FläktGroup®
SEMCO®

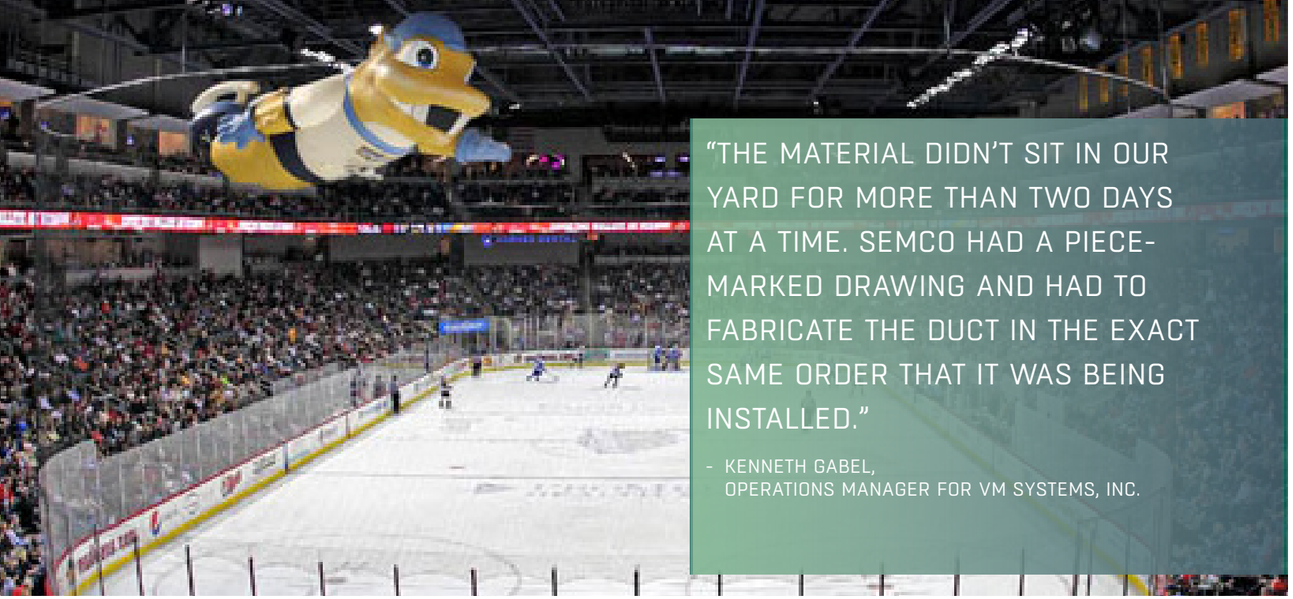
HUNTINGTON CENTER
HOME OF THE TOLEDO WALLEYES
CASE STUDY

ON GOAL FOR OPENING SEASON
HUNTINGTON CENTER, TOLEDO, OHIO

Timing is everything when it comes to a major urban construction project like the Huntington Center in Toledo, Ohio. Building the 82-foot-high arena in the middle of a busy downtown took a lot of planning, and left no room for error. With the 2009-2010 opening season of the Toledo Walleye ice hockey team looming ahead, contractors frequently worked through the night to stay on schedule to complete the facility. Some of the most critically timed construction phases occurred before the roof was ever installed on this 266,000 sq. ft. multi-purpose arena.

Bound on all four sides by downtown buildings, the jobsite left no room for material storage during the primary construction phase. Delivery of steel, brick, piping and other materials had to be carefully timed to arrive precisely as needed.

This delivery-upon-demand system applied to the 84" diameter double-wall spiral duct by FläktGroup® SEMCO®, which



"THE MATERIAL DIDN'T SIT IN OUR YARD FOR MORE THAN TWO DAYS AT A TIME. SEMCO HAD A PIECE-MARKED DRAWING AND HAD TO FABRICATE THE DUCT IN THE EXACT SAME ORDER THAT IT WAS BEING INSTALLED."

