on www.carrierductless.com (for Carrier-branded products) and www.bryantductless.com (for Bryant-branded products) and click on "Find a Dealer" at the bottom of the page or contact Carrier toll-free at 844-468-4301 from 8 a.m. to 5 p.m. ET Monday through Friday, for assistance in locating a Carrier or Bryant dealer in your area for more information.
Recall Details
Description: This recall involves Carrier- and Bryant-branded 1.5-ton multi-zone, 4-ton multi-zone and 4-ton single-zone ductless heat pump outdoor units. The units are used for cooling and heating homes and light commercial facilities. The model number and product number can be found on the nameplate/rating plate on the side of the units.

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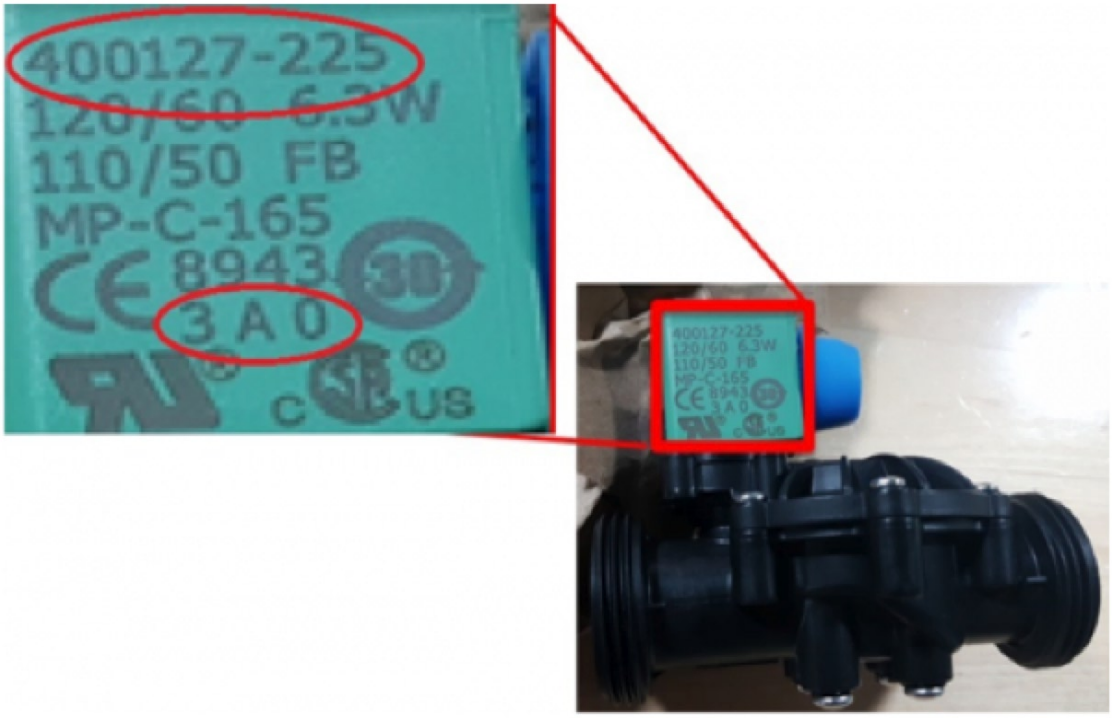
Remedy: Consumers should immediately contact their installing servicer, dealer or contractor to arrange for a free repair. While awaiting repair, consumers should monitor affected units while they are being operated and keep foliage and other flammable items at least 24 inches away from the recalled units.
Incidents/Injuries: Carrier has received six reports of the heat pumps catching fire (one occurred in the United States and five in Canada). No injuries have been reported.
Sold At: Carrier and Bryant distributors, independent dealers and contractors nationwide from March 2015 through April 2019 for between about $600 and about $4,000.
Importer(s): Carrier Corporation, of Palm Beach Gardens, Fla.
Manufactured In: China
Recall number: 20-009

The recalled models and product numbers are:

