Newsletter

November 2020

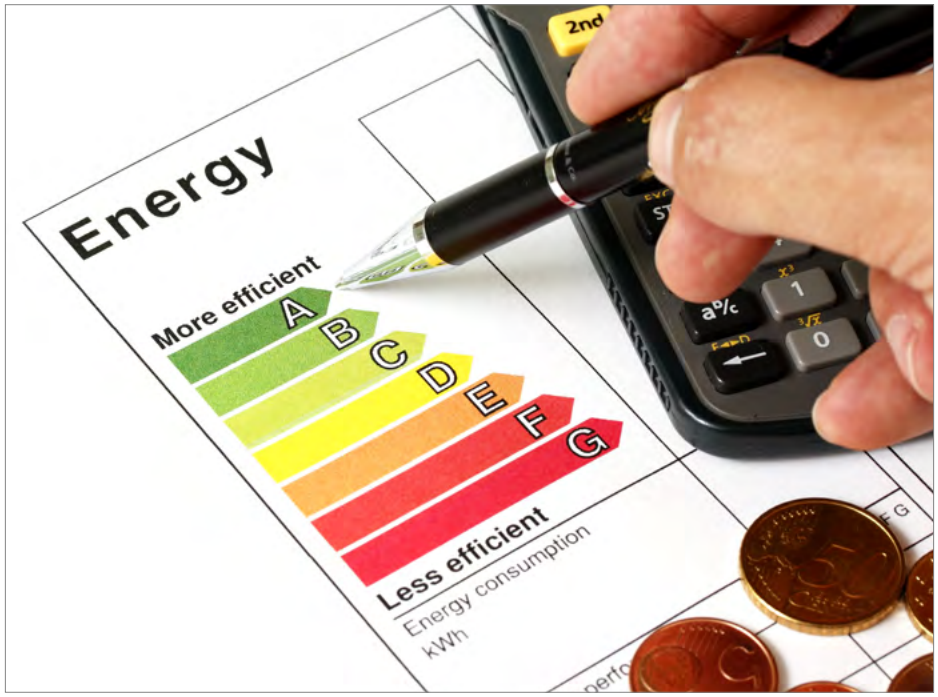
News, Events & Happenings

New Hire

We would like to welcome our new Business Development Representative, Ashley Zarrell, to the Airmatic Compressor Family. Ashley graduated from Ramapo College of New Jersey with a degree in sociology. After college, she'd worked as a business development representative with a large industrial tool company. She is an energetic and motivated individual who will be bringing her many skills to this new position with Airmatic Compressor. Ashley will be responsible for supporting the marketing department as well as generating leads for new business. We are very excited for her to join our team!

Customer Success Story

How to Pay for a New Compressor with the Energy Savings just by Upgrading the Control Technology



Robert Smith, System Specialist

A Valve Manufacturing company had recently inquired about improving their compressed air system to be more energy efficient. The company was running an older 50 horsepower inlet modulating air compressor for the past 10 years. We had installed electrical data logging on the compressor and measured the power consumption of the unit for a period of 1 week. From the data, we found the air compressor was running partially loaded, only needing to produce 50% of the compressed air but consuming 85% power during the entire week. Also, the compressor was turned on in the morning 1 ½ hours before production had started. We had suggested a new variable speed air compressor that would save energy by only producing the compressed air required and the ability to turn on and off at a specific time. With the energy savings dollars per month from the electrical bill, the company was able to COMPLETELY offset the monthly lease payment for the new air compressor.

Why Compressed Air Piping "Loops" Make Cents

Frank Asbaty, System Specialist

Your air compressor is the heart of your air system. Most customers focus on the compressor and consider the piping as a secondary concern. However, just like a heart can fail because of clogged arteries, a compressor can fail because of improper piping.

A local nutritional supplement packaging company was having issues with downstream (far away in the facility from the compressor) psi pressure drops. The packaging process equipment they use relies on a certain level of psi (unit of pressure expressed in pounds of force per square inch of area). When that psi, or pressure, is reduced to a level that is too low, performance of the equipment suffers.

