Compressed Air Efficiency

Don’t let your compressed air system steal your profits

Compressed air study – up to $15,000 to fund your study*

The typical compressed air system uses only 50% of its air supply for production, while the other 50% is lost to leaks and wasteful use. An efficiency study includes:

- An ultrasonic survey of leaks and their associated costs
- A report of the system’s major components, system loading, flow and metering results, and waste; along with recommended improvements
- Recommendations for the right size and configuration of equipment

Request a professional study from one of our participating compressed air vendors, and start saving money right away!

*Systems must be at least 50 hp; requires Xcel Energy preapproval and that customers must fix at least 50% of the air loss from leaks or waste identified in the study.

Variable Speed (VSD/VFD) compressors < 50 hp

With a rebate of up to $7,000, Xcel Energy can help you pay for your VSD air compressor.

VSD air compressors use a special drive to control the RPM of the unit, which will ultimately save energy.

Benefits:

- Reduce energy costs
- Reduce power surges
- Better air delivery of more constant air pressure
- Produce a more efficient volume of air

A professional efficiency study is the best way to know if a VSD air compressor is right for your business.

Cycling dryers, mist eliminators and dew point controls – new in 2014!

Xcel Energy is now offering prescriptive rebates for cycling dryers, mist eliminators and dew point controls (purge controls).

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<th>Eligibility</th>
<th>Xcel Energy’s Rebate Amount</th>
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<td>Cycling Dryers</td>
<td>Use sensors to turn off the compressor when not needed; saving energy while still meeting your system’s drying needs</td>
<td>75 CFM to 2400 scfm</td>
<td>$1.50/CFM</td>
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<td>Mist Eliminators</td>
<td>Low pressure drop oil and water filter which cuts operating costs and saves energy</td>
<td>125 CFM to 1900 scfm</td>
<td>$3/CFM</td>
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<td>Dew Point Controls</td>
<td>Minimizes your dessicant dryer’s wasted purge air while saving time and money by cycling the dryer based on the air’s moisture content</td>
<td>90 CFM to 2000 scfm</td>
<td>$1,000/Dryer</td>
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Assumptions in this example include a 75 hp compressor operated two shifts a day, five days a week at an aggregate electric rate of $0.05/kWh over 10 years of equipment life.

Note: Colorado energy costs may be different than the U.S. DOE averages used in this chart.

*Total lifetime costs include equipment, installation, maintenance and electricity.
Custom rebates up to $600/kW

Non-VSD air compressors in constant demand or dual control situations, as well as larger compressors, may qualify for custom rebates. In fact, mist eliminators, cycling dryers, storage, cabinet coolers, or almost any measure that saves energy could qualify!

Custom rebates require preapproval before the equipment is purchased, and certain restrictions apply. But potential rebates, and your potential monthly savings, are huge!

No air loss drains—improve air quality and get up to $200 each!

Removing condensate is important to your air quality levels required by your equipment. No Air Loss Drains, also known as zero-loss drains, or no-loss drains, continuously measure moisture and purge it only when and for as long as necessary, without the loss of compressed air.

The drains can be installed at the compressor, air dryer, filter, storage tank, or at any point where moisture might collect. They open a valve only when signaled by condensate levels, making the no-loss drain more efficient than timed drains or electronically operated solenoid valves. And, they are less likely to clog than level-operated mechanical traps.

Benefits:
- Reduces energy cost by eliminating air waste
- Improves air quality
- No need for periodic adjustments of intervals and cycle times associated with timed drains
- No clogging and pressure loss associated with float-operated valves
- Lowers maintenance costs

How to estimate saving of no air loss drains:

\[
\text{Time on (sec)} \times \text{Compressed air hours of operation} \times 0.02125 \times \# \text{ of electronic solenoid drains} = \text{Estimated Savings/yr}
\]

Example: A system running 7,000 hours annually has five electronic solenoid drains (ESDs) that are timed on for 10 seconds and timed off for five minutes. Replacing the ESDs with no air drain valves could save $1,488/year.

\[
10 \text{ sec} \times 7,000 \text{ compressed air operating hours} \times 0.02125 \times 5 \text{ ESD} = $1,488/\text{year}
\]

**This example is an estimate and should be used for illustrative purposes only. Your results and savings may vary. Assumptions include 85 CFM with 100 system psig on at $0.25 per 1,000 CF.**

For more information about any of Xcel Energy’s study, prescriptive, or custom programs, visit xcelenergy.com/Rebates or contact us at 855.839.8862 or email us at energyefficiency@xcelenergy.com. Rebates described are available to Colorado business customers for qualifying equipment. Please read the rebate application for offers, terms and conditions, which are subject to change.