



foresight

MANAGEMENT

Compressed Air Leak Studies

WHY

In manufacturing facilities, compressed air is essential and can be the most energy-intensive machinery in your facility. Often this equipment is running every shift with large electric motors and can account for 15-35% of an electric bill, therefore it's essential to pay attention to how efficiently the compressed air is made and distributed. Gaskets, valves, and drills are all high points of use and are most prone to developing leaks, but the response is often reactive instead of proactive.

In our minds, it's not a question of "if" there is a leak in your system, but rather "how much." Even the tightest compressed air systems leak nearly 10% and some upwards of 50%. Regular studies of your compressed air systems will ensure maximum efficiency and real savings for your business. A proactive approach to addressing leaks not only reduces your energy bill month to month but prolongs the life of your existing equipment through regular maintenance.

DON'T TAKE OUR WORD FOR IT...

**SOMETHING IN THE AIR:
ULTRASOUND FOR COMPRESSED
AIR LEAK DETECTION**

HOW

Foresight's certified compressed air technicians conduct the leak audits of your entire facility by walking the plant with an ultrasonic leak detection gun. We locate and tag any leaks in your distribution system your ear alone might not yet detect and will estimate the amount of energy in kilowatt-hours leaking from your system.

Our team will provide you with a detailed report highlighting the type and location of each leak within your compressed air system, alongside a plant drawing with leak locations and pictures. This strategic information speeds up the repair process either for your maintenance team or with your preferred compressed air contractor. It also allows you to prioritize immediate action for the largest leaks.

Depending on your process, Foresight recommends completing leak detection audits at least once a year, if not more. By staying vigilant against the threat of compressed air leaks, your system will be more efficient, and your company will save money.

BENEFITS

- More efficient compressed air systems
- Lowered electric costs
- Prolonged life of expensive machinery
- Support for your maintenance team

CASE STUDY

Client Profile

Large manufacturer of commercial seating.

Before Foresight

When an employee heard a leak, they reported it to the maintenance team, who would sometimes address the issue. They dealt with compressed air leaks only when they became an obvious problem. However, in a large facility running 24-hour shifts, merely listening for leaks meant most were not loud enough to be noticed over the equipment noise. In a visit to the facility, Foresight's engineers suggested a compressed air leak study to identify undetected issues that could be contributing to high energy bills and equipment failure.

After Foresight

Foresight completed a compressed air leak study and identified 121 leaks in their compressed air system. We mapped out their facility and numbered each leak in correlation with a leak tracking report. This document provided their maintenance team with the size of the leak and the energy and cost savings potential so they could prioritize the largest leaks first. The factory saw \$42,000 in savings in one year by addressing compressed air leaks. Their team now takes a proactive approach to their compressed air by regularly auditing their system.

Compressed air leak studies often identify 5-50% cost savings off an electric bill. For many manufacturing clients, this can easily mean tens of thousands, if not hundreds of thousands in annual utility savings per facility.

SAMPLE REPORT

FREQUENTLY ASKED QUESTIONS

How much does a compressed air leak audit cost?

Foresight typically prices out these audits based on your facility's size and complexity of your compressed air system. Often, our costs range between \$0.02 to \$0.08 per square foot.

What kind of return on investment will I see?

Most studies result in a 3 to 12 month ROI, plus improved system performance!

What are other ways can I optimize my compressed air system?

We recommend checking the pressure set point of your system. You will save 1% on your electric spending for every 2 PSI reduced.

Does my compressed air system really leak?

Absolutely. Even the tightest systems leak. It's not "if" it leaks, but "how much" it leaks.

We run our plant 24/7 and can't shut down. Can you do a leak study while we are operational?

Yes! You do not need to make any special accommodations to complete a study.

How often should we check our compressed air?

We recommend a minimum of annually or as frequently as quarterly.

Are there incentive programs to help with the cost?

Yes. Most energy companies have rebate and incentive programs for fixing compressed air leaks.



To learn more about how your business could benefit from Compressed Air Leak Studies, contact:

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