After an inspection of the facility, it was uncovered that they do not have a looped piping system. Their piping, as is common in many plant systems, is one-way, with branches feeding out from the compressor room (supply) in all directions to the point of use. Also, it is fairly common to find the compressed air lines all sized to be the same—however, the flow in each branch may not be equal due to demand. Therefore, the pressure loss in one section of the piping may be very different than the other. The pressure loss in the section with the heaviest flow, or the longest run, becomes the line with the lowest available pressure at the point of use.

Some customers feel that if they have downstream pressure drops, the answer is to just increase the outlet pressure of the compressor to compensate for that low pressure furthest away from the compressor. That solution rarely works, and always winds up costing the customer valuable energy dollars, since every 2% increase of psi over 100 psi increases your energy costs by 1%.(20 psi increase=10% energy increase usage)This increased pressure setting can equate to thousands of dollars in energy costs per year. Every pipe system will have some pressure drop. There's no way around it. The key is to minimize it as much as possible.

This is where a piping loop makes sense/cents. Looping the piping has two effects, it equalizes and much of the time lowers the pressure drop because now the critical end use has at least one more diverse parallel paths to receive compressed air. And having a loop typically means the piping is the same size throughout the loop, rather than reducing the size near the end. A loop will make it so the pressure is spread evenly throughout the system. You won't have a lack of pressure at the end of the line. A loop also makes it easier to expand later.

The bottom line: If you want to do it right, reduce operating costs, and reduce headaches from downstream pressure drops, don't cut corners on your compressed air piping system. When in doubt, make a loop.

Let Airmatic Compressors' mechanical team design your next AIRnet piping loop system.

The Case for Leak Detection Programs

Bill Goerke, System Specialist

In the part of New Jersey where I am from, there is a saying, “It is what it is”, and that tends to be the tone many plant managers take when it comes to the subject of leaks. Let’s be real, leaks exist in every compressed air system…25% to 35% of compressed air produced goes to leakage, and in some extreme cases…up to 50% or more of the air produced. When 78% of an air compressor’s operating cost are related to the energy required to run them…that’s real money.

Below is a graphic from a base loading study I did for a local contract packager; we discovered one of the three air compressors was running by itself, generating a bit over 400 cfm air for the system. Problem was, the plant was closed those weekend days, and there was no production process air needed…100 horsepower of air compressor was running two days a week, consuming energy, doing no work…running no production equipment…NOT MAKING YOU MONEY!

The Services Team at Airmatic was brought in to perform a Leak Study using Ultrasonic Leak Equipment. Each leak was photo documented and quantified based on cfm (cubic feet per minute) wasted. A total of 143 non-productive compressed air leaks were identified. The report detail made for a handy checklist as the company made efforts in repairing these leaks. These leaks totaled an estimated 446 CFM and represent approximately $123,000 in annual energy costs. The majority of the leaks are present at point of use connections…poly tubing with push fittings, switching valves, regulators and coil hose connections. The bulk of the leaks ran a range between 4 and 8 cfm, about 1 to 2 horsepower of energy per leak.

Seeing that the system runs 24/7 (8,760 hrs.), at $0.15 per kW-hr…each “2 Horsepower” leak is costing $1,960.

The facility has since began repairing the easier leaks, making progress, and working through the list. The goal is to be able to turn off the compressors before shutting down for the weekends. In a future article, we hope to show the result of their efforts.

Still saying, “It is what it is”? We at Airmatic believe it does not have to be.

How Compressed Air Helped a Retired Man in Rural Pennsylvania Maintain Contact with The World

David Van’t Slot, System Specialist

His name is Van, most of the ham radio world knows him as Van W2DLT, but I know him as Dad. He is long retired and has been an amateur radio enthusiast since he was 12 years old. He loves communicating with other operators around the world, often until the wee hours of the morning. South Africa, South America, Russia and Poland are just some of the places that contacts from his rural PA home.

I know, how does compressed air come into this? Well one day he asked me to help him put up a 400-foot wire antenna on his wooded Pennsylvania property. I dreaded that I would probably be climbing trees or throwing rocks over branches to hang the antenna wire from the trees.

