



PJM Pipeline

NJ Plumbing Licence # 6694
NJ Fire Protection License # P00713

PROJECT PHOTOS



PJM pressure testing, flushing & cleaning

When installing different types of piping systems, the goal is to have a complete system that is installed correctly, can function properly, and is readily accessible to maintain. Proper pressure testing, flushing and cleaning is important to help ensure unproblematic system performance.

Before pressure testing a piping system, inline devices that may not be able to withstand test pressure, such as flow meters, pressure sensors, DPTs, etc., should be isolated or removed. Systems should be pressure tested for 2-4 hours at a minimum of 1.5 times the operating pressure. Most hydronic systems (chilled water, reheat, preheat, etc.) are tested using water. Steam and condensate systems are usually tested using clean compressed air. If the piping is subject to freezing, it is important to make sure test water is removed at the completion of testing, or, alternatively, the system can be tested pneumatically. Otherwise, broken or burst coils or piping can be a costly consequence.

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After pressure testing has been completed, pipes must be cleaned and flushed. This important step requires that all valves are open and the system operates as a complete loop. In a new system, clean water and a mild detergent such as TSP (trisodium phosphate) should be circulated for a minimum of 4-6 hours. Existing systems with silt, sludge or debris problems need specialized cleaning at higher velocities to remove foreign matter. These issues must be analyzed on a case-by-case basis to determine the severity of the problem.

Once a system has been cleaned and flushed, it must be filled and chemically treated. Specifications or a client may call for a particular brand or product such as a rust inhibitor or other treatment. Fluids should be sampled and tested on a yearly basis by a competent chemical testing company and adjusted accordingly. *continued on pg. 2*



SERVICE PHOTO ALBUM



Small Split Systems Solve Hot Spots -

Building “hot spots” can be often be cooled by a DX split system. Frequently used in teledata rooms/closets, split systems often have emergency power backup to keep critical networks operating. Split systems can also be used to cool offices and rooms where central system cooling is not cost effective. They work quite well and control temperature very tightly.



Overcurrent & Tripping -

Be aware that when a breaker or fuse trips during normal operation, it is cause for concern. In most cases, this protective power interruption means that the circuit has reached its thermal or magnetic limit. Investigate with an Amprobe that the motor or load is running within the RLA.

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It is important for maintenance and good heat transfer that piping is properly cleaned and treated, and remains clean. If these procedures and subsequent maintenance are not properly followed, clogged strainers, coils, control valves and heat exchangers can cause problems down the line.

PJM recommends that you inspect your piping systems periodically so that problems can be fixed with little effort at minimal cost. It's when things are let go for too long that issues can become complicated and expensive. **To find out more, please call PJM at (609) 921-1394.**

PJM hand protection

by Glenn Landolfi, PJM Service Manager

Hand and arm injuries, most commonly in the form of severe cuts, abrasions, and puncture wounds resulting from handling rough or sharp materials, account for one third of all construction-related injuries. With proper use of job-appropriate PPE, most of these injuries can be prevented, and there are many choices available that are far more comfortable and provide better dexterity and protection than the lightweight cotton or bulky leather gloves of the past.

Because different trades require different levels of protection from cuts, punctures and abrasions, gloves should be chosen accordingly based on specific need. For example, the average HVAC worker, who handles materials with sharp metal edges, has needs that are very different from a cement worker who is susceptible to abrasions. ANSI has established cut protection standards ranging from a minimal level 1 to level 5; levels 3 and 4 are recommended for HVAC workers. Gloves should also offer adequate grip and dexterity based on the application. This is usually achieved with coatings such as rubber, nitrile, and polyurethane. Besides the obvious advantages, better grip and dexterity can help prevent workers from removing gloves for more intricate tasks. Finally, gloves should be comfortable and fit properly. With today's improved technology, there are many available choices for your particular need.

ISN

ANNOUNCEMENTS

◆ PJM has received an A rating from ISNetworld. This ensures our customers and future customers that safety at PJM is Job 1. ISNetworld is the global resource for connecting corporations with safe, reliable contractors in capital-intensive industries.

PJM Pipeline



PJM PROFILES

Dick Hocking, PJM Project Manager

Dick began working as a pipefitter and welder 45 years ago, joining the union in 1967. He was an Army Paratrooper and served in Vietnam in '66-'67 as an assistant paramedic. Dick is very active in local government and volunteer work. He has served as the elected mayor of Lawrence Twp., NJ, as chief of the Lawrenceville Vol. Fire Dept., and was a first aid squad volunteer. He also served as Scoutmaster of his local Boy Scout troop for five years.

Dick joined PJM six and a half years ago as Project Manager. He and his wife, Judy, have been married for 41 years.



PJM HCFC phase-out schedules

by Pat Mosner, PJM President

In accordance with the Montreal Protocol, an international environmental treaty, the EPA has a schedule in place phasing out the use of ozone-damaging HCFC refrigerants by 2020.

In 2003, phase one banned the production and import of HCFC-141b in the U.S. The second stage of the phase-out was implemented on Jan. 1, 2010 and states that HCFC-142b and HCFC-22 may no longer be produced or imported for use in new equipment. Production and import of HCFC-142b and HCFC-22 are still permitted for use in equipment manufactured before 2010.



In 2015, HCFC-142b and HCFC-22 will be banned from production and import except for use in equipment manufactured before 2020. Both substances will be banned from import and production in 2020, at which time U.S. consumption will have been reduced by 99.5% from when the phase-out plan was established.

THE FACT IS

- ◆ Did you know 70% percent of installed HVAC systems suffer from inadequate airflow? Improper airflow can result in equipment failure, high energy bills and poor comfort. Improper refrigerant charging can lower efficiency by up to 20%.

