



Public Utilities Commission

Application to Commit Energy Efficiency/Peak Demand Reduction Programs (Mercantile Customers Only)

Case No.: 12-0054-EL-EEC

Mercantile Customer: Rexam Beverage Can Co.

Electric Utility: The Toledo Edison Company

Program Title or Description: Energy Efficiency Compressor Replacement Project for 2011

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. 10-834-EL-POR

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

Any confidential or trade secret information may be submitted to Staff on disc or via email at ee-pdr@puc.state.oh.us.

Section 1: Mercantile Customer Information

Name: Rexam Beverage Can Co.

Principal address: 8770 W. Bryn Mawr, Chicago, IL 60631

Address of facility for which this energy efficiency program applies:

10444 Waterville Swanton Road, Whitehouse, OH 43571

Name and telephone number for responses to questions:

Gene Pawula - Director, Supply Chain (773-399-3616)

Electricity use by the customer (check the box(es) that apply):

- ☒ The customer uses more than seven hundred thousand kilowatt hours per year at the above facility. (Please attach documentation.)
- ☐ The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Section 2: Application Information

A) The customer is filing this application (choose which applies):

- ☐ Individually, without electric utility participation.
- ☒ Jointly with the electric utility.

B) The electric utility is: The Toledo Edison Company

C) The customer is offering to commit (check any that apply):

- ☐ Energy savings from the customer's energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
- ☐ Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- ☒ Both the energy savings and the capacity savings from the customer's energy efficiency program. (Complete all sections of the Application.)

Section 3: Energy Efficiency Programs

A) The customer's energy efficiency program involves (check those that apply):

- ☐ Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)). **If Checked, Please see Exhibit 1 and Exhibit 2**
- ☒ Installation of new equipment to replace equipment that needed to be replaced. The customer installed new equipment on the following date(s): 3/1/2011.
- ☐ Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s):
_____.
- ☐ Behavioral or operational improvement.

B) Energy savings achieved/to be achieved by the energy efficiency program:

- 1) If you checked the box indicating that the project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) - (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____ kWh

- 2) If you checked the box indicating that the customer installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: 485,280 kWh

Please describe any less efficient new equipment that was rejected in favor of the more efficient new equipment. **Please see Exhibit 1 if applicable**

- 3) If you checked the box indicating that the project involves equipment for new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) - (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: _____ kWh

Please describe the less efficient new equipment that was rejected in favor of the more efficient new equipment. **Please see Exhibit 1 if applicable**

- 4) If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.

Section 4: Demand Reduction/Demand Response Programs

A) The customer's program involves (check the one that applies):

- ☒ Coincident peak-demand savings from the customer's energy efficiency program.
- ☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
- ☐ Potential peak-demand reduction (check the one that applies):
 - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
 - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.

B) On what date did the customer initiate its demand reduction program?

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

5 kW

**Section 5: Request for Cash Rebate Reasonable
Arrangement (Option 1) or Exemption from Rider (Option 2)**

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) The customer is applying for:

☒ Option 1: A cash rebate reasonable arrangement.

OR

☐ Option 2: An exemption from the energy efficiency cost recovery mechanism implemented by the electric utility.

OR

☐ Commitment payment

B) The value of the option that the customer is seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☒ A cash rebate of \$29,117. (Rebate shall not exceed 50% project cost. Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined.)

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

☐ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for _____ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

☐ A commitment payment valued at no more than \$_____. (Attach documentation and calculations showing how this payment amount was determined.)

OR

- ☐ Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of the customer's ongoing efficiency program. (Attach documentation that establishes the ongoing nature of the program.) In order to continue the exemption beyond the initial 24 month period, the customer will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

- ☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____(Continue to Subsection 1, then skip Subsection 2)
- ☒ Utility Cost Test (UCT) . The calculated UCT value is: **See Exhibit 3** (Skip to Subsection 2.)

Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were _____.

Our program costs were _____.

The incremental measure costs were _____.

Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were **See Exhibit 3**

The utility's program costs were **See Exhibit 3**

The utility's incentive costs/rebate costs were **See Exhibit 3**

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of the program including, but not limited to, make, model, and year of any installed and replaced equipment.
- A copy of the formal declaration or agreement that commits the program or measure to the electric utility, including:
 - 1) any confidentiality requirements associated with the agreement;
 - 2) a description of any consequences of noncompliance with the terms of the commitment;
 - 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;
 - 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
 - 5) a commitment by the customer to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.
- A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.



Public Utilities Commission

Application to Commit
Energy Efficiency/Peak Demand
Reduction Programs
(Mercantile Customers Only)

Case No.: 12-0054-EL-EEC

State of Ohio :

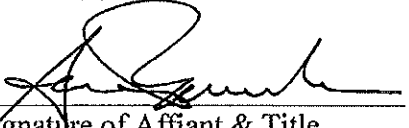
Gene Pawula, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

Rexam Beverage Can Co.

[insert customer or EDU company name and any applicable name(s) doing business as]

2. I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.

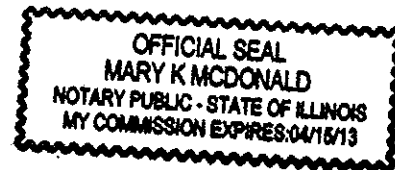

Signature of Affiant & Title

Sworn and subscribed before me this 3rd day of November, 2011 Month/Year

Signature of official administering oath

Print Name and Title

My commission expires on 4/15/2013



Mary K McDonald
11/3/2011

Customer Legal Entity Name: Rexam Beverage Can Company

Site Address: Whitehouse

Principal Address: 10444 Waterville Swanton Road

Project No.	Project Name	Narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment:	Description of methodologies, protocols and practices used in measuring and verifying project results	What date would you have replaced your equipment if you had not replaced it early? Also, please explain briefly how you determined this future replacement date.	Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.
1	Compressor #5 Replacement	The Whitehouse plant compressed air system has 7 high pressure compressors and 1 low pressure compressor to service the plant. The equipment mix is designed to provide sufficient high pressure equipment to run the entire plant when the low pressure machine is off for any reason and also provide sufficient extra equipment to allow for any maintenance or failure of a high pressure compressor. At this time, one of the Atlas Copco machines (Compressor #5, Atlas Copco Model #ZT4B-300 Hp) is in need of some repair. During a recent low pressure compressor outage, plant air supply was marginal which required a rental compressor to provide adequate plant air pressure. Compressor 5 is an air cooled unit vs a water cooled unit. The negative features of air cooled units are overheating in hot summer days and icing in cooler days. Due to the current condition of compressor 5 and the features of air cooled units, corporate engineering has determined that a new water cooled compressor that is more efficient in scfm/Hp output would be the best decision to save energy and get the plant back to the capacity recommend	As mentioned above, Kwh savings include direct savings from replacing old compressor with more efficient compressor (40,000 Kwh/yr), as well as indirect savings of allowing plant to shut down less efficient compressor 22% of time (445,280 Kwh/yr), for total energy savings of 485,280 Kwh annually. See attached Project Summary which includes savings calculation of less efficient compressor vs new compressor. Also attached is the Technical Data sheet from Sullair showing ratings of new compressor, along with the results of a study of Whitehouse plant's compressors done by IZ Systems, along with some background on IZ from their website.		Atlas Copco ZT4B 300HP air-cooled compressor. No longer operable due to cracked heat exchanger and cracked frame.