To my surprise, when arrived…he brings out his, brand-spanking new, Tennis-Ball-Compressed Air Cannon. We looked at each other and began to grin. Not only are we going to hang some antennas in the trees around his property today but…
We are going to have a blast doing it!!!

The tennis balls are modified with fishing line and a fishing reel mounted to cannon and goal is to fire the tennis balls and the fishing wire over the highest branches and hoist up the heavy wire antenna. He brought out his small air compressor, hooked it up to the tennis ball air cannon. We filled it to about 60 Psi of air, dropped a tennis ball in, pointed it at about a 45-degree angle towards the desired tree. I said “Ready, Aim, Fire”. As I pulled the trigger I heard a loud low pitch thud as a tennis ball screamed out of the cannon. I guess I didn’t tie the fishing line tight enough, because the bright blur of a tennis ball just kept going and going; It landed about 4 houses down the street…never been seen again. I said “oops, good thing that we have more tennis balls”. We both laughed and said, “Wow did you see that thing go!!! Probably scared the heck out of the neighbor!!”

We got the hang of firing the tennis balls with the fishing line from the cannon, and finished hanging the antenna in the trees.

I left that day with a smile on my face and thought: Who would have believed that some compressed air and a tennis ball air cannon could help a retired man maintain radio contact with the world, and more importantly, how it helped bring a father and son closer together. We literally had a **“BLAST”** in the process.

Vacuum Systems

Airmatic Vacuum Customer Profile – Part 1

Jeremy Garfield, Associate Director of Business Development

Plagued with multiple vacuum pump failures and a rapidly expanding demand for their products, a major North Jersey cheese manufacturer has some big decisions to make regarding the future of their vacuum system.

Already an air compressor customer, this growing cheese company engaged Airmatic after all of their point-of-use rotary vane vacuum pumps experienced failures at different times, shutting down their respective production equipment and bringing the plant to a screeching halt.

The vacuum system includes four rotary vane vacuum pumps which were supplied by the manufacturer of the production equipment, and installed inside of each piece of machinery. This **integrated point-of-use configuration** has created several problems for our customer, and is unfortunately representative of many industrial vacuum systems.

Point-of-Use Vacuum System Problems:

1. Difficulty of maintenance –due to their location in the production area, the vacuum pumps get soaked by whey (the water left over during the cheese manufacturing process) and cleaning fluids on a regular basis. This moisture causes continual reliability issues, and the location of the pumps makes it very hard to service them effectively.
2. Business continuity risk – the way the system is installed currently, one vacuum pump failure shuts the entire plant down. The customer has no back-up.
3. Excessive energy consumption – while designing ancillary equipment into their production equipment, OEMs rarely concern themselves with efficiency of components. This causes pervasive oversizing of vacuum pumps and compressed air requirement guidelines and drives customers' costs up.

Stay tuned for the results of the upcoming vacuum capacity study and resulting centralized system design in future Airmatic newsletters.

Service Event of the Month

Verifying installation details upfront will lead to a safe and reliable operation for years to come!

Will De Luca, Director of Technical Service

At Airmatic we are always looking to educate our prospects and customers on items that provide value-add to their compressed air and vacuum systems, as well as their company.

We strive to ensure that we build long standing relationships with our customers, and always try to offer information and expertise to help them install and operate their equipment properly, in order to deliver years of reliable utilities to their processes.

One key item at the inception of a new compressor purchase is having a proper installation, and doing so, will clear the path for a safe and efficient start-up commissioning process to bring the equipment online quickly.

Airmatic has a full Mechanical Services Dept. that can provide turnkey installations to further assist our customers, and when customers perform their own equipment installation, we offer guidance to them in order to ensure that when it's time for start-up commissioning support, everything is in order and ready for takeoff!

In the event that our Mechanical Services Dept. was not involved in the installation, we will communicate and advise our customers on the vital items they need to be aware of, consider, and address in order to be properly prepared for start-up services on their new air compressor.

The following are some of the key points that we communicate to our customers to have them verify prior to the start-up and commissioning process, in order to ensure all goes smoothly on both sides.

