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GRUNDFOS

The Industrialist Hotel

405 Wood Street, Pittsburgh, PA 15222

Installation Site Overview



The Industrialist, an autograph hotel by Marriott, is an 18-story luxury boutique hotel located in downtown Pittsburgh, Pennsylvania, with a sweeping view of the Monongahela River.

Located in the newly renovated historic Arrott building at 401 Wood St., The Industrialist features 124 guest rooms, 1,200 sq. ft. of meeting space, two restaurants, and a fitness center, all situated in a prime accessible location to the vibrant center of Pittsburgh.

The Opportunity

Constructed in 1902, the Arrott building hosted offices for several decades before falling vacant. Purchased by HRI Properties in 2017, the building was gutted and completely refurbished for Marriott's upscale Autograph Collection line of hotels.

"The risers were a little different on this project because it was an older building and they weren't designing it from scratch," Darren Belajac, President of Pinnacle Sales commented. "There were three separate water heater systems [in the building], one served ground through the third floor, one served the fourth through tenth floor, and one served the seventh through the eighteenth floor plus the penthouse."

To ensure the building's future guests had immediate access to hot water, the domestic hot water system (DHWS) was designed with CircuitSolver® thermostatic balancing valves. "This is a pretty high-end hotel," Belajac added, "When people are staying there, they don't want to wait even 30 seconds for hot water."



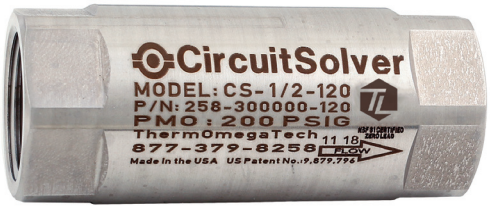
The CircuitSolver® Union Assembly with integrated check valve was selected for this installation, paired with three Grundfos ECM pumps.

"We've had good success with [CircuitSolver®] on other projects … [so] that's the one we chose," Ron Dombrowski, Superintendent at Ryco, Inc., the project's plumbing contractor said. "We've used [manual balancing valves] and we didn't like them. I'd have to go back for the next three months and rebalance everything. They were always screwing up. With CircuitSolver®, you install it and walk away."

The Installation

Ryco, Inc. installed 150 CircuitSolver® Union Assemblies in the DHWS, one at each room's return, instead of at the end of each floor's supply run as is traditionally done.

The large number and unique location of the CircuitSolver® valves in the 18-story building was a purposeful design choice, Belajac says. "The idea was to put the balancing valves at the end of each supply to the rooms so that we knew every room was going to be taken care of and have hot water quickly."



In addition to the balancing valves, three Grundfos pumps were selected to complement the CircuitSolver® valves' temperature regulated flow control: two Grundfos MAGNA3 32-100 pumps and one Grundfos MAGNA3 40-120.



"The Grundfos MAGNA3 has a temperature sensor built into the unit so you don't need an external aquastat," Belajac explained. "And since the pump is a variable-speed model, you just set it to the return temperature you want to see. When a lot of water is being used or the line temperature [drops], the pump speeds itself up. [When] it is satisfied, it ramps itself down very slowly, that way we're still moving some water but not over-pumping."

Both the CircuitSolver® balancing valves and Grundfos MAGNA3 pumps automatically regulate flow based on current water temperatures, constantly adjusting to maintain a set temperature. "You have a modulating balancing valve based on temperature, use a modulating pump that works on temperature." Belajac continued," They just match each other really well and make for a very efficient domestic system."

The Result

The Industrialist Hotel's DHWS started up in December 2020. Within a day, it automatically and fully balanced itself, with virtually instant hot water available at each fixture on every floor.

Reflecting on the overall experience, Ron Dombrowski spoke favorably of CircuitSolver®, compared to when he used manual balancing valves. "It was terrible. I'd be back at that project many, many times, many months later. We'd spend weeks going back, so [CircuitSolver®] is a time saver. It's like the stone age and modern time, really. [CircuitSolver®] is head and shoulders above."

Darren Belajac extolled the benefits of using Grundfos pumps in a temperature balanced system, saying, "Building owners want to see efficiency, and you're getting at least 50% energy savings with an ECM pump. Grundfos has been doing ECM longer than any of their competitors, so as far as reliability and quality, all the bugs have been worked out. They just have more expertise."

Barry Nauss, Area Sales Director at Grundfos, had a similarly favorable review of the project. "We were glad to provide The Industrialist Hotel with a state-of-the-art system by combining ThermOmegaTech's CircuitSolver® and the Grundfos MAGNA3 to give peace of mind to the contractor, end-user, and guest. Together, the technology provides reliability they can trust while reducing the overall power consumption and increasing comfort on the domestic hot water system. The end result is simply outstanding."

The Industrialist Hotel officially opened its doors on June 2, 2021 and has received zero complaints from its guests about hot water availability.

"I'm glad we switched [to CircuitSolver®]," Dombrowski said. "It just makes my job easier."