Docket No. 12-0054-EL-EEC

Site: 10444 Waterville Swanton Road

Exhibit 2

Customer Legal Entity Name: Rexam Beverage Can Company

Site Address: Whitehouse

Principal Address: 10444 Waterville Swanton Road

	Unadjusted Usage, kwh (A)	Weather Adjusted Usage, kwh (B)	Weather Adjusted Usage with Energy Efficiency Addbacks, kwh (c) <i>Note 1</i>
2010	48,470,611	48,470,611	48,470,611
2009	43,910,754	43,910,754	43,910,754
Average	46,190,683	46,190,683	46,190,683

Project Number	Project Name	In-Service Date	Project Cost \$	50% of Project Cost \$	KWh Saved/Year (D) counting towards utility compliance	KWh Saved/Year (E) eligible for incentive	Utility Peak Demand Reduction Contribution, KW (F)	Prescriptive Rebate Amount (G) \$	Eligible Rebate Amount (H) \$ <i>Note 2</i>
1	Compressor #5 Replacement	03/01/2011	\$154,700	\$77,350	485,280	485,280	5	\$38,822	\$29,117
					-	-	-		
					-	-	-		
					-	-	-		
					-	-	-		
					-	-	-		
					-	-	-		
		Total	\$154,700		485,280	485,280	5	\$38,822	\$29,117

Docket No. 12-0054-EL-EEC

Site: 10444 Waterville Swanton Road

Notes

(1) Customer's usage is adjusted to account for the effects of the energy efficiency programs included in this application. When applicable, such adjustments are prorated to the in-service date to account for partial year savings.

(2) The eligible rebate amount is based upon 75% of the rebates offered by the FirstEnergy Commercial and Industrial Energy Efficiency programs or 75% of \$0.08/kWh for custom programs for all energy savings eligible for a cash rebate as defined in the PUCO order in Case NO.10-834-EL-EEC dated 9/15/2010, not to exceed the lesser of 50% of the project cost or \$250,000 per project. The rebate also cannot exceed \$500,000 per customer per year, per utility service territory.

Commitment
Payment
\$

\$0

Exhibit 3 Utility Cost Test

UCT = Utility Avoided Costs / Utility Costs

Project	Total Annual Savings, MWh (A)	Utility Avoided Cost \$/MWh (B)	Utility Avoided Cost \$ (C)	Utility Cost \$ (D)	Cash Rebate \$ (E)	Administrator Variable Fee \$ (F)	Total Utility Cost \$ (G)	UCT (H)
1	485	\$ 308	\$ 149,602	\$ 3,546	\$29,117		\$ 32,663	4.6
Total	485	\$ 308	149,602	3,546	\$29,117	\$0	32,663	4.6

Notes

- (A) From Exhibit 2, = kWh saved / 1000
- (B) This value represents avoided energy costs (wholesale energy prices) from the Department of Energy, Energy Information Administration's 2009 Annual Energy Outlook (AEO) low oil prices case. The AEO represents a national average energy price, so for a better representation of the energy price that Ohio customers would see, a Cinergy Hub equivalent price was derived by applying a ratio based on three years of historic national average and Cinergy Hub prices. This value is consistent with avoided cost assumptions used in EE&PDR Program Portfolio and Initial Benchmark Report, filed Dec 15, 2009 (See Section 8.1, paragraph a).
- (C) = (A) * (B)
- (D) Represents the utility's costs incurred for self-directed mercantile applications for applications filed and applications in progress. Includes incremental costs of legal fees, fixed administrative expenses, etc.
- (E) This is the amount of the cash rebate paid to the customer for this project.
- (F) Based on approximate Administrator's variable compensation for purposes of calculating the UCT, actual compensation may be less.
- (G) = (D) + (E) + (F)
- (H) = (C) / (G)

Rexam Beverage Can Company ~ Whitehouse
Docket No. 12-0054-EL-EEC

Site: 10444 Waterville Swanton Road



Ohio Edison • The Illuminating Company • Toledo Edison

Mercantile Customer Program - Custom Project Rebate Calculator

Project Name and Number:	Compressor #5 Replacement (Proj #1)
Site Name:	Rexam Whitehouse
Completed by (Name):	Philip Laskowsky
Date completed:	9/16/2011

Energy Conservation Measure	Annual Energy Savings kWh	Eligible Prescriptive Rebate Amount kWh * \$0.08
Replacement of inefficient compressor with new one (direct kwh savings)	40,000	3200.00
New compressor allows plant to shut down less efficient compressor 22% of annual run time (indirect kwh savings)	445,280	35622.40
Total Project Energy Savings kWh	485,280	
Total Custom Prescriptive Rebate Amount \$		\$ 38,822.40

Notes about this rebate calculation:

See attached documentation for further details on energy savings calculations.