— Ensure they have possession of all the proper manuals and documentation for the equipment that was provided

— Important to read and understand the installation requirements that the manufacturer has set forth

— Be sure to inspect the delivered equipment for transport damage, and report and findings back to Airmatic ASAP

— Completely unpackage the unit and rigged it into its final location

— Position unit with the appropriate clearances for proper servicing, operation, and performance

— Properly plumb the unit into the air piping system with an isolation ball valve(s)

— Install a vent port and shutoff valve for proper system depressurization and LOTO (Lock Out Tag Out)

— Ensure there are no check valves installed in the compressed air piping

— Plumb the condensate drain lines to a central collection spot i.e. oil/water separator, or floor drain if oil-free unit

— Ensure appropriate electrical power supply (voltage/amps) is available

— Ensure proper wire size and disconnect fuses are utilized (refer to Instruction Manual for recommendations)

— Ensure the electrical service is properly connected to the compressor per the local codes

— Ensure there is proper ventilation for the compressor room and the equipment within

— Verify that compressor is full of lubricant

In addition, at any time during the installation process, our team members are available to assist with any questions, recommendations, best practices etc.

Getting the equipment properly installed ensures that it be in the best operating environment for optimal performance and reliability, and it will also represent a safe and efficient working environment for the Service Technicians that will keep in running for years to come.

Customer Service Department

A note from our Director of Customer Service –

Jason Rogers, Director of Customer Service

Though our products are second to none, the truth is great products are not good enough to ensure customer loyalty. Research has shown that customers would rather work with companies who provide excellent customer service over those with quality products. We are a customer focused company that helps businesses reduce operating cost and improve productivity while providing exceptional service. Prior to the pandemic, and especially since, we have made it a priority to improve the way in which we support our customers internally. Two of the ways in which we've strengthened our customer service team is:

1. On a weekly basis, we identify order errors and we correct them.
2. We understand that there is strength in numbers and have built a deep customer service team who's knowledgeable, empathetic, passionate and motivated.

Director of Customer Service:
Jason Rogers

Service Manager:
Elvin Diaz

Maintenance Agreement Manager:
Vicki Wilson

Service Coordinators:

Scott Mangan

Thomas Gdula

Juan Ramos

Valerie Flint

Derek Pahl

Tevin Kinchen

Miguel Rivera

After Market At Its Best

Workplace Safety

Craig Verga, Director of Aftermarket

Like most of us that work in an industrial environment, you have probably taken many safety courses. And while frontline employees are the "tip of the spear" when it comes to safety metrics, developing a company-wide safety culture is the true key to an organization's success. A successful safety culture should be embedded in an organization, and it should be embraced and promoted by senior management. It drives towards the goal of reducing operational hazards to its entire workforce, regardless of commercial concerns or individual leadership style. Beliefs, values, and competencies lie at its core.

At Airmatic Compressor we believe in this philosophy. The work we conduct on a daily basis contains many hazards; including electrical and mechanical energy hazards, fall hazards, and exposure to ergonomic and repetitive stress injuries just to name a few. Airmatic Compressor's employees go through rigorous and continuous safety training, all of which has been verified by such organizations as ISNetworld and Avetta Supply Chain Risk Management. We have A+ ratings with both organizations.

All of our employees deserve the right to go home at night in the same condition upon which the arrived to work that day. In alignment with this philosophy, our employees are coached to assess each job, manage the potential hazards through engineering controls and PPE, and to identify situations that cannot be mitigated without additional intervention. At Airmatic we believe our safety culture is not only one of the key's to our success, but it is key to your success as well.

Market Performance Information

Keeping Up with the Joneses

Michael Johnson, Director of Sales & Marketing

Remember that term? We all tell ourselves that we don't get caught up in such things, but it's human nature to want 'better' stuff. And when we see our neighbors sporting something nice, it gets us thinking. It can operate similarly in the industrial marketplace by using references to sell something. Companies with high credibility running a brand X compressor influence what other companies purchase for their own use. This can be one of many tools used to successfully sell equipment.

