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A DO PUBLICATION

Unitary + Light Commercial

HVAC Offers Numerous Career Paths

By Angela D. Harris Of *The NEWS* Staff

he Bureau of Labor Statistics (BLS) reports that the national unemployment rate is hovering at 7.6 percent, but trade contracting, which includes the HVACR sector, is slowly on the rise. "Employment in specialty trade contracting has increased by 128,000 since September 2012," noted a March report, issued by the BLS. "This gain is about equally split between residential and nonresidential components."

While unemployment rates are edging downward in some states, the need for gainful employment is still a tangible necessity in most regions. The BLS is estimating an approximate 34 percent increase for demand of mechanics and installers between 2010 and 2020, and while the HVAC industry employs many installers and mechanics, its job reach extends well beyond those two positions.

The industry is growing, and demand for qualified people both in the field and in the

office is breeding an emergence of diverse HVACR positions.

Now Hiring

Careers at the contractor level include, but are not limited to, technician, installer, dispatcher, fleet manager, project manager, sales, service manager, human resources, payroll, contractor, and more.

Dennis Purvis, service/account manager at Mechanical Services Inc., an Emcor Co., in Orlando, Fla., said that not only does the company have many of the positions listed above, but it also has an in-house apprentice course for sheet metal and ductwork. The company also has certification and training for those interested in IAQ inspectors and control technicians.

"The HVACR industry thrives — even in times of a poor economy," said Purvis. "With a good company, there is room for advancement, fair pay, and little fear of layoffs."

Moving beyond traditional positions in an HVACR contracting firm, those looking • See CAREER PATHS | page 20

hvac briefs

• Andy J. Egan Co. (Grand Rapids,

Mich.) earned its third Elite award in

the Michigan Business and Professionals Association's (Warren, Mich.)

West Michigan's 101 Best and Bright-

est Companies to Work For competition.

past president Jack Bartingale re-

ceived a lifetime achievement award

from the University of Wisconsin

Construction Club (Madison, Wis.).

• Nest Labs Inc. (Palo Alto, Calif.)

• ASHRAE (Atlanta) Guideline 1.4P,

The Systems Manual for Facilities, is

open for advisory public review until

• The National Air Filtration Asso-

ciation (NAFA) is accepting nomi-

nations for its Clean Air award,

membership awards, and NAFA

Continued on page 4

scholarship through Aug. 1.

acquired MyEnergy (Boston).

Manufacturers

Organizations

June 2.

• Bartingale Co. Inc. (Eau Claire, Wis.)

Optimizing Heat Pump Performance

By Joanna R. Turpin Of *The NEWS* Staff

ike most HVAC equipment, airsource heat pumps can provide a comfortable indoor environment, as well as save energy, if they are installed and maintained properly. The last point is key, notes the U.S. Department of Energy (DOE), as the difference between the energy consumption of a well-maintained heat pump and a severely neglected one ranges 10-25 percent.

Regular maintenance is even more crucial for newer heat pumps, whose efficiency decreases greatly if not properly maintained, said Rob McClintock, president, McClintock Heating, Cooling & Electrical Inc., Matthews, N.C. McClintock, who also operates as a Trane comfort specialist, said, "The system must be properly calibrated, lubricated, and tuned, otherwise it won't last nearly as long or could even fail prematurely. We recommend homeowners service their heat pumps at least once a year, though twice a year is ideal to ensure the systems are • See OPTIMIZING | page 9

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Hooters Receives a Mechanical Makeover

ack in 1983, when Hooters restaurants began business in Florida, they made a deliberate gamble, playfully positioning the franchise as a unique, entertaining place to dine. Today, with almost 450 restaurants worldwide, the Hooters system employs over 25,000 people; about 70 percent of them are Hooters Girls.

Yet, one thing Hooters managers get serious about, and are unwilling to gamble with, are the mechanical systems that keep patrons comfortable inside.

The majority of Hooters restaurants are located in newer buildings, with up-to-date HVAC systems. The 5,000-square-foot St. Louis building is an exception. "The St. Louis Hooters building was a problem child for us," said Robby Fichtel, national facilities manager for Hooters.