Rexam Whitehouse 2006 Compressed Air Supply Power and Volume

Average Conditions (Normal Demand - 7,007 scfm; Peak Demand - 7,627 scfm)

Expanded Capacity without Low Pressure System

Air Compressor	Normal Demand					Peak Demand				
	bhp	kW	scfm	% load	scfm /bhp	bhp	kW	scfm	% load	scfm /bhp
#1 ZR275	369	299	1495	100%	4.05	369	299	1495	100%	4.05
#2 32-450H	453	367	1938	100%	4.28	453	367	1938	100%	4.28
#3 ZR4-63	363	294	1522	100%	4.19	363	294	1522	100%	4.19
#4 ZR275	369	299	1495	100%	4.05	369	299	1495	100%	4.05
#5 ZT4B	206	167	559	47%	2.72	312	253	1178	99%	3.78
Totals	1,760	1,427	7,009		3.98	1,866	1,513	7,628		4.09

minimum of a 2000 acfm backup compressor must be purchased

Expanded Capacity with Low Pressure System

Air Compressor	Normal Demand					Peak Demand				
	bhp	kW	scfm	% load	scfm /bhp	bhp	kW	scfm	% load	scfm /bhp
#1 ZR275	369	299	1554	100%	4.21	369	299	1554	100%	4.21
#2 32-450H										
#3 ZR4-63	239	194	750	47%	3.14	331	269	1370	87%	4.13
#4 ZR275	369	299	1554	100%	4.21	369	299	1554	100%	4.21
#5 ZT4B										
new LP Cooper	530	430	3149	####	5.94	530	430	3149	####	5.94
Totals	1,507	1,222	7,007		4.65	1,600	1,297	7,626		4.77
			backup capacity	3,250				backup capacity	3,250	

Summer Peak (Normal Demand - 7,007 scfm; Peak Demand - 7,627 scfm)

Expanded Capacity without Low Pressure System

Air Compressor	Normal Demand					Peak Demand				
	bhp	kW	scfm	% load	scfm /bhp	bhp	kW	scfm	% load	scfm /bhp
#1 ZR275	369	299	1415	100%	3.84	369	299	1415	100%	3.84
#2 32-450H	453	367	1834	100%	4.05	453	367	1834	100%	4.05
#3 ZR4-63	363	294	1440	100%	3.97	278	226	925	64%	3.32
#4 ZR275	369	299	1415	100%	3.83	369	299	1415	100%	3.83
#5 ZT4B	274	222	903	80%	3.30					
new compressor						440	357	2038	100%	4.63
Totals	1,828	1,482	7,008		3.83	1,910	1,549	7,627		3.99
			backup capacity	2,261				backup capacity	1,642	

Expanded Capacity with Low Pressure System

Air Compressor	Normal Demand					Peak Demand				
	bhp	kW	scfm	% load	scfm /bhp	bhp	kW	scfm	% load	scfm /bhp
#1 ZR275	369	299	1415	100%	3.84	369	299	1415	100%	3.84
#2 32-450H	453	367	1834	100%	4.05	453	367	1834	100%	4.05
#3 ZR4-63	227	184	609	42%	2.69	329	266	1230	85%	3.74
#4 ZR275										
#5 ZT4B										
new LP Cooper	530	430	3149	####	5.94	530	430	3149	####	5.94
Totals	1,579	1,280	7,007		4.44	1,681	1,363	7,628		4.54
			backup capacity	3,372				backup capacity	2,752	

Project #1 – Compressor No. 5 Replacement

Project savings is composed of hard savings in electricity and soft savings of future cost avoidance of heat exchanger repairs.

Hard savings of electricity is derived from two areas: 1.) the new compressor output will allow the plant to shut down a less efficient compressor 22% of the annual run time. 2.) the new compressor, running the majority of the time, operates on 5.0 less kW than Whitehouse's current compressors.

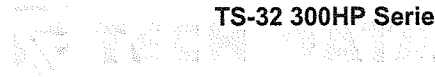
The below is summary of the electrical savings calculations:

Savings of Less Efficient Compressor	
Yearly Operating Hours	8,000
Percent of runtime of less efficient compressor	22%
Hours of Less Efficient Compressor	1,760
KW per hour	253.0
Annual Kwhs Savings	445,280
Cost/Kwh	\$0.0475
Annual Savings	\$21,151
Savings of New Compressor	
KWs Savings Per New Compressor	5.0
Annual Hrs	8,000
Annual Kwhs	40,000
Cost/Kwh	\$0.0475
Annual Savings	\$1,900
Total kWh Savings for Project #1	485,280



TS-32 Series, 300 HP—60 Hz Horsepower Rated

MODEL	300L	300H	300HH	300XH
Compressor Performance*				
Full Load Pressure - psig	100	125	150	175
Capacity at Full Load Pressure - acfm	1640	1440	1330	1240
Power at Full Load Pressure - bhp	331.0	320.0	324.0	322.0
Package kW Air-cooled	265.1	256.6	259.7	258.1
Package kW Water-cooled	256.7	248.1	251.3	249.7
Gear Ratio	1.04	0.91	0.84	0.79
Electrical Data (Typical) 460V				
Motor hp	300	300	300	300
Motor Nominal Efficiency	96.2%	96.2%	96.2%	96.2%
Nominal rpm	1800	1800	1800	1800
Frame Size ODP	447TSS	447TSS	447TSS	447TSS
Service Factor	1.15	1.15	1.15	1.15
Nameplate Amps	330	330	330	330
Lock Rotor Amps - Max.	2180	2180	2180	2180
Starter Size	600 AMP	600 AMP	600 AMP	600 AMP
Electrical Enclosure	NEMA 4	NEMA 4	NEMA 4	NEMA 4
Cooling Data				
Fluid Flow - gpm	68	75	81	87
Heat Rejection - Fluid Clr. - BTU/min.	11050	10948	11318	11397
Heat Rejection - Aft. Clr. - BTU/min.**	4297	3773	3485	3249
Air/Fluid Receiver				
Fluid Fill Capacity - U.S. Gal.	35	35	35	35
Volume - Cubic Feet Air (U.S.Gal.)	20 (150)	20 (150)	20 (150)	20 (150)
Rated Pressure - psig	160	160	210	210
Dimensions & Weights w/o Enclosure				
Length - inches	154	154	154	154
Width - inches	78	78	78	78
Height - inches	84	84	84	84
Weight - lbs. - Air-cooled	12670	12670	12670	12670
Weight - lbs. - Water-cooled	12160	12160	12160	12160
Discharge Connection - in. Flanged	3	3	3	3
Moisture Drain Connection - in. NPT	1/2	1/2	1/2	1/2
Dimensions & Weights w/Enclosure				
Length - inches	154	154	154	154
Width - inches	78	78	78	78
Height - inches	86	86	86	86
Weight - lbs. - Air-cooled	13270	13270	13270	13270
Weight - lbs. - Water-cooled	12760	12760	12760	12760
Discharge Connection - in. Flanged	3	3	3	3
Moisture Drain Connection - in. NPT	1/2	1/2	1/2	1/2



