

Compressed Air Technologies (75 hp or less)

Pacific Power provides incentives for many types of energy-efficient technologies. Please read the following sections carefully to ensure that you follow the appropriate steps for securing your incentive for compressed air equipment. In the FinAnswer Express® program, eligibility for compressed air technologies is limited to customers with compressed air systems less than or equal to 75 horsepower (hp) in size, except for the zero loss condensate drain measure, which is eligible for incentive when installed in any size system. Technical assistance and financial incentives may be available for compressed air technologies installed on larger systems. For more information, contact Pacific Power or your vendor before purchasing your new equipment.

Incentives for additional measures beyond those shown here may be available. For more information about the FinAnswer® Express program, eligibility requirements, incentive levels, or other general inquiries, contact your local equipment dealer or Pacific Power. Visit the program website at pacificpower.net/wattsmart to submit an inquiry online or call our **energy services hotline** at **1-800-222-4335**.

ZERO LOSS CONDENSATE DRAIN

Measure description: Condensate drains are used to remove liquid water from a compressed air system. The usual timer-type drain opens for a user-set duration at a user-determined frequency, resulting in significant venting of compressed air. A zero loss condensate drain removes water with no venting of compressed air, resulting in reduced air demand and compressor energy consumption.

Applicability: New construction and retrofit installations are eligible. There is no constraint on system size. Equipment must be purchased and installed on or after January 19, 2012 and meet all program terms and conditions. Incentives may be available for equipment purchased prior to January 19, 2012; please contact us at **1-800-222-4355**.

Equipment eligibility: A zero loss condensate drain designed to remove liquid water without venting compressed air must be purchased and installed on a qualifying compressed air system. Zero loss condensate drains purchased as an integral part of other compressed air measures are eligible for this incentive.

Items to submit with application:

1. Dated sales receipt/invoice with retailer/contractor name, address, and phone number. Add installation date as well.
2. Compressor hp, part load control type (load/unload, inlet modulation, on/off, VFD), and estimated annual operating hours.

Prequalification required? No.

Equipment code	Measure description	Incentive
ZLCOND	Zero Loss Condensate Drains	\$90 / unit

REFRIGERATED CYCLING DRYER

Measure description: Refrigerated dryers cool the compressed air stream to condense and remove water vapor. Cycling refrigerated dryers employ a thermal mass and cycle the refrigeration system only as needed (roughly in proportion to the airflow). Cycling refrigerated dryers can save considerable energy compared to non-cycling refrigerated dryers, which run the refrigeration system constantly, regardless of airflow.

Applicability: New construction and retrofit installations are eligible. Eligibility is limited to customers with compressed air systems less than or equal to 75 hp in size. Equipment must be purchased and installed and meet all program terms and conditions.

Equipment eligibility: Incentive is available for installation of a cycling refrigerated dryer with rated capacity less than or equal to 500 scfm*. The refrigeration compressor must cycle off during periods of reduced air demand. The dryer must operate exclusively in cycling mode and cannot be equipped with the ability to select between cycling and non-cycling mode.

Items to submit with application:

1. Dated sales receipt/invoice with retailer/contractor name, address, and phone number. Add installation date as well.
2. Manufacturer specification sheet or nameplate data for cycling refrigerated dryer.
3. Compressor hp, part load control type (load/unload, inlet modulation, on/off, VFD), and estimated annual operating hours.

Prequalification required? No.

Equipment code	Measure description	Incentive
RECYDR	Refrigerated Cycling Dryer	\$1.50 / scfm*

*scfm = standard cubic feet of air per minute at standard conditions (14.5 psia, 68°F, and 0% relative humidity)

RECEIVER CAPACITY ADDITION

Measure description: Adding receiver volume to certain compressed air systems with limited receiver capacity may allow the trim compressor to cycle less frequently, permit the system to operate at lower pressure, and reduce average compressor power.

Applicability: New construction and retrofit installations are eligible. Eligibility is limited to customers with compressed air systems less than or equal to 75 hp in size, with limited or no existing receiver capacity (i.e. ≤ 2 gallons per scfm of compressor capacity). Equipment must be purchased and installed and meet all program terms and conditions.

Equipment eligibility: Incentive is only offered on receiver capacity in excess of 2 gallons per scfm of trim compressor capacity. The compressor’s primary part load control method must be load/unload, not inlet modulation, on/off, VFD, or variable displacement control.

Items to submit with application:

1. Dated sales receipt/invoice with retailer/contractor name, address, and phone number. Add installation date as well.
2. Compressor hp, part load control type (load/unload, inlet modulation, on/off, VFD), and estimated annual operating hours.

Prequalification required? No.

Equipment code	Measure description	Incentive
RECCAD	Receiver Capacity Addition	\$1.50 / gal above 2 gal/scfm*

*scfm = standard cubic feet of air per minute at standard conditions (14.5 psia, 68°F, and 0% relative humidity)

VFD CONTROLLED COMPRESSOR

Measure description: By using a variable speed drive (VFD) to adjust compressor speed and, therefore, delivered capacity, variable-speed oil-injected screw compressors can maintain more consistent discharge pressure and operate more efficiently than fixed-speed oil-injected screw compressors during periods when a facility’s demand for compressed air is less than the compressor’s full capacity.