Brand	Product	Model Number	Product Number
Carrier	1.5-ton multi-zone	38MGQC18---3	38MGQC18---301--
	4-ton multi-zone	38MGQF48---3	38MGQF48---301--
	4-ton single zone	38MBQB48---3	38MBQB48---301--
	1.5-ton multi-zone	538TEQ018RCMA	538TEQ018RCMAAAA
Bryant	4-ton multi-zone	538TEQ048RFMA	538TEQ048RFMAAAA
	4-ton single zone	538REQ048RBMA	538REQ048RBMAAAA

VIQUA Recalls Solenoid Valve Kits for UV Water Treatment Systems Due to Electrical Shock Hazard



Recalled valve kit with product number displayed at the top of the green coil component and date code printed at the bottom.

Name of product: VIQUA Solenoid Valve Kits

Hazard: Electrical current could leak from the solenoid valve, posing an electrical shock hazard to the user.

Remedy: Repair

Recall date: October 3, 2019

Units: About 70 (in addition, about 170 were sold in Canada)

Consumer Contact: VIQUA at 800-265-7246 from 8 a.m. to 4:30 p.m. ET Monday through Friday, email at technicalsupport@viqua.com or online at https://viqua.com and click on "Product Safety" or http://info.viqua.com/safety-announcement for more information.

Recall Details

Description: This recall involves solenoid valves included in VIQUA solenoid valve accessory kits for residential and commercial UV water treatment systems. They can be identified by the green coil component attached to the solenoid valve with ASCO parts numbers 400127-xxx and date codes between 1A3 through 5A2 (13th week through the 52nd week of 2018) or 0B1 through 0B8 (1st week through the 8th week of 2019).

Remedy: Consumers should immediately stop using the recalled valve kits, disconnect power to the UV water treatment system and visit VIQUA's website for help inspecting the green coil component attached to the solenoid valve for the production date codes included in the recall. Consumers with the recalled solenoid valve should contact the firm to receive free installation of a replacement coil.

Incidents/Injuries: None reported

Sold At: VIQUA distributors and plumbing contractors nationwide from May 2018 through October 2019 for between about $460 and $500 for the valve kit.

Importer(s): VIQUA, of Canada

Manufactured In: United States

Recall number: 20-004

Report an Incident Involving this Product.

NABO is Now Accepting Applications for the 2020 NABO Grant Program

The Program

The National Association of Boiler Owners and Operators ("NABO") has established a grant program to provide for and encourage eligible individuals to continue their education to pass the National Board Examination for boiler and pressure vessel inspectors and to become a National Board Commissioned Inspector.

This grant program is administered by NABO. All awards are granted without regard to race, color, creed, religion, sexual orientation, gender, disability or national origin.

Eligibility

Applicants to the NABO Grant Program must be either:

- Children of individuals employed by or affiliated with ARISE Boiler Inspection and Insurance Company Risk Retention Group policyholder companies ("ABIIC")
- Veterans of the United States Military Services; or
- Individuals with HVAC or Code or Non-Code boiler and pressure vessel manufacturing shop experience as Welder or Quality Control.
- Must be a citizen of the United States.

Eligible Educational Institutions

An Eligible Educational Insitution is any accredited school that has a curriculum to prepare students to pass the National Board Examination to become a National Board Commissioned Inspector. Seer current National Board requirements here: http://www.nationalboard.org/index.aspx?pageID=390&ID=483

Awards

Applications must me post marked no later than January 25, 2020. Applications will be reviewed against the program criteria by a selection process determined by NABO. Grant recipients will be selected on a competitive basis and will be notified by February 25, 2020. If selected as a Grant Recipient, the student will receive an award in the amount of $10,000 for tuition, books, and related fees. Up to two awards will be granted each year. Applicants can reapply for additional awards each year while continuing their education.