MODEL	300L	300H	300HH	300XH
dBa Ratings at 1 Meter (Typical)				
Air-cooled w/o enclosure	Consult Factory			
Water-cooled w/o enclosure	Consult Factory			
Air-cooled w/enclosure	Consult Factory			
Water-cooled w/enclosure	Consult Factory			
Remote Cooler Package	Consult Factory			
Water-cooled Series Flow (w/after-cooler)				
Flow at 80°F Water In - gpm	65	65	65	65
Pipe connection NPT - In/Out - inches	1 1/2 / 1 1/2	1 1/2 / 1 1/2	1 1/2 / 1 1/2	1 1/2 / 1 1/2
Max./Min. Water Pressure - psig	75 / 25	75 / 25	75 / 25	75 / 25
Water Outlet Temperature °F	105	105	105	105
Cooling Air Flows				
Air Flow Water-cooled Fan w/encl. - cfm	4150	4150	4150	4150
Water-cooled Vent Fan - hp	3/4	3/4	3/4	3/4
Air Flow Air-cooled Fan - cfm	26400	26400	26400	26400
Air-cooled Fan Motor - hp	10	10	10	10

Filter Rating

Inlet Air 99.9% Eff. Per SAE J726C

Main Lubricant Flow Beta 20 > 200 Per ISO 4572

*Capacity per CAGI / PNEUROP PN2CPTC2 (Annex C to ISO 1217.)

NOTE: Data subject to change without notice.

Sullair Corporation
3700 E. Michigan Blvd., Michigan City, IN 46360
Tel: 1-800-SULLAIR FAX: 219-874-1273
www.sullair.com



This document may not be reproduced or distributed without express consent from Sullair.

Two-Stage Rotary Screw Air Compressors

Constant Speed and Variable Speed Drives (VSD)
75-450 kW ■ 100-600 Horsepower



- Unparalleled energy efficiency and durability
- Energy savings up to 13% on full-load
- Energy savings up to 30% on part-load

Sullair Capabilities

Sullair Leadership

Since 1965, Sullair has been recognized around the world as an innovator and a leader in rotary screw compression and vacuum technology. For more than 40 years, Sullair has designed and manufactured its own rotors and air end assemblies at the corporate headquarters in Michigan City, Indiana.

The award-winning rotary screw design sets the industry standards and delivers the quality and reliability one expects from a leader.

Sullair Technology

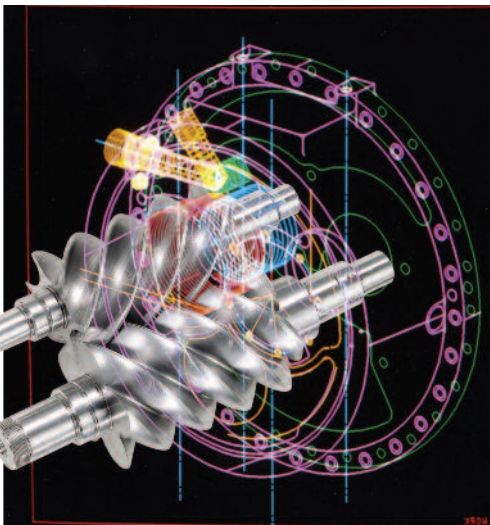
Utilizing the most modern technologies, equipment and advanced manufacturing techniques, Sullair designs, manufactures, assembles, and tests the most innovative compressed air and vacuum products in the industry. Sullair products are known around the world for their universally applicable design, outstanding craftsmanship and superior quality.

Sullair's Statistical Process Control

Sullair's Statistical Process Control (SPC) system monitors rotor quality standards to assure consistent compressor and vacuum performance.

Sullair's Commitment to Innovation

Underlying Sullair's leadership is a dedication to excellence and a commitment to innovation. Sullair is constantly exploring new ideas and seeking new ways to meet industry's need for increasingly energy efficient compressed air and vacuum solutions.



Sullair Stationary Air Power Systems

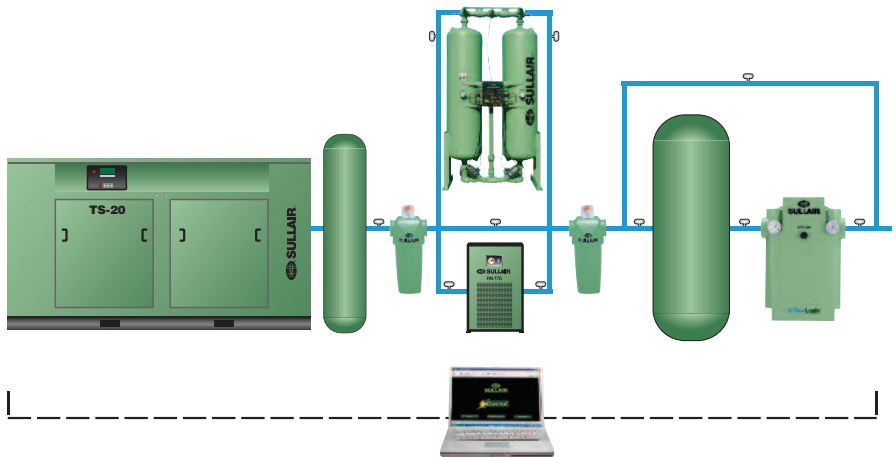
Sullair offers total compressed air systems to help compressed air users reduce energy costs and improve productivity by analyzing, managing and controlling their compressed air systems.

Sullair's air systems include: plant air audits, energy efficient products, compressed air system controls, equipment to monitor and manage systems, air distribution products, and after-purchase support.

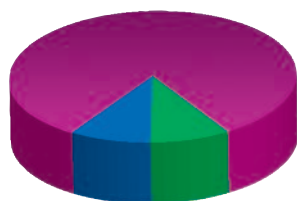
Each component of the system is carefully matched for capacity and pressure to provide maximum performance and energy efficiency. A total Sullair system provides the user with an air quality guarantee.

This System includes:

- rotary screw compressor
- desiccant or refrigerated dryer
- filters to meet your requirement
- flow controller
- ethernet-based eConnect™ to monitor and control the entire system



Sullair Reduces Your Life Cycle Costs



- Equipment
- Maintenance
- Electricity

Air Compressor Life Cycle Costs

According to *Best Practices for Compressed Air Systems*, Compressed Air Challenge, Second Edition, 2007, energy costs now

represent 82% of the total operating expenses. Energy savings from Sullair's Two-Stage Compressors can significantly reduce life cycle costs.

