

Automobiles move.

The environment in which they move contains objects moving in different directions at different rates of speed, and other objects that aren't moving at all. Even with rules governing what can move when, where and how fast, the predictable outcome of all this movement is occasional collisions.

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**The GX11-FF compressed air system** offers the legendary power and reliability of Atlas Copco rotary screw compressors in an integrated package that is sized and equipped for small and medium sized industrial applications.

Fortunately, most of the damage resulting from everyday vehicle collisions can be repaired, and vehicles can be refinished to look and drive like new. Auto body repair businesses apply skilled work forces and specialized equipment to straighten bent bodies, remove dents, replace parts that cannot be fixed, and repaint surfaces.

One basic resource found in practically every auto body facility is compressed air. It is used to operate pneumatic tools (such as air flanges, air nibblers, and air sanders), to blow dust off surfaces, and to apply primer, pigmented paint, and clear-coat finish.

The quality of compressed air used in the painting process has a direct influence on the outcome of a paint job. If impurities such as fine particulate, moisture, or lubricating oil carry over into the compressed air, the quality of the finish can suffer from bubbles, spots or other faults. The increasing use by auto body shops of waterborne paints – whether by choice or to comply with environmental regulations – raises the issue of compressed air quality to an even higher level.

Considering their scale, auto body shops are large users of compressed air. Even so, auto body shops and other light industries have traditionally settled for inefficient and noisy piston compressors, typically because they are often the low-cost option at the time of purchase. Trouble is, they cost much more to operate than more sophisticated compressors that use rotary screw technology. Since energy is the most expensive component in the production of compressed air, any

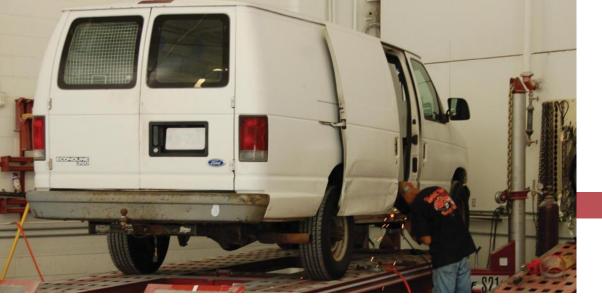
savings realized when purchasing a piston compressor is quickly eaten away by higher operating costs.

Piston-type compressors have other shortcomings for auto body applications. The basic design of the compression element means that lubricating oil carries through to the process air more than is the case with a rotary screw compressor. Oil carry over is something to avoid in general, but for a painting operation it's crucial. Simply put, getting oil downstream into the paint lines can ruin a paint job.

As energy costs account for a growing share of the cost of doing business and as customers demand higher standards of quality in auto body services, the owners of auto body businesses are paying closer attention to their compressed air systems. Sandra Chaney, owner of Pat's Auto Body in Winston-Salem, North Carolina, is an auto body shop owner whose success in business brought the issue of efficient, high quality compressed air to the forefront.

"When I recently expanded into our newest building," Sandra says, "I started researching upgrading our three existing air compressors. They were all older piston machines and the maintenance was getting expensive. I asked my paint distributor for advice and he told me about screw compressors. I had never heard of this type. He said they were more energy efficient than piston compressors and quieter, too."





Atlas Copco has joined the United Nations Global Compact, the world's largest voluntary corporate responsibility initiative.

A chance encounter at a neighboring business led to a solution for Sandra's compressed air needs. "It's interesting how some sales opportunities come about," Mike Brown explains. (Mike is a Sales Representative with Carolina Compressor Center in Winston-Salem, North Carolina.) "My boss Robert Eshelman was picking up swimming pool chemicals one Saturday and learned that Pat's Body Shop, a business located behind his pool supplier, was expanding. He left me a message that Saturday and I dropped by the following Monday. This turned out to be great timing as they were indeed expanding and were interested in replacing their old piston compressors."

