



This Issue

- Upkeep Getting You Down? P. 1
- Motivation of Steam P. 3
- Letter from the President P. 1
- PM Checklist P. 2

A Letter From The President

August 2014 marks M&M's 30-year corporate anniversary. As I think back to 1984, fond memories swirl around in my head. My partner, Tim McNamara, and I were working for an industrial distributor at the time. We knew that we could provide better, personalized customer service, competitive pricing, and superior product knowledge if we ventured out on our own. I was fresh from working as an application engineer with Powers Process Controls and was fortunate enough to convince them to give us a shot as a distributor.

It was the days of bag phones and only the very "privileged" or larger, more established outfits had computers. We modified a bag phone and put it in a briefcase. We had clipboards for inventory and worked out of my garage. For us it was pounding on doors and non-stop customer contact. Every penny we made went into buying inventory,

expanding the empire. We had second jobs after working 10-12 hour days. We had the world by the tail.

For years, we concentrated on adding lines, inventory, and personnel, and eventually moved out of the garage. These days management is still working 10-12 hour days, but we are fortunate enough not to have to have second jobs. Simpler times . . . well, maybe.

There have been plenty of changes in those 30 years but our original formula has not changed. All in all it has been a good run and we intend on continuing the tradition by grooming the next generation, passing along the values we hold dear as we pride ourselves as a specialty line distributor that goes above and beyond for our customers.

Thank you for standing by M&M for these 30 years! We look forward to serving you for many years to come.



—Rich Murov

Upkeep Getting You Down?

Seasonal maintenance in spring is the time when maintenance teams should be concentrating on maintaining HVAC systems, performing operational repairs, and optimizing efficiency of automated control systems, software, and diagnostics.

Don't let the thought of upkeep get you down. Spring is the perfect time for building and grounds maintenance; the dog days of summer are not yet upon us, and the early morning cool, and gradual warm-up of springtime, helps keep the dirty work and sweat to a minimum.

Good preventative maintenance (PM) practices of your Heating, Ventilation, & Air Conditioning (HVAC) will help decrease downtime and save you from a myriad of unforeseeable breakdowns or problems.

First up: Look over your boilers in preparation for next winter. If you get

. . . continued on next page

Upkeep Getting You Down?

... cont'd from previous page

it done now, there will be no need to worry before the onset of winter once again. Carefully inspect your controls and panels for proper operational efficiency, make sure to lubricate any moving parts as required, clean and change out filtering systems, inspect coils, and clean and vacuum coils, filters, reflecting plates, and ducts and air returns, to make sure your heating system is free of debris.

Ventilation and irrigation = less irritation: Whether it is clearing your gutters and checking for blockages, ensuring irrigation systems are clear and unbroken, checking valves and hoses for leaks, tears, and cracks, or inspecting outside spigots that may not have survived the rigors of winter, regular PM procedures can optimize your systems and help keep costs to a minimum.

Next: Tune-up your air conditioning systems. The 'V' in "Ventilation" includes changing your air filters. Not only does this ensure efficient airflow, but any buildup of moldy-smelling or unpleasant odors accumulated over the stuffed-up winter months, will be alleviated and will aid in a fresh, clean, sweet-smelling environment in your building. A clean environment helps prevent illness in the workplace, which can also contribute to inefficiencies and downtime of your business.

Good PM = R&R: Repair, replace, rebuild, or maintain your HVAC on a regular basis and you may be able to enjoy a little rest and relaxation (R&R) over the summer months.

PREVENTATIVE MAINTENANCE CHECKLIST

Want to be better prepared to tackle upkeep of your business? Here are some Preventative Maintenance recommendations, which you can easily accomplish in the spring:

- Lubricate:** Moving parts need lubrication to operate efficiently. Grease moving parts as required in order to reduce friction that can cause an increase in electrical power usage.
- Tighten:** Check connections for loose wiring that can cause safety hazards and damage or lessen the life of your system.
- Measure:** Your toolbox should include voltmeters, diagnostic tools, and calibrators depending on the type of installation you maintain. Make sure to measure voltage for faulty connections, test and set field calibration of your unit to recommended specifications, and run system diagnostics regularly to ensure that your system is within normal operating range and to ensure optimal efficiency and safety.
- Replace:** Inspect and clean or change air filters once a month for optimization of your A/C, furnace, and pumps. Clogged air filters emit unpleasant odors and cause units to bog down and run inefficiently.
- Ventilate, Irrigate, and Drain:** Clear airflow blockages, repair irrigation leaks or replace valves and hoses, clear drain plugs of debris.
- Download:** "There may be an app for that!" It may be possible to control your cooling system from your phone to help control energy usage and cost of maintenance. Check your smartphone for available apps for your equipment!
- Inventory:** Make sure that your parts supply on-site includes commonly used items such as air filters in addition to parts that may be required in the event of equipment malfunction. Inspect your equipment for worn parts, anticipate your need, and keep spare parts on hand.