Sullair's two-stage compressors significantly reduce operating and energy costs over the entire compressor life cycle. Contributing to the energy savings are:

- Sullair's proven air end with the low restriction inlet valve
- High efficiency fan
- Low pressure drop air-fluid separation system to prevent energy loss

Sullair designs deliver cost savings for the life of the product. Improved air filtration translates into:

- Extended separator life
- Improved fluid filter life
- Less lubricant contamination

To reduce fluid disposal costs, we offer our biodegradable Sullube™ 8000-hour fluid, or 24KT™, a long-life fluid that never needs changing.

Advantage of Two-Stage Compression at Full-Load

Two-stage compressors* have a power advantage of 11 percent to 13 percent over equivalent sized single-stage compressors for two key reasons:

Compression is Divided Between the Two Stages

In a single-stage compressor operating at 100 psig at sea level, the compression ratio is 7.9 to 1 (in absolute terms). A two-stage compressor operating at the same pressure will have a compression ratio of 2.8 to 1 in each stage (2.8 is the square root of 7.9) achieving the compressor's power savings.

Internal Leakage Losses are Reduced

Reduced pressure difference across each stage facilitates reduction in leakage losses.

Sullair's Superior End-to-End Design

Sullair's TS two-stage tandem compressors use two sets of rotors arranged in a unique end-to-end design that achieve higher efficiencies than other two-stage rotor arrangements. This design is based on Sullair's proven technology used in its single-stage units, which has set the standards for efficiency and reliability in single-stage compressors for more than four decades.

The industry standard since its introduction in 1984, the TS Series tandem compressors offer unmatched full-load efficiency; often providing a two-year payback in energy savings compared with single-stage compressors. With the tandem's variable capacity control, featuring spiral valve technology,

further operating efficiencies can be achieved during part-load operation.

Rotary Screw Reliability

These TS models use a two-stage rotary screw air end, featuring Sullair's rugged bearing design: tapered roller bearings on the discharge end and cylindrical roller bearings on the inlet for high load carrying capacity.

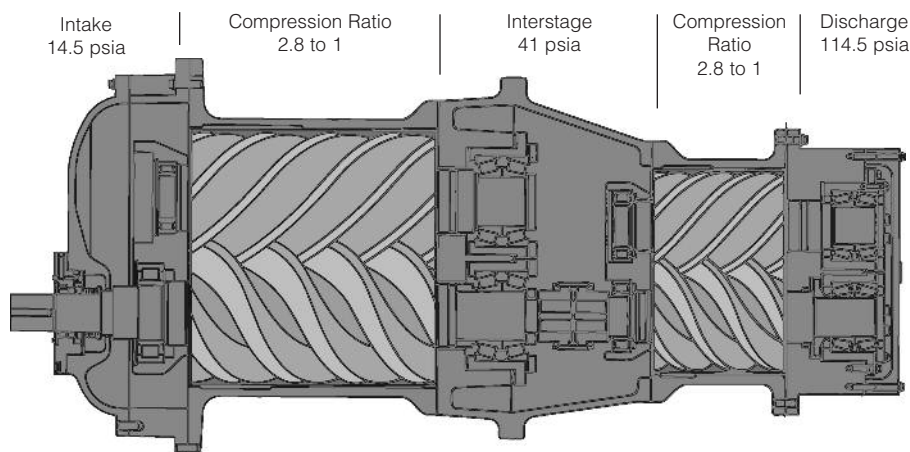
Extended Bearing Life

By dividing the compression ratio across two stages, the two-stage tandem will significantly exceed the life of the average single-stage compressor.

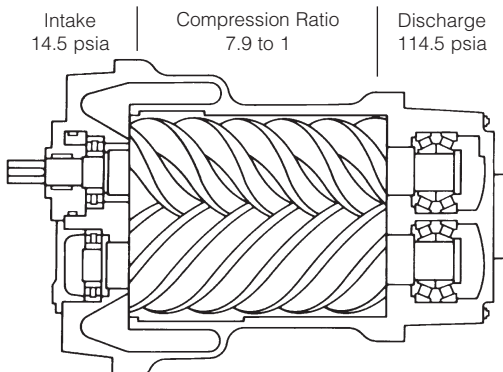


*Compressed Air and Gas Handbook, Sixth Edition.

Two-Stage

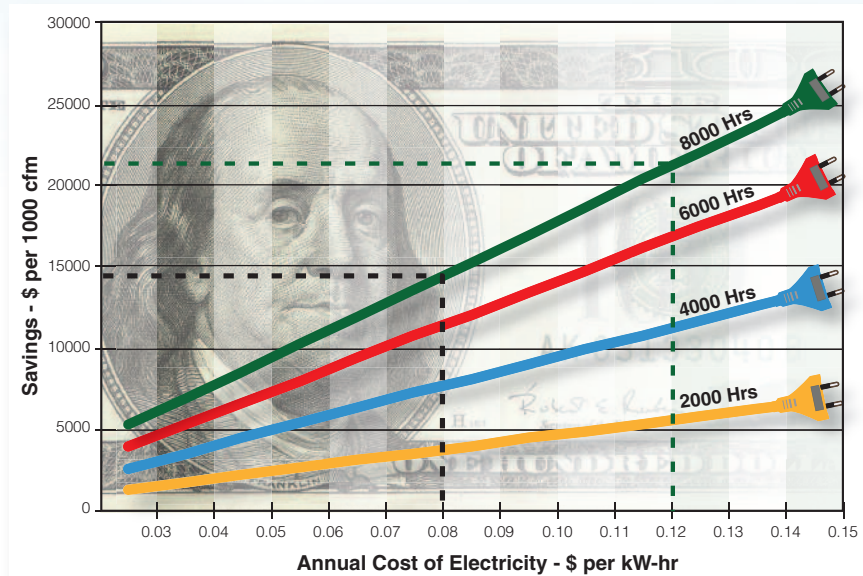


Single-Stage



Power Savings per 1000 cfm on TS-32

Energy Savings Two-Stage Over Single-Stage, Full-Load



Power Savings per 1000 cfm

Two-stage tandem vs. single-stage rotary screw at full-load. At a power cost of \$.08/kW/hr, the black dotted line shows that a tandem two-stage

compressor will save \$14,373 per 1,000 cfm over a single-stage compressor operating for 8,000 hours at 100 psig. At a power cost of \$.12/kW/hr, the green dotted line shows a saving of \$21,560 per 1,000 cfm over

a single-stage compressor operating for 8,000 hours at 100 psig. The savings will be significantly greater for higher capacity compressors.

