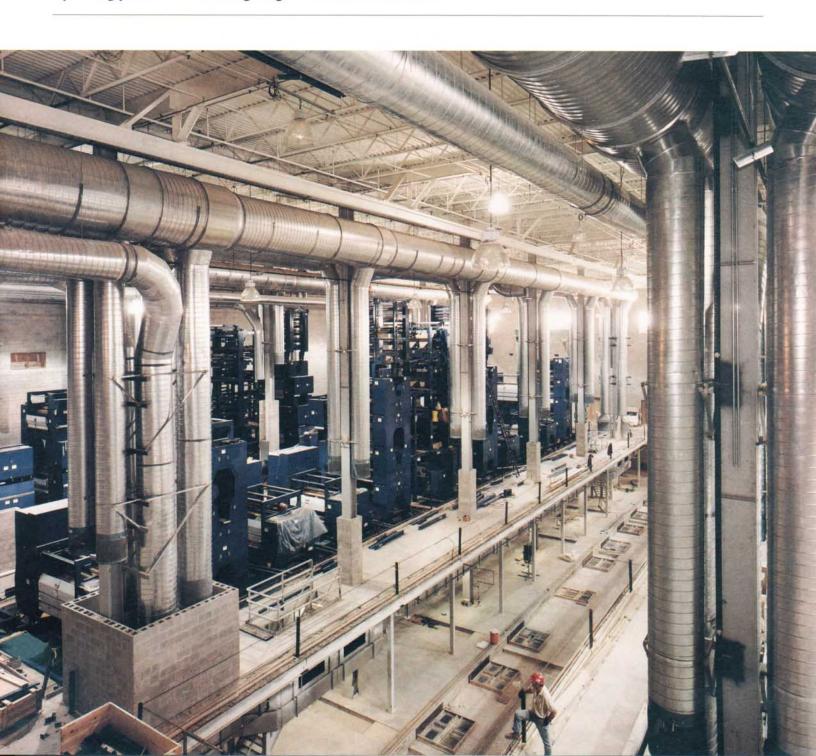


solutions

Finding ways to better serve our customers and solve their problems.

number 2

Providing a highly adjustable air supply system for a printing plant while meeting a tight installation schedule.





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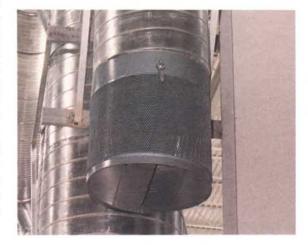
Left: The supply air handling system in the press bay area consists of eighteen 150-foot runs of duct with a total of 108 drops. HVAC engineers and contractors are expected to provide the best air handling system at the lowest cost. When faced with special requirements, they need a supplier who does more than just sell duct. United McGill offers a full line of airflow system products plus a total service program to help get the job done right in the field.

Special products and service helped get the job done right for Philadelphia Newspapers, Inc. The company was building a 670,000-square-foot printing and distribution center in Upper Merion, Pennsylvania, to serve the *Philadelphia Inquirer* and *Philadelphia Daily News*. Several separate air handling systems were to be installed throughout the building. One special requirement was a supply air system that would maintain a comfortable temperature in the press bay area, where nine printing presses would be operating.

The problem was finding an efficient way to flood the work area around each press with approximately 100,000 cubic feet per minute of conditioned air. This application required a wide distribution of air without a high velocity blowing on the presses and disrupting their operation. To solve the problem, mechanical engineers at the Austin Company planned to have eighteen 150-foot runs of duct installed 55 feet above the floor, with drops every 25 to 30 feet. At the end of each drop was a United McGill FACTAIR® terminal outlet, which would make it easy to adjust the discharge of heated or cooled air. The engineers had tried several types of outlets on previous jobs and found that FACTAIR® outlets worked best. According to Bob Zaleski, senior mechanical engineer, "For this application, the FACTAIR® worked really well. We haven't seen anything else out there that gives us the ability to adjust air distribution the way we want it."

Williard, Inc., the sheet metal contractor that installed the building's duct systems, faced other problems. They had only 6 weeks to install the duct system in the press bay area. At the end of that period, the area had to be cleared so that the printing presses could be moved in.

The original intention was to supply all materials from United McGill's regional manufacturing plant in Vermont. But when the order was placed, the sales staff suggested that a mobile duct machine could fabricate the duct more efficiently. United McGill's mobile duct machines are self-contained mini-factories that operate right on the jobsite, producing duct as it is needed. With a mobile duct machine on the job, the first benefit to be realized was lower shipping costs. Had the duct been produced at the Vermont plant, it would have required 20 truckloads to deliver it to the jobsite. With the mobile duct machine, the materials for the duct required only 3 truckloads.





Above right: FACTAIR® terminal outlets can be adjusted to control an air handling system's air velocity, volume, and pattern.

Below right: To meet the tight installation schedule and reduce material handling costs, duct was fabricated on the jobsite by a mobile duct machine. Air distribution is adjustable because of the FACTAIR® terminal outlets installed on the drops next to the printing presses.



In addition to reducing delivery costs, the mobile duct machine helped keep the project on schedule by supplying the contractor with duct when and where it was needed. Material handling time was greatly reduced because the mobile duct machine produced the duct in the order that it was needed for installation. Martin Homan, project manager for Williard, explains, "Normally, if I place an order for spiral, I have to wait about 6 weeks before I even start to see anything. Then I get a load here, a load there, and I'm never sure I'm getting the pieces I really need. I think it's a big advantage having the machine right here. If there's a problem with a missing piece, you can always have it made."

But the mobile duct machine was only part of the story. The fittings were manufactured at United McGill's plant in Vermont and shipped to the jobsite. To keep the project on schedule, the fittings had to be on hand when the contractor needed them. Homan says, "One of the things I really liked about the job was how quickly the fittings were shipped. I've never had a spiral job where I had all my fittings before I had my pipe. On this job I knew I had the fittings I needed, so I could just continue running my pipe. It was a combination of the field machine and the shop running out fittings for me."

United McGill's mobile duct machine operators were on the jobsite throughout the project, making sure installation went smoothly. As they fabricated the duct, they attached Spiralmate[®] flanged connectors to all pieces 50 inches or greater in diameter. The flanged duct proved to be very easy to assemble.

Because of the mobile duct machine, smaller sizes of duct were also easy to assemble. Duct that is shipped by truck is handled several times and can lose its shape by the time that it arrives at the jobsite. According to Homan, "By making it right here at the jobsite, I think it held its shape a lot better. If a piece of duct is round, it's a lot easier to put together with a coupling. If it's egg shaped, I'd have to roll it round, get it up there, and fight it all the way. When you're working 45 feet in the air, you can't afford these problems."

At one point, the contractor faced possible holdups because some duct and fittings were needed that had not been in the original order. With its Quality Delivered Quickly (QDQ) program, United McGill's Vermont plant was able to manufacture the fittings and ship them to the jobsite within 24 hours. The mobile duct machine was even faster, producing the duct within minutes. Homan says, "If I need a piece, I can always go to the operator and get it without disrupting the whole schedule or waiting or going to another line. That is one of the biggest things I think the mobile duct machine helped us with."



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