

Air for Sale

Plants trade compressor hardware for 100% reliable air supply (PlantServices.com)

Compressed air is industry's fourth utility. Along with electricity, water and natural gas, compressed air is a resource that powers everything from handheld pneumatic tools to plant-wide manufacturing systems. Most plants produce their own compressed air. Many, however, are treating compressed air like they would any other utility by purchasing compressed air not compressed air equipment.

In simple terms, a third-party supplier produces compressed air on a user's site and the user agrees to purchase the quantity and quality of compressed air required. A pioneer and one of the largest suppliers in the United States is [DirectAIR®](#), a division of Air Technologies.



"In 1993, Air Technologies sold 20 compressors to a major gas utility company for filling their CNG vehicles, and we were responsible for maintaining the compressors," explains Steve Schoeny, corporate utility services manager for Air Technologies. "They had PLCs that sent an alarm to a technician's pager if a problem was brewing. When there was an alarm, a technician drove to the site, which could be hours away, to address the issue. Too often he'd drive all the way just to hit a reset button."

DirectAIR® sites are monitored 24/7 by a certified master service technician.

"We have some very smart folks in-house who knew our machinery and could write software code," Schoeny adds. "They designed and produced a control system to run compressors unattended 24/7 and to monitor them

remotely. Just like that, we had something special." Air Technologies was already applying this remote capability for the utility company when it got a call from another business in Ohio. "A steel mill was shutting down one of its power houses," Schoeny says. "They asked if we could supply them with compressed air — not air compressors, just compressed air."

Building on the success of the steel mill installation, Schoeny's team developed the concept into a separate business that evolved into DirectAIR®. It now operates 27 air-as-a-utility sites in the United States, mainly in the Midwest and Northeast.

Combined, these sites have 111 Atlas Copco compressors, 23,110 installed HP, the ability to deliver nearly 100,000 cfm, and total installed DirectAIR® assets of over \$10 million. Machines at DirectAIR® sites have reliably logged more than 3 million running hours and delivered more than 126 billion cubic feet of clean, dry compressed air due to Air Technologies' application and service expertise, combined with the superior reliability of Atlas Copco compressors. In more than one million hours of combined site operations, DirectAIR® customers have not experienced a single continuous hour of lost production because of low air pressure. That is equivalent to more than 110 years of combined operation without an hour lost.

The user provides the land and utility hookups. DirectAIR® furnishes, installs, operates and maintains a new air-compressor facility within its own modular building, a system known as ModulAIR®. A monthly fee is based on compressed-air consumption, with billing similar to that of an electrical utility.



Atlas Copco compressors, filters and dryers are at the heart of the systems because they are consistently efficient and reliable machines. ManagAIR®—the current version of the software our team developed—enables unattended operation and remote monitoring with intuitive, point-and-click access to real-time data. Air Technologies supports the operation with predictive and preventive maintenance.

Using sophisticated and robust algorithms, the software manages equipment use ensuring only the most efficient and reliable units are on line at any one time. It also notifies Air Technologies electronically as any problems arise so they can be resolved before they escalate. Because all of this takes place automatically and with Air Technologies fully responsible at all times, customers never have to worry about it. The systems are modular so they can be decentralized to reduce operating costs and improve system-wide pressure balance. Modules are added or removed easily to address changes in compressed-air needs.



In addition to the guaranteed, hassle-free reliability and flexibility of DirectAIR®, users also appreciate that there are no assets to purchase and no leases to capitalize. It's a long-term solution with minimal financial exposure. Depending where a facility is located, the arrangement can potentially reduce property taxes. The use of highly energy-efficient equipment and controls provides significant energy savings (typically 20% to 40%). DirectAIR® also eliminates cost variables including service, repair, rentals, lubricants, oil disposal, inefficient machinery and controls, lost production, scrap and excessive in-plant maintenance caused by poor air quality.

"DirectAIR® users never have to buy another air compressor or dryer," Schoeny says. "They never issue another purchase order for repairs or compressor maintenance, and they all but eliminate the possibility of costly production downtime because of loss of air or poor-quality air, all without any involvement from plant personnel or management. It's a different value proposition because we're really selling guaranteed 100% reliability." "When all cost savings and productivity improvements are properly considered, DirectAIR® is the most profitable solution to a company's compressed air needs."

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