The Reliable Sullair Air End

Decades of Proven Reliability are Testimony to the Quality of the Sullair Air End

Although the principle of rotary screw compression remains the same, Sullair is continually improving materials, engineering and design of its air ends and compressor packages.

No Loss of Capacity or Efficiency

Sullair air ends have only two moving parts: the asymmetrical profile rotors. Contact occurs only on a lubricated pitchline, so wear is virtually eliminated. As a result, Sullair compressors do not lose capacity or efficiency.

Longer Air End Life

Controlled pressure lubrication and Bearing Fluid Reservoirs (BFR) assure a reliable supply of fluid to rotating elements.

Lower Operating Costs

Discharge port matches ratios of volume and operating pressure for maximum efficiency. Axial air inlet avoids preheating inlet air for further savings.



The Sullair TS-20,

Multi-Stage Air-Fluid Separation

- Dual nested Optimizer™ separator elements, reduce fluid carryover to a maximum of 1 ppm
- Reduced carryover lowers make-up fluid costs
- Pleated Optimizer™ elements lower initial pressure drop for greater efficiency and extends element life
- Easy to change with built-in lid lifting device on models TS-32 and TS-32S



Optimalair™ Heavy-Duty Air Intake Filter

- Includes remote air intake connection
- Provides finest inlet filtration in the industry (0.4 microns using Fine Fiber Technology)
- Keeps fluid clean and extends life of other internal components
- Reduces pressure drop throughout the operating life, resulting in energy savings

Sullair Supervisor™ Controller

- Computer-compatible micro-processor controller has simple graphic illustration of monitored functions and an easy-to-read keypad
- Constant readout of pressure and temperature
- On-demand readout of all operating and maintenance conditions
- Monitors key functions and safety shutdowns
- Power failure auto re-start



Fiberglass Fluid Filter

- Aircraft-quality media provides better filtration
- Up to 20% more efficient than conventional paper elements
- Lengthens life of the compressor

Two-Stage Compressor Air End

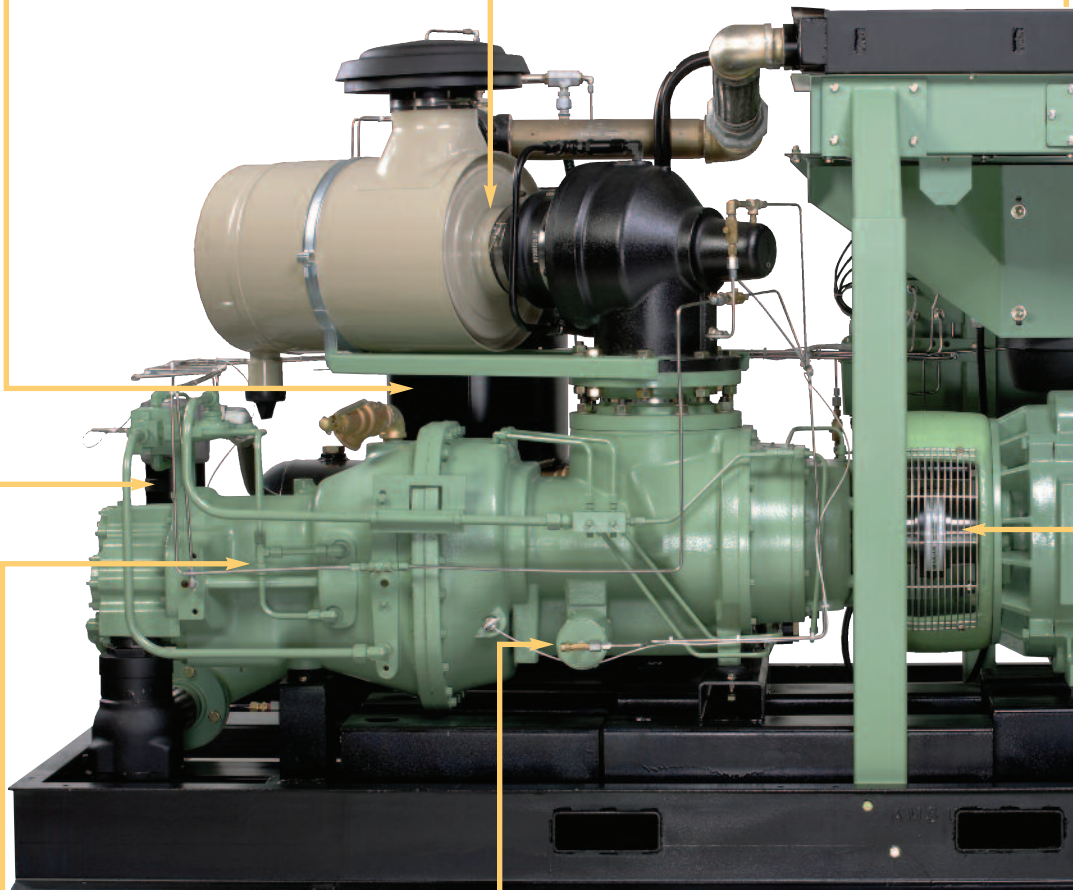
- Delivers more air
- Reduces power consumption
- Extends air end bearing life

Time Proven End-to-End Design

- Reduces pressure drop through stages
- Easier serviceability

Variable Capacity Control System Featuring Spiral Valve Technology

- Lowers part-load operating costs
- Reduces cycling duty on package
- Maintains consistent plant pressure
- Simple control
- Reduces bearing load



TS-32 and TS-32S

- Dual control, provides automatic start-stop operation
- Lead-lag and sequencing with multiple compressors
- Service and preventive maintenance schedule
- Hours are recorded for “Run”, “Loaded” and “Consumable Parts”
- Fault history with sensor readings
- “Help” key provides built-in troubleshooting



Easy Maintenance

- Access to all critical components even with a sound enclosure installed

NEMA 4

- Wye Delta starter for softer start
- Standard on TS-20, 250 hp and TS-32
- Optional on TS-20, 100 to 200 hp

Enhanced Serviceability for Air-Cooled Oil Cooler and Aftercoolers

- Easy to remove panels provide access for cleaning coolers



BEARING FLUID RESERVOIRS

Interstage Cooling Process

- Absorbs heat of compression
- Dramatically reduces power costs



INTERSTAGE COOLING PROCESS

Motor Coupled to Air End Through Non-Lubricated, Flexible Coupling

- Allows use of standard NEMA frame motor
- Simplifies installation and start-up

Select a Long-Life Fluid...

