All plants have air leaks

The US Department of Energy estimates that an average of 25% of compressed air is lost to leaks — resulting in unnecessarily high operating costs. In many plants the leak losses are much higher.

In this soft drink bottling plant, approximately half of the average consumption is lost to air leaks. With the local industrial electricity rate of $0.13/kW·h, this constant demand may cost as much as $34,000 per year in electricity.

The graph above is an actual flow study. Each trend line tracks a 24 hour period in a 10-day Air Demand Analysis. Leak costs were based on the local electric rate, 8760 annual operating hours, and compressor output of 4.5 cfm per hp and motor efficiency of 93%.
Ready to fix your leaks? 
Kaeser can help.

Our leak detection and repair program is a smart solution for facilities that are ready to stop wasting energy. The cost to identify and fix leaks is far less than the cost of wasted energy.

Sample Return on Investment

- Average demand: 450 cfm
- System horsepower: 100 hp
- Industry average leak rate: 25%
- Leak energy cost (for 25 hp): $12,300*
- Fee to find and tag leaks: $1200/day
- Cost to fix 1/3 of leaks identified (labor and materials): $800
- Total Costs: $2000
- Annual electrical savings: $4100
- Net Savings: $2100 in first year

*Based on full time operation, 93% motor efficiency, and $0.07/kW·h (US average)

Additional benefits of leak reduction:
- more stable system pressure and better functioning equipment
- less leakage means less compressor run time
- increased service life and decreased maintenance requirements
- additional capacity available for surges in production and growth
- lower carbon footprint
- increased profits