Applicability: New construction and retrofit installations are eligible. Eligibility is limited to customers with compressed air systems containing a single operating compressor less than or equal to 75 hp in size. Equipment must be purchased and installed and meet all program terms and conditions.

Equipment eligibility: Incentive is available for the installation of a VFD-controlled oil-injected screw compressor with capacity less than or equal to 75 hp. The unit must adjust compressor speed as the primary means of capacity control and must not use inlet modulation when demand is below the minimum speed threshold of the VFD compressor. Incentives for VFD controlled compressors are calculated based on compressor size, hours of operation, estimated loading, and other system parameters based on \$0.15/kWh of annual energy savings. Energy savings figures are subject to approval by Pacific Power.

Technical assistance and financial incentives for VFD controlled compressors larger than 75 hp or installed as part of a multiple compressor system may be available through Pacific Power’s Energy FinAnswer® program. For more information about Energy FinAnswer, contact Pacific Power or your vendor before ordering or purchasing equipment.

Items to submit with application:

1. Dated sales receipt/invoice with retailer/contractor name, address, and phone number. Add installation date as well.
2. Manufacturer specification sheet or nameplate data for air compressor.

Prequalification required? Prequalification is recommended but not required to receive incentives for compressed air systems containing a single operating compressor less than or equal to 75 hp in size. A calculator tool and technical help are available for determining project savings and the incentive amount. Please contact Pacific Power for assistance.

Prequalification is required for larger or multiple compressor systems. To be eligible for incentives, contact us before you sign purchase orders for new equipment.

Equipment code	Measure description	Incentive
VFDCCM	VFD Controlled Compressor	\$0.15 / kWh of annual energy savings*

*Energy savings are subject to Pacific Power approval. For assistance calculating project savings and incentives, contact Pacific Power on our energy services hotline at 1-800-222-4335 or via email to: ca.compair@pacificpower.net

LOW PRESSURE DROP FILTER

Measure description: Coalescing filters are designed to remove solids and aerosols from compressed air systems and discharge condensate from the system. Low pressure drop (i.e., loose-packed, deep bed coalescing) filters have a significantly lower pressure drop and longer element life than standard filters, resulting in reduced compressor energy use.

Applicability: New construction and retrofit installations that meet eligibility requirements may qualify for an incentive via a post-purchase application. Eligibility is limited to customers with compressed air systems less than or equal to 75 hp in size. Equipment must be purchased and installed and meet all program terms and conditions.

Equipment eligibility: Low pressure drop filters must be purchased and installed in place of standard coalescing filters on compressed air systems from 25 to 75 hp in size. Low pressure drop filters must meet the following criteria:

1. Pressure loss at rated flow is ≤ 1 psi when new and ≤ 3 psi at element change.
2. Particulate filtration is 100% at ≥ 3.0 microns and 99.98% at 0.1 to 3.0 microns, with ≤ 5 ppm liquid carryover.
3. Filter is deep-bed "mist eliminator" style with element life ≥ 5 years.

Items to submit with application:

1. Dated sales receipt/invoice with retailer/contractor name, address, and phone number. Add installation date as well.
2. Itemized list of equipment quantity, description, manufacturer, model number, or other identifying information as appropriate.
3. Compressor hp, part load control type (load/unload, inlet modulation, on/off, VFD), and estimated annual operating hours.

Prequalification required? No.

Equipment code	Measure description	Incentive
LPRDFL	Low Pressure Drop Filter	\$0.80 / scfm*

*scfm = standard cubic feet of air per minute at standard conditions (14.5 psia, 68°F, and 0% relative humidity)

OUTSIDE AIR INTAKE

Measure description: Permanent ductwork that allows a compressor to take in cool, relatively dense outdoor air improves efficiency compared to a system that draws warmer intake air from inside the equipment room. Advanced systems employ automatic controls to determine whether the outside air or compressor room air is cooler, and then supply the air compressor with inlet air from the cooler location.

Applicability: New construction and retrofit installations are eligible. Eligibility is limited to customers with compressed air systems less than or equal to 75 hp in size. Equipment must be purchased and installed and meet all program terms and conditions.

Equipment eligibility: Permanent ductwork must be installed between the compressor air intake and the outdoors. Ductwork must meet compressor manufacturer’s specifications, which may include (a) ≤ 0.25 " W.C. pressure loss at rated flow, and (b) allow use of compressor room air during extremely cold outdoor air conditions.

Items to submit with application:

1. Dated sales receipt/invoice with retailer/contractor name, address, and phone number. Add installation date as well.
2. Compressor hp, part load control type (load/unload, inlet modulation, on/off, VFD), and estimated annual operating hours.
3. Photograph of installed ductwork and air compressor.

Prequalification required? No

Equipment code	Measure description	Incentive
OUTSAI	Outside Air Intake	\$6 / horsepower