Application

Interested individuals must complete the application and submit it to:

NABO Grant Program
c/o ARISE Boiler Inspection & Insurance Co., RRG.
7000 S. Edgerton Road, Suite 100
Brecksville, OH. 44141
Email: nabo@ariseinc.com

Applicants are responsible for gathering and submitting all necessary information. Applications are evaluated on the information supplied; therefore, answer all questions as completely as possible. Incomplete applications will not be evaluated. All information received is considered confidential and is reviewed only by the NABO Grant Program Selection Committee.

Selection of Grant Recipients

Grant Recipients are selected on the basis

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of academic record, demonstrated leadership and participation in school and community activities, honors, work experience, statement of goals and aspirations, and a personal interview, if elected by the NABO Grant Program Selection Committee. Financial need is not considered.

Selection of the Grant Recipients is made by the NABO Grant Program Selection Committee. All applications agree to accept the decision as final.

Grant Recipients will be notified as soon as possible after receipt of the completed application. Not all applicants to the program will be selected as Grant Recipients. Students may reapply to the program each year they meet eligibility requirements.

Payment of Grants

All awards will be paid direction to the Eligible Education Institution. Grant Recipients will be responsible for all income taxes due on any awards.

Obligations

Grant Recipients must keep at least a "C" average in all courses in order to keep the award. If the recipient's grades fall below a "C" average in his or her courses, the Grant Recipient shall be required to repay the award to NABO. Grant Recipients must submit a transcript of courses taken and grades received to the NABO Grant Program Selection Committee at the end of each grading period.

Amendments and Termination of NABO Grant Program

NABO reserves the right to review the conditions and procedures of the NABO Grant Program and to make any changes at any time, including termination of the NABO Grant Program.

Additional Information

Questions regarding the NABO Grant program should be addressed to:

NABO Grant Program
c/o ARISE Boiler Inspection & Insurance Co., RRG.
7000 S. Edgerton Road, Suite 100
Brecksville, OH. 44141
Email: nabo@ariseinc.com

See pages 9, 10, and 11 for Grant Application!

Got an important message for your fellow NABO members?
Have an announcement that you'd like to share?
Send your submissions for the NABO NOW! newsletter to
paul.welch@tuvsud.com

NABO Grant Program Application

I, _____ have read and understand the conditions of the NABO Grant Program. I affirm that I plan to pursue a career in boiler and pressure vessel inspection and to sit for the National Board Examination to become a National Board Commissioned Inspector. I give permission to officials of my educational institution to release transcripts of my academic record and other information requested for consideration in the NABO Grant Program. I understand that this application will be available only to qualified people who are pursuing a career in boiler and pressure vessel inspection. I affirm the information contained herein is true and accurate to the best of my knowledge and belief.

Date _____ Signature _____

Legal name in full _____
(Print/Type) Last Name First Name M.I.

Permanent residence _____
Number, Street, and Apartment Number

_____
City State ZIP

Your address at school _____
(if different) Number, Street, and Apartment Number

_____
City State ZIP

Home telephone (_____) _____

School telephone (_____) _____
(if different)

E-mail address _____

(Check one) I am a ☐ U.S. citizen ☐ U.S. national ☐ Resident alien expecting citizenship by the date of award

Date of birth _____
Month/Day/Year

Name of Educational Institution _____

Current cumulative GPA _____ on a scale of _____

Your undergraduate major(s)_____

Number of college credits earned to date _____ Total number of credits required for graduation _____

Expected date to receive baccalaureate degree _____ Degree you will receive _____

Graduate degree(s) sought _____ Concentration(s) _____

Name _____

1. List the secondary school from which you graduated, and all higher education institutions attended.

School	Location	Dates Attended

2. List awards, scholarships, or special recognitions you have received.

3. List college and high school activities

4. List work experience

Name _____

5. Describe the educational program you intend to pursue if you receive a NABO Grant Award.

6. What are your employment goals?

7. What additional personal information do you wish to share with the NABO Grant Program Selection Committee?

8. Describe your military service, leadership and education, including mechanical or engineering-related training and military application of that training.