Speaking of selling equipment, demand in our current marketplace has softened up following a short-lived bounce back from Covid. Lots of companies are holding their breath anticipating potential lockdowns as we head into the cooling temperatures of fall in preparation for an even colder winter.

What's a business to do? Hang tough according to the folks at ITR Economics. As a subscriber to their valuable newsletter and updates, I have learned to trust their forecasts and outlooks, particularly for the long term. The latest report, October 2020, states that "The US economy is in the early stages of a recovery trend, and, while every business cycle is unique, this year is showing certain similarities to 2002, 2009, and 2016." Supporting this they further comment, 1) "The US consumer is in

position to drive the recovery trend forward", 2) "The recovery is and will continue to be non-linear...it will however, be quicker than what followed the Great Recession". Simply put, the Long Term View will see the obvious decline of 2020, a Recovery and Rise in 2021 and Growth in 2022. They also point out that "Those who act with conviction will enjoy the largest spoils as the economy recovers in 2021 and 2022."

So, business overall will pick up. We must remain focused and ready for meeting demand as it swings back. Those that have invested, spending money and time wisely will reap the rewards as we get back on track for the next growth phase.

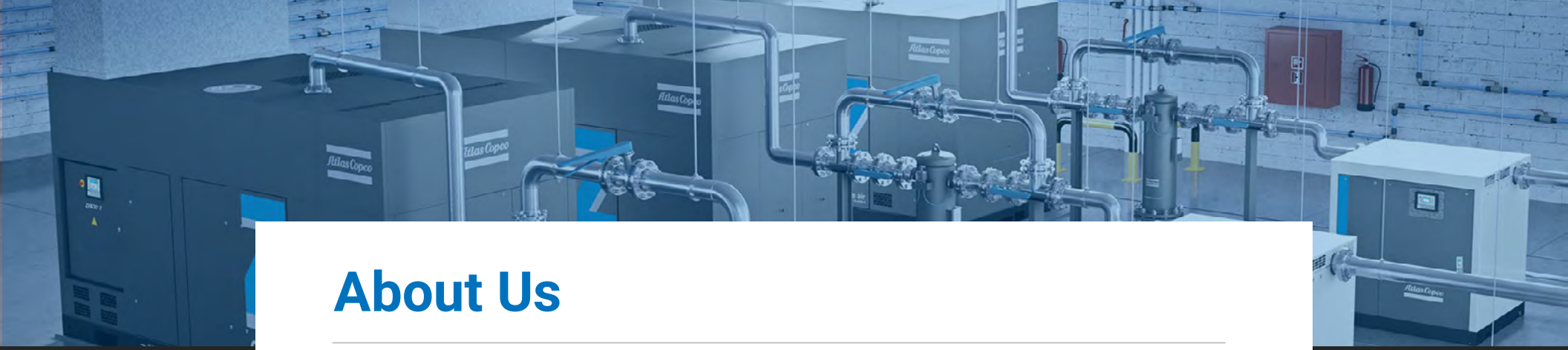
November Sales Specials

Atlas Copco November Sales Special

Airmatic Compressor is offering its customers a whopping 15% off on all Atlas Copco G Series 10, 15, 20, 25 & 30 HP screw compressors through the month of November. Stock is limited... contact us today before they're gone! Sale ends 11/30/2020

Zeks Sales Special

Excess stock can be a problem but let their problem be your solution. Airmatic Compressor is offering discounts on all excess stock of Zeks products. Including Mist Eliminators, Dryers, Aftercoolers, N2 Generators, and more. Contact us today for more information on these discounted products.



About Us

Founded in 1975 by Nestor Vowteras, Airmatic Compressor Systems is a customer-focused company that helps businesses reduce operating costs and improve productivity while providing exceptional and sudden service.

We train our staff to listen to your needs and find the right solution to your compressed air and vacuum questions. We then help you design the right air system and address a service need in a sudden manner.

As New Jersey's largest distributor of air compressors and vacuum pumps, we provide the most efficient and reliable equipment, sudden and reliable service and professional and smart air compressor installations.

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