After years of operation in the building, Hooters management decided to make a change that would not only increase comfort in the old downtown building, but also curb operating costs for the aging HVAC system.

Full Speed Ahead

The building's heating system consists of an old 1 million Btu cast-iron boiler connected to a main air handler above the dining area. Bathrooms and kitchen areas are served by four additional fan coil units of various capacities.

Adjacent to the restaurant is a large concrete parking garage with a spiral ramp to access the upper levels. Inside, the spiral is open from the ground to the top of the garage, like a huge cylindrical skylight. A 50 ton chiller occupies this space, cooling Hooters in the summer months. The previous owner of the Hooters building had an agreement with the owners of the parking garage, allowing placement of the chiller within the walls of the spiral.

"It wasn't the best arrangement for the chiller because no modulating valves were being used," said Jeff Durbin, general manager of the service contracting firm, American Services, St. Louis. "The chiller runs full-tilt until the thermostat temperature is reached; then it shuts off. Once it starts back up, the entire building drops 4-5°F in 10 minutes. The same goes for the boiler and fan coil units."

The challenge at Hooters in St. Louis was described as gas pedaloperated heating and cooling, with bricks thrown at the accelerator, then quickly removed. "We needed a real controls system in the building," said Fichtel.



Following a routine maintenance visit to the St. Louis Hooters, Jeff Durbin, general manager of American Services, prepares for his next customer visit.



Durbing explains the simplicity of the iWorx LCI2 (local control interface) with waitress Rebecca Hern.

Taking Control

"The old gas-fired boiler is slated for replacement within a year or two, but in the meantime, we wanted a way to make our current system more efficient," said Fichtel. "We talked with several controls companies, but Behrmann Co., a St. Louis-based manufacturer's rep firm, came out on top. They were eager for us to use the new Taco iWorx Web-based controls. We liked the idea, and wanted to install the system ourselves."

The iWorx system is an easily scalable, open-protocol building management, monitoring, and control system designed specifically for the light commercial market. The system is designed to best serve buildings up to 50,000 square feet.

"What makes iWorx different from other systems is that you don't need special tools, software, or computers to do the installation or commissioning," explained Tom Polansky, technical service engineer at Taco.

Once wired, programs are resident in the controller. By manipulating control parameters for the specific HVAC equipment on the local control interface (LCI), engineering time is eliminated, and installation costs drop significantly. "Once a controller is wired into the system, you just push a button, and it identifies itself on the network," continued Polansky. "No control sequences to write; no website to build."

The controls system at Hooters consists of a main module LCI, auxiliary sensor module, and a controller for each unit. The auxiliary sensor is a global controller, reading outdoor temperature and humidity. It relays data to all the other controllers in the system. Throughout the building, there are individual controllers for each of the four fan coil units, the main air handler, the boiler, and the chiller unit in the car port.

So Far, So Good

"Of all the controls systems we've used, the Taco iWorx system has been the simplest and easiest to install," said Durbin.

"Hooters was our first iWorx installation, and it still went in faster than all of the other control systems would have, even though we were familiar with the other controls systems. Like any new technology, there was some learning involved, but we were able to power through that easily."

Now that the system at Hooters is online, anyone with a Web browser and a password — even a smartphone with the proper app — can monitor or change the settings in the building. Managers at Hooters have the option of doing this on their own, or they can leave the task of system management up to American Services.

The system can also send preventative maintenance and service emails so that conditions are closely monitored, allowing problems to be solved before they arise.

As different components of the HVAC system get replaced, they are easily interfaced with the iWorx system. Although the old boiler is compatible with iWorx, the newer the equipment is, the more comprehensive the relationship between the unit and its controller, even further boosting efficiency and controllability.

"The project started shortly after the New Year and wrapped up two weeks later," said Behrmann's Walt Steiner. "We were delighted to see how smoothly the system was installed and became operational. The installation went very well for American Services and now the Hooters facility has a comfort solution that's exceeding all expectations."