

Leaking compressor lines make money disappear into thin air

Shut down for the day, the plant is virtually empty. But even though production has stopped, silence does not prevail - there is still the hissing sound of your compressed air system. The sound of money leaking away.

In fact, as much as 10 to 20 percent of the capacity of most systems is lost by leakage, says Van Air Systems of Lake City, Pennsylvania, manufacturers of compressed air drying and cooling equipment.

An easy way to estimate this loss is to determine the percentage of time that the compressor runs when the plant is not operating. The cost of leaks can then be approximated by using the Compressed Air and Gas Institute (CAGI) figure of U.S.\$ 0.16 per 1,000 SCFM.

According to Van Air, there are two main causes for system leaks: moisture-induced corrosion in pipe joints, and valves left open to drain condensate; a 1/32" opening in a "cracked" valve is estimated to leak roughly 70,000 SCF per month. To minimize these problems, the company suggests installation of automatic valves on drop legs and use of dryers.

In addition to leakage costs, maintenance engineers should also pay attention to pressure loss. Energy costs increased approximately 0.5 percent for every PSI lost, the company says. It recommends that in system design, it pays to always select components that offer the lowest possible pressure drop.