Sullube™ is Standard Factory Fill

- Five-year air end warranty
- Biodegradable
- One-year or 8000-hour service life
- Reduces fluid disposal costs

24KT™ is Optional

- Exclusive ten-year air end warranty
- Eliminates annual fluid changes
- Eliminates fluid disposal costs

Free fluid sampling and analysis program with either fluid.

Best Warranties in the Industry



Sullair's Emerald Five-Year Warranty

This unmatched warranty includes: the air end, motor, air-fluid receiver and cooler(s).



Sullair's 24KT™ Ten-Year Warranty

This unprecedented warranty includes: ten years on the air end, five years on the motor, air-fluid receiver and cooler(s).

The Sullair Two-Stage Tandem Compressor

Part-Load Savings

It's a fact: the electric power cost to run an air compressor continuously for one year is often two to three times greater than the purchase price of the compressor itself.

That's why Sullair developed the two-stage tandem compressor. By combining two-stage compression and a spiral valve, the TS performs with unmatched full-load and part-load efficiency and often provides a two-year payback in energy savings compared to a single-stage compressor.

Energy Savings Built In

Sullair two-stage tandem compressors have been proven to be 13% more efficient than single-stage screw compressors at full-load operation. At 60% load, the Sullair two-stage tandems provide up to 30% savings over single-stage compressors.

How It Works

The compression volume varies to suit the air demand by progressively opening or closing internal bypass ports on the air end.

Capacity is matched to system demand, reducing cycling time and extending component life.

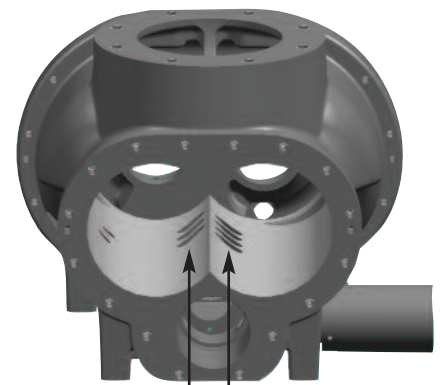
Part-load capacity and efficiency can produce energy savings up to 17%.

Variable Capacity Control Saves You Power

The compressor displacement is matched to the output need. The VCC technology assures precision operation for virtually any part load point. It provides significant power savings at part load conditions, compared to compressors using suction throttling, or load/no load control.

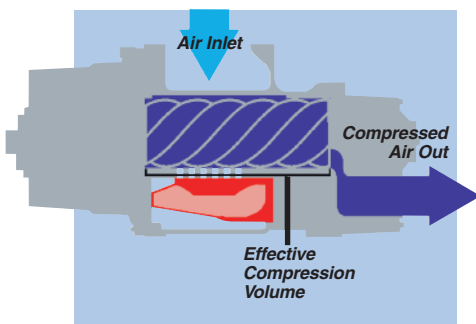
Increases Capacity Control Efficiency

By activating automatically when the unit is operating under partial load, and allowing the compression of only the required quantity of air, the spiral valve increases the efficiency of the compression process. The ultimate result is greater compression efficiency and reduced power consumption.

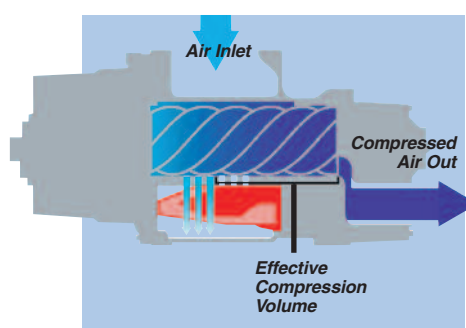


Rotors withdrawn to show bypass ports in stator.

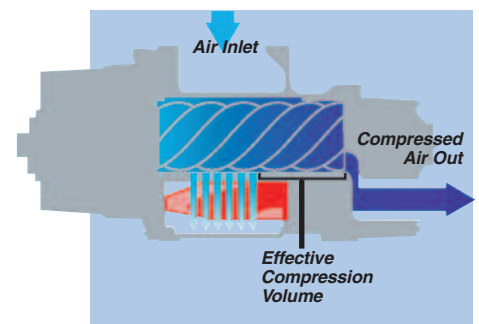
Closed Bypass Ports



Partially Open Bypass Ports



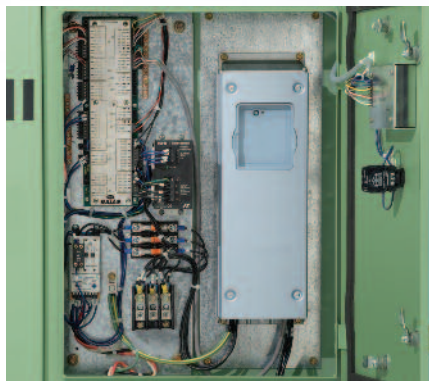
Open Bypass Ports



Sullair VSD Compressors with Smart Technology

Sullair Smart Technology Gives You

- Simplicity
- Reliability
- Flexibility
- System protection



Variable Speed Drive Avoids Potential Peak Demand Charges

The Sullair Two-Stage Series compressors provide the highest power factor over the entire frequency range, often avoiding utility company penalties.

Reliability

- Designed from the frame up as a complete package — not built with a variety of off-the-shelf components
- Serial communication between the Supervisor™ Controller and VSD eliminates the need for hard wired relays

Soft Start is Standard

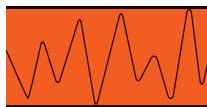
- Eliminate the need for Wye Delta and other soft starter
- Avoid high electrical current at start-up

Compressors with Sullair Smart Technology Provide:

- Excellent energy savings
- Relief from potential peak demand charges
- Alleviation from electrical harmonics
- Stable system pressure
- Consistent product quality
- Reduced storage requirements
- Flexibility for future growth
- Lowest five-year life cycle cost
- Potential utility company rebate

Variable Speed Drive is the superior alternative to other compressor control systems.

Stable system pressure improves the consistency of your process reducing product rejects. Maximizing energy savings means increased profits.