- KENNETH GABEL,
OPERATIONS MANAGER FOR VM SYSTEMS, INC.

was specified for the arena space. This exposed duct loops around the upper part of the arena just a few feet above the top tier seating. To conserve precious vertical space inside the arena, engineers chose to "nest" the massive duct inside the 207-foot-long roof trusses rather than installing it below them. The duct had to be installed in between the trusses in order to leave plenty of clearance for large props and equipment brought in for events like concerts and circuses. The duct was lowered into the truss space by crane before the steel roof decking was installed.

Strategic Delivery

"We had a very short window of time between the truss installation and the roof decking," said Kenneth Gabel, Operations Manager for VM Systems, Inc., the sheet metal contractor for the project. "We had to follow the truss installers weekly in order to get our work completed in time."

To make all this work, VM Systems had the ductwork shipped to the shop (located a few miles from the construction site) and then transported it to the jobsite on company trucks. The material was lifted by crane from the trucks and directly into the installed space.

FläktGroup SEMCO provided the entire length of the pre-insulated, double-wall spiral duct as well as interior duct for the perimeter spaces of the arena. The manufacturer customized rectangular saddle taps to fit inside the round duct. These taps housed the large air diffusers required to direct air all the way to floor level of the arena. The sections of duct were completely pre-fabricated with special flanges located at optimum intervals. The saddle taps were welded per

the engineering firm's design. Volume dampers and accessories were also factory installed.

Mandell-Vasquez, Inc., the FläktGroup SEMCO representative in Toledo, Ohio, worked closely with the manufacturer and the contractor to coordinate these custom fabrications and carefully timed deliveries.

"It was tricky," remarked Hernan Vasquez, president of Mandell-Vasquez. "The saddle taps had to be deep because the duct would encase two-inch thick fiberglass insulation, a heavy duty volume damper, and a large drum diffuser. Of course, everything had to be neatly hidden since this was a completely visible installation."

All of the duct was fabricated at FläktGroup SEMCO's manufacturing facility in Roanoke, Virginia and then shipped directly to the jobsite every other day in order to coincide perfectly with the strict installation schedule.

"The material didn't sit in our yard for more than two days at a time," said Gabel. "FläktGroup SEMCO had a piece-marked drawing and had to fabricate the duct in the exact same order that it was being installed."

No Excuses. No Errors.

Fans would have had a hard time understanding how a product as commonplace as spiral duct could wreck the completion schedule of the Huntington Center, but according to John Gramke, Regional Sales Manager for FläktGroup SEMCO, it's not as implausible as one might think. According to Gramke, fabricating large, custom ductwork to the exacting dimensions and shipping within the strict delivery requirements of a project like this is overwhelming for many manufacturers. But that's not the case for FläktGroup SEMCO.

"We've made custom ductwork a standard at FläktGroup SEMCO. Spot-on delivery without compromising quality is something we really focus on. We understand that a delayed delivery can result in a chain reaction of delays that jeopardize the project and cost our customers money," said Gramke.

FläktGroup SEMCO has proven its ability to handle carefully timed deliveries in numerous high profile projects, including the famed Lucas Oil Stadium in Indianapolis, Indiana. It is a defining characteristic of FläktGroup SEMCO manufacturing – one that distinguishes the company in a highly competitive sheet metal market. It is also a tangible benefit to companies like VM Systems who complete hundreds of HVAC installations each year and can't afford mishaps.

"We work hard at this portion of our business," said Gramke, "which is why we are consistently chosen for demanding projects like this. It isn't just about the duct. It's about the accuracy of coordination, quality of manufacturing, and most important the timely delivery of a product guaranteed to fit."

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FläktGroup® SEMCO®
Corporate Headquarters
1800 East Pointe Drive
Columbia, Missouri 65201 USA

573.443.1481

sales.semco@flaktgroup.com

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