

ENERGY WISE

for your Business



Compressed air leaks can be responsible for 20-30% of total air compressor output and are a significant opportunity for energy efficiency and operating cost savings.

MVEC

MINNESOTA VALLEY ELECTRIC COOPERATIVE

A Touchstone Energy® Cooperative

125 Minnesota Valley Electric Drive
Jordan, MN 55352
Phone: 952.492.2313
Toll-free: 800.282.6832 Fax:
952.492.8281
Craig Lofdahl: craigl@mvec.net Joe
Green: joeg@mvec.net
www.mvec.net



COMPRESSED AIR PROGRAMS

Compressed air can be a significant energy user in a facility affecting operating costs, productivity, and profitability. These compressed air rebates can help identify and implement energy efficiency measures to reduce operating costs, improve productivity, enhance system efficiency, and increase profitability.

Compressed Air Leak Study

Improve the efficiency of compressed air supply with a compressed air leak study that identifies the energy savings potential associated with reducing compressed air losses using ultrasonic leak detection. Compressed air leaks can be responsible for 20-30% of total air compressor output and are a significant opportunity for energy efficiency and operating cost savings.

Compressor Accessories

- Cycling air dryer – match air drying with air drying demand as opposed to running continuously.
- Engineered nozzle – sometimes referred to as “venturi” or “air amplification” nozzles, these nozzles use the compressed air to entrain and amplify atmospheric air into a stream, increasing pressure while reducing compressed air up to 70%.
- Low pressure drop filter – sometimes referred to as “mist eliminator” filters. Lowering the pressure requirements of the system enable the compressor pressure set point to be lowered, reducing energy input required by the compressor system.
- No loss drain – an electronic, pneumatic, or hybrid “no loss (condensate) drain” is designed to automatically adjust with compressed air system demand and eliminate condensate with zero compressed air loss.
- Pressure/flow controller – installation on the downstream side of an air storage receiver creates a pressure differential which can be used to supply the peak air demand in short durations instead of using additional compressor horsepower to feed the peak demand.
- Storage tank – provide extra capacity for a compressed air system. The storage tank prevents the compressor from reacting to every individual demand event preventing short-cycling, short duration ramping, and downstream oil deposits.

Equipment Type	Rebate Amount
Air leak study	50-74 HP, 50% of cost up to \$2,000 75-99 HP, 50% of cost up to \$2,500 100+ HP, 50% of cost up to \$15,000
Cycling air dryer	\$150
Engineered nozzle	\$30
Low pressure drop filter	\$100
No loss drain	\$100
Pressure/flow controller	\$200
Storage tank	\$750

COMPRESSED AIR

Rebate Application

Business Member Information:

Business Name _____

Installation Address _____

City _____ State _____ ZIP _____

Contact Name _____ Account # _____

Email _____ Phone _____

Rebate Recipient:

To release the rebate incentive check to an alternate party other than the cooperative business member, the member must specify an alternative mailing address and authorize with a signature below.

Please Send Rebate to (check one):

☐ Business Member ☐ Alternative Recipient

Recipient Name _____

Mailing Address _____

City _____ State _____ ZIP _____

Contact Name _____

Application Check List:

- ☐ Rebate application with signature
- ☐ Itemized project invoices (labor & materials)
- ☐ Equipment specifications

The undersigned does hereby certify that the undersigned is solely responsible for the accuracy of the information contained in this application. All rules of the program have been followed and the installation is complete. The undersigned acknowledges that nothing contained in the application imposes any liability on the cooperative for the work performed and information presented by the member, member's engineer, contractor, or vendor. The undersigned also authorized payment of incentive directly to the specified rebate recipient.

Rebate applications due no later than the third Friday of November.

Member Signature:

Member Signature _____ Date _____

COMPRESSED AIR

Rules & Information

Warranty Information:

Rebate qualifications do not imply any representation or warranty of such equipment, design or installation by the cooperative. The cooperative shall not be responsible or liable for any personal injury or property damage caused by this equipment. The cooperative does not guarantee that a specific level of energy or cost savings will result from the implementation of energy conservation measures or the use of products funded under this program. In no event shall the cooperative be liable for any incidental or consequential damages.

General Program Rules:

1. The member is responsible for checking with the cooperative to determine funding availability and resolve questions on program rules and qualification of products.
2. Installation must be complete before application is submitted and rebate funds are issued.
3. Members and vendors must submit itemized equipment invoices, rebate application, and manufacturer equipment specifications. To ensure that the equipment installed meets the cooperative's performance standards, these invoices must itemize labor charges, quantity and price of the equipment installed, as well as information regarding the manufacturer and model numbers for all equipment included in the rebate.
4. Rebates must be applied for within 12 months of invoice date.
5. The cooperative reserves the right to conduct random inspections of installations.

Compressed Air Leak Evaluation Requirements

- Business Members are eligible for the compressed air evaluation rebate every five years
- The maximum rebate amount shall be the lesser of 50% of the project cost or \$20,000.
- Qualifying compressed air system requirements:
 - Must be electrically driven
 - Total installed air compressor capacity greater than 50 HP (excluding backup equipment)
 - Operates at least 2,000 hours/year
- Compressed air evaluations must include an ultrasonic leak detection audit
- A final report including:
 - Estimated cost of system inefficiencies including member cost, demand (kW), and energy (kWh), resulting from leaks of the air system
 - Compressor number, type, capacity, pressure, age, motor size, and efficiency
 - Description of major compressed air end uses
 - Inspection results of all compressed air system components and identification of problem areas
 - Identification and description of system loading of major compressed air users including size, frequency, duration of use.
 - Identification of the process to implement the system energy efficiency improvements and provide cost estimates repair leaks, unregulated end-uses, and inefficient compressed air applications
 - A list of recommended improvements to maintenance procedures with any follow-up actions to improve operation and efficiency
- Repairs must be made to 50% of the air loss due to leaks and waste identified in the study to qualify for the rebate

COMPRESSED AIR

Equipment & Rebate Information

Compressor Accessories

			Rebate
<input type="checkbox"/> Cycling air dryer	CFM	<input type="text"/>	\$150
<input type="checkbox"/> Engineered nozzle	nozzle diameter (in.)	<input type="text"/>	\$30
<input type="checkbox"/> Low pressure drop filter	horsepower	<input type="text"/>	\$100
<input type="checkbox"/> No loss drain	kW/100 CFM	<input type="text"/>	\$100
<input type="checkbox"/> Pressure/flow controller	horsepower	<input type="text"/>	\$200
<input type="checkbox"/> Storage tank	horsepower storage (gal/cfm)	<input type="text"/> <input type="text"/>	\$750

Compressed Air Leak Evaluation

Total installed compressor HP	<input type="text"/>
Study Cost	<input type="text"/>
Operating Hrs/year	<input type="text"/>
Rebate	<input type="text"/>

Compressed HP	Rebate Amount
50-74	50% up to \$2,000
75-99	50% up to \$2,500
100 +	50% up to \$15,000

Rebate Information

Project Cost	<input type="text"/>
Total Rebate	<input type="text"/>