

SERVICE CALLS



CATALYST eases installation and maintenance – CATALYST comes as a retrofit kit with prewired external-mounted enclosure, and limited field wiring is required, allowing for straightforward installation in half the time, with no interruptions. A Service Switch simplifies maintenance by enabling personnel to service the unit in any mode of operation without risk of jumpering, overriding, or dismantling the system.



Cooling season preparation – Spring cleaning of chiller tubes, coils and cooling towers is vitally important to ensure proper system performance. Chilled water piping should be flushed annually with trisodium phosphate (TSP), then rinsed and filled with clean water. Strainer baskets should be thoroughly cleaned as well. Use a corrosion inhibitor to protect pipe integrity, and be sure to vent air before operating the system.

CATALYST Proven Superior as RTU Upgrade Solution

MSC is pleased to announce that we have joined Transformative Wave's Affiliate Partner network as installers of the acclaimed CATALYST technology.

The CATALYST is a rooftop unit (RTU) retrofit solution that has been proven to reduce HVAC energy usage by 25%-50%. More than a controller and more than a VFD, CATALYST is a complete HVAC upgrade that has been developed as an easy-to-install pre-wired kit that includes numerous components and adds five to six new sensors. The result is drastically-lowered energy consumption and overall performance improvement in constant volume HVAC systems. The CATALYST assures proper ventilation, maximizes the use of outside air for free cooling beyond standard economizer logic, and reduces fan energy use by an average of 69%.

In July 2013, the U.S. Department of Energy released the results of a two-year study that found that CATALYST upgrades on sixty-six existing RTUs produced an average energy savings of 57%. The study was conducted across the nation in four climate zones and on various building types.

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CATALYST controllers can operate as stand-alone units or wirelessly networked together via the eIQ Platform, which allows web-based real-time monitoring and control of performance verification, fault alerts, remote set-point adjustment, diagnostics, data collection, and scheduling. The CATALYST can be integrated with an existing BMS or applied as the BMS, and it can be expanded to control lighting and other automation needs.

Through our Affiliate Partnership with Transformative Wave, MSC can provide proven CATALYST technology to our clients as a flexible and economical RTU solution for existing and new units. Please call MSC at 973-884-5000 to find out more about the CATALYST, or visit www.transformativewave.com/catalyst.

The Perils of Choosing a Low Bid Contractor by Tori Tietz

When you choose the lowest cost service provider for preventative maintenance and service, change orders in the form of costly HVAC repairs and downtime is to be expected. It is common practice for “low bid” PM contractors to cut corners by not allotting the necessary time to do the job correctly, thus driving down the quality and skill level you will receive. This means more than likely the technician does not have the time to look for early warning signs of equipment failure, such as pitted contactors which leads to motor or compressor failures, during the maintenance inspection. It takes additional time to unscrew the cover for these contactors and actually inspect them. Finding this issue on a spring start-up will save the system from tripping off and the customer from expense additional emergency service call.

Additionally, if you’ve chosen one of the many contractors willing to play the game of “go in less expensive and recoup the loss in additional work later”, chances are good that they are not investing any money in training for their technical work force, either. Nor are they providing sufficient management and support for their technicians, leaving them out there to do the best they can as quickly as possible – at your company’s expense.

By switching to a reputable preventative maintenance service company like MSC, whose mission is to provide premium PM service and training for your facility technician, **we can reduce your operating and repair costs in short order** – after correcting the preventable issues that resulted from lack of attention by others.



The Polar Vortex is Gone, But Should Not Be Forgotten

Now that spring is officially here, building and facilities managers are glad to put the polar vortex of 2014 behind them. Sub-freezing temperatures wreaked havoc on mechanical systems. Coils, cooling towers, plumbing lines, heat exchangers, and other vulnerable parts and equipment froze and broke, forcing businesses to shut down and spawning countless emergency service calls. Necessary repairs have since been completed, but have you taken the appropriate preventative steps to protect your HVAC equipment from freezing in the future?

1. Install unit or space heaters in untempered areas susceptible to freezing: soffits, tunnels & ceiling spaces.
2. Electrical heat tracing should be used to protect pipes from freezing.
3. Circulate water with freeze protection pump.
4. Check glycol concentration levels, which can dilute or diminish over time, and replenish when necessary.
5. Drain and blow down cooling towers to winterize before cold weather sets in.
6. Ensure that process cooling tower sump heaters are working properly.



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973-884-5000

HVAC Service Tech Shortage: Where are all the Young People?

As the prolonged nationwide shortage of skilled trade workers continues into 2014, interest in technical fields remains tepid among students, parents and educators. The topic is widely publicized, with numerous news outlets touting the many benefits of trade-based careers, so why hasn't there been an increase in interest? Why are we still failing to encourage our youth to pursue these avenues?

Over the last few decades, parents and educators have overwhelmingly steered students toward college programs and away from trade schools, which has created an unfair bias against skilled trade careers. We are doing a disservice to our up-and-coming generation by sending the wrong message about these professions when they are, in fact, excellent career choices.

Several factors are combining to create high demand for HVAC service technicians. Baby boomers are retiring in large numbers at a time when there is increased need for HVAC services, but there are few qualified workers in line to replace them. An estimated 57,000 new HVAC workers are needed each year in the U.S., but trade schools are not turning out nearly enough techs to replace them. As a result, there is an overabundance of well-paying HVAC service technician jobs that remain vacant.



What can be done to reverse the trend we've created? First, parents and educators must work to remove the stigma that has been placed on skilled trade careers. We must educate ourselves and our youth about the advantages of these professions, and acknowledge that our collective quest to send every student to college has created a huge imbalance that has led to high unemployment rates among young people with four-year degrees. HVAC service technicians in New Jersey earn a respectable wage, significantly above the national average. The majority of HVAC training programs cost less than a typical four-year college education, take less time, and jobs are virtually guaranteed upon completion. Demand for HVAC services is infinite, and HVAC tech jobs cannot be shipped elsewhere. They often serve as a stepping stone to upper management positions where a high degree of technical knowledge is required.

EMS (Environmental Monitoring Systems)

While the typical BAS (building automation system) includes automated controls for a variety of building systems, an EMS (environmental monitoring system) is specifically engineered to monitor individual critical points related to the environment. **EMS are primarily used in industries that demand strict regulatory compliance such as pharmaceuticals, biotech, and healthcare to capture temperature, humidity, pressure, CO2, etc.** Detailed performance data is archived to aid validation and qualification and generate compliance reports. Warnings and alarms safeguard sensitive materials when conditions approach or exceed set limits.

DID YOU KNOW...

○ MSC has received an A rating from ISNetworld. ISNetworld is a global resource for connecting corporations with safe, reliable contractors in capital-intensive industries.