Motivation of Steam

The inherent simplicity of steam . . . or steam traps . . . is actually complex. What would you like to know? That steam is the underlying force of power for most of the world? Or that the first known source of steam power dates back to the 1st century in the device called an aeolipile, which looks like a modern day Weber grill fueled by firewood underneath the basin? Or that the Industrial Revolution was driven by steam power engines, because everybody - whether for factories, locomotives, or steamboats – utilized steam to provide power for their industries. Steam engines were invented in the 1600’s and by the latter part of the 1700’s pumps, mechanisms, and valves for steam power were widely patented and improved upon.

Today’s steam energy is mostly generated by steam turbines. Unlike internal combustion engines, which generally use fossil fuel for power, steam turbines are not particular about what type of fuel is used to heat water into its gaseous state of energy. Almost anything can be used to fire up the boilers that provide the pressurized energy of steam gas; coal, fire, nuclear energy, atomic power, or even solar energy can all effectively boil water, which is the one requirement to produce steam, or the gaseous phase of water.

The loop of steam continues to produce power; steam engine power, energy, propulsion of gas through piping and valves, which in turn generate energy that is distributed by its own pressure, then transferred to where it is used, or to its end-point. Then, as it is used up, the gas reverts to its original form, called condensate.

Basically, that is where steam traps come into play. By its containment within a steam trap, or valve, the steam energy is distributed to the end-point power source or use, the latent heat is used up, and the condensate, air, and non-condensate separates, distributes, and returns to the boiler for reuse.

Harnessing the power of steam energy includes reusing the returned condensate by recycling and reusing the condensate. And, since condensate forms from the used-up energy of gas, which is formed by heating past the boiling point, reusing the condensate will require less fuel; since water has already passed through the system and has already been heated up, it will heat up again much faster than the first time, thereby requiring less fuel.



Simple? Not really: Generally, the energy, pressure, velocity, and activity of the gas needs to be maintained, monitored, and directed in order to ensure the process is doing what it is supposed to do (create energy to power things) without losing its ability to provide energy. Loss of energy is due to the latent heat, or energy, seeping out through cracks or broken valves or pipes, or by condensate being so pressurized that the velocity

cannot be controlled. This loss of control can cause water build-up and water hammer, which can cause damage to the pipes and valves, somewhat like a tsunami does when it builds up and slams into land. The force of displacement must go somewhere, and the vacuum is filled with the overflow of too much condensate.

In general, steam is power or energy, and is the driving force and momentum of not only past generations, but the propellant of our future where renewable resources are the norm. Concern for the environment is foremost in today’s industrial endeavors, and by reducing waste and reusing resources such as condensate that forms out of the gaseous, used-up phase of steam, this will aid in optimizing, utilizing, and perfecting the power of steam energy.

Steam traps process the simplest of elements - water. Steam traps begin with, utilize, reuse, and end with H₂O. Hidden within the mechanism of steam traps is the latent possibility of changing our world! How exciting!



1-800-876-0036

What else can you do to optimize your HVAC system?

- **Upgrade:** It may be time to replace your older units to bring them into compliance with future energy efficient mandates to reduce costs and emissions. Check the U.S. EPA Web site (www.epa.gov) to investigate energy savings and mandates proposed or implemented in your area. Upgrading to a CMMS (computerized maintenance management system) can increase performance and reduce downtime; the CMMS can identify critical situations or equipment failures and notify personnel via text, e-mail, or voice mail instantaneously, thereby reducing response time.

M&M Control Service represents the top manufacturers in the industry. We bring you the best products at the best prices, delivered from stock or direct from the factories. We aim to exceed our customers' expectations, with continuously improved service, quality products, competitive prices and the fastest delivery. Our personal service staff is the best in the business and is committed to ensuring that your needs are met.

If you would like to receive our newsletter, or know someone else whom you think should be on our mailing list, please send an email to sales@mmcontrol.com requesting subscription. Please be sure to include the email address where you want the subscription to be sent.

P.O. Box 250 **Phone: 847-356-0566**
Grayslake, IL 60030-0250 **Fax: 847-356-0747**
www.mmcontrol.com **E-mail: sales@mmcontrol.com**

At M&M, everyone is our preferred customer! Come join the "M&M Family!"