Sandra picks up the storyline. "When Mike Brown called me I was already talking to some other manufacturers, but he came over right away and was extremely helpful. I ended up getting prices from four suppliers. Atlas Copco was the second highest price, but Mike spent a lot of time with me discussing the advantages of rotary screw technology. He convinced me that his product was the highest quality and most energy efficient of all four units I was looking at. I was especially pleased that it was the most energy efficient since we are working to make our operation more 'green."

Sandra bought a 15 hp Atlas Copco GX-11-FF compressed air system. GX series systems include an energy efficient rotary screw compressor, refrigerated dryer, and coalescing filter in a compact, quiet, all-inone package. It has a minimum footprint, which frees up valuable floor area for other equipment or workspace. The pre-piped tank-mounted design provides for simple and economical installation – often as simple as connecting to electrical power and to the facility's

air piping system. Sandra had her plumber install an airloop system with galvanized piping to deliver air to points of use.

"Even with a filtration system," says Mike, "the old piston compressors at Pat's Auto Body couldn't get all the oil out of the system and there was no refrigerant dryer to remove moisture. Atlas Copco offers superior filtration and an onboard refrigerant dryer to provide the high quality air needed to spray a high quality paint job. The old compressors were noisy, too, which was a big deal since they had to run continuously to provide enough air for the shop. The Atlas Copco compressors are much quieter, plus they can go into energy-saving sleep mode when demand drops and then restart automatically when demand rises."

Smart business investments like these are driving quality improvements and energy savings, helping Sandra to continue expanding Pat's Auto Body. She has 31 employees, and according to statistics compiled by PPG Industries Automotive Paint Division, her business is one of just three 100% female owned body shops in the U.S. with more than \$2 million in sales.

Pat's Auto Body is a family business that's been in operation since 1954, and Sandra became the sole owner in 2001. The business currently has four buildings and Sandra plans to take over two more in the near future. "I want to offer my customers the option to have minor repair work done while their cars are here for body work," she says. "Customers like this because of the convenience of not having to drop the car off at another repair shop."



Her satisfaction with her Atlas Copco compressor led her to purchase another GX11-FF and a 10 hp GX7-FF for her body shop operations. She plans to buy a 7.5 hp GX5-FF for the clean-up and detailing operation. With her Atlas Copco compressors on the job for many months now, Sandra can share her experience. "The quietness of the Atlas Copco compressors is superb. I was so glad to get rid of that noise from the piston compressors. You just don't realize what a difference it makes for the work environment. I am also very pleased with the power savings. We moved part of my operation into a larger building with two additional air conditioning units, but because of the energy efficiency of the new air compressor, my power bill for that building has gone down by about \$600 each month. That's over \$7,000 of savings per year, and that will pay for the compressor with power savings in less than one year!"

In a sense, the benefits of lower noise and lower operating cost are a bonus, since the primary concern for an auto body business is a reliable source of high quality compressed air. "No matter how well you apply paint," Mike Brown contends, "impurities in your compressed air supply can turn a great deal of labor and materials into expensive waste and unhappy customers."

GX series compressed air systems include a coalescing filter and integrated refrigerant dryer which remove impurities and moisture from the compressed air, ensuring a supply of clean, dry air at all times. This is particularly important for auto body repair shops, which rely on compressed air for many purposes, most importantly applying paint.

Clean, dry air plays an even more important role in the application of waterborne paints. As environmental laws governing release of VOCs (Volatile Organic Compounds) get more and more strict, working with waterborne paints is something every auto body business will have to contend with in the future. Those with an eye toward the future can make a difference today by investing in compressed air systems that use energy efficient rotary screw technology.

The GX series also features advanced sound dampening that results in operating sound levels of only 61 to 68 dB(A), much lower than piston compressors with similar output. Reducing sound levels creates a more comfortable work environment.



## **Paint Requires High Quality Air**

Pat's Auto Body knows, no matter how well you apply paint, impurities in your compressed air supply will ruin a paint job. Clean, dry air is even more important with waterborne paints.

Atlas Copco has your solution. Our GX Full Feature compressed air systems include an energy efficient rotary screw compressor, refrigerated dryer, and coalescing filter in a compact, quiet, all-in-one package.

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