Conventional System Pressure



Sullair Smart Technology System Pressure

Energy Efficient

This compressor series is more energy efficient than similar compressors, thanks to:

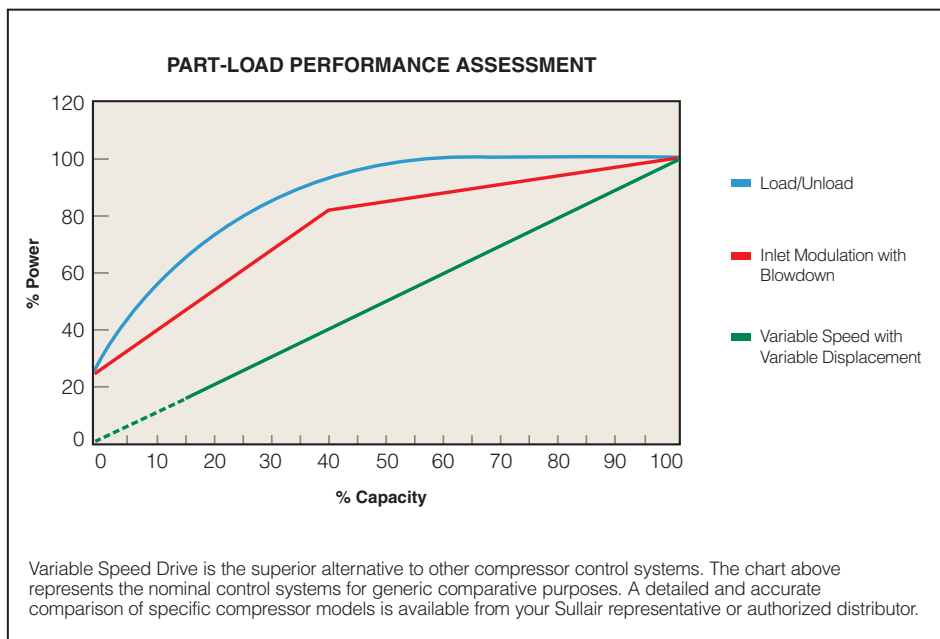
- Sullair's proven air end with low restriction inlet valve
- Optimized fluid system that reduces fluid temperatures
- Premium efficient motors
- Low pressure drop air-fluid separation system
- High efficiency fan

Considering that energy costs represent 82% of the total cost of owning compressors, these savings significantly reduce total life cycle costs.

Total Compressor Flexibility

Sullair's Variable Speed Drive provides the flexibility to vary both capacity and pressure. This flexibility makes it possible to "grow" your air system without adding another compressor.

It's the compressor for today, tomorrow, and the future.



Sullair Air Quality Guarantee



Two Levels of Air Quality

Sullair recognizes that the requirements for air quality vary according to each compressed air application. For this reason, Sullair provides compressed air systems that achieve two distinct levels of air quality and a guarantee for each.

Sullair Stationary Air Power System

The Sullair Stationary Air Power System matches a Sullair compressor, a Sullair dryer and Sullair filters. Sullair assures that its System will meet specific performance levels throughout its operational life. We offer a one-year test/review period, backed by a purchase refund guarantee, to verify the performance of the Sullair System.

Select the System

Select the air quality level to meet your plant air or process requirements. You can be assured that the quality of air from the Sullair System you specify will remain consistent for the life of the equipment. Sullair guarantees it... and that's as good as gold.

The Sullair Oil-Free Air Quality Guarantee

The System consists of a Sullair compressor, Sullair dryer, and Sullair filters. The compressed air from this system contains particulates no larger than .01 micron, including coalesced liquid water and lubricants.

Maximum remaining oil aerosol content is 0.01 parts per million by weight (ppm/w) @ 70°F, including oil vapor. The air from this Sullair System meets the most stringent ISO standard (ISO 8573.1, Class 1 for oil vapor and Class 2 for particulate) for air quality.

The Sullair Critical Air Quality Guarantee

The compressed air from this Sullair System exceeds the ISO standard (ISO 8573.1, Class 1 for oil vapor and Class 2 for particulate). The System includes a Sullair compressor, Sullair dryer, and Sullair filters. The odor-free compressed air from this system contains particulates no larger than 0.01 micron, including water and oil aerosol content of 0.01 parts per million by weight (ppm/w) @ 70°F. The remaining oil vapor content is less than 0.003 ppm/w.

To get more information on Sullair's Air Quality Guarantee, please contact your Sullair distributor.

These Systems are not intended to remove carbon monoxide, methyl isocyanate or other noxious, corrosive or toxic gases, vapors or fumes. The System does not provide breathing air.

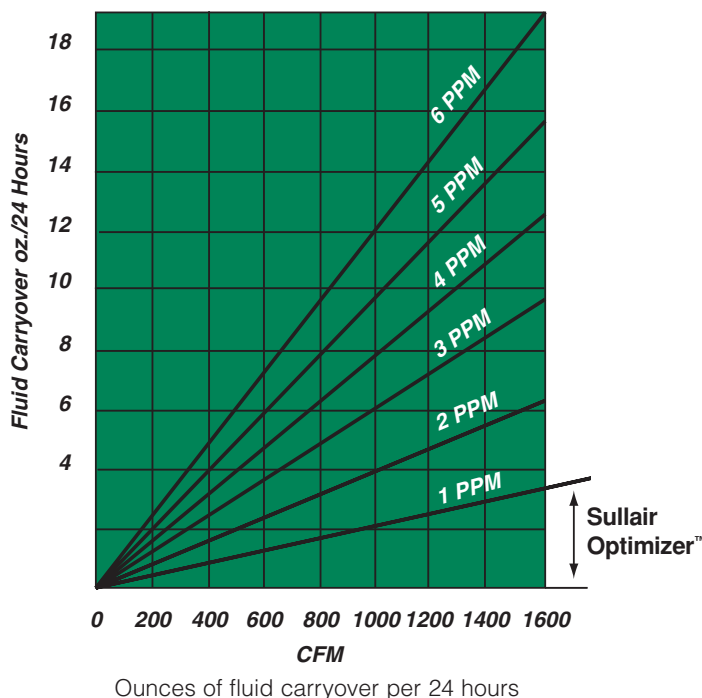
Air Quality Is One of the Best in the Industry

Lowest Fluid Carryover

While others claim a low carryover of 5 ppm or more, Sullair's single-stage compressors offer a carryover rate less than 1 ppm—the lowest in the industry. Sullair's MSS, Multi-Stage Separation, uses a sump design, which allows use of oversized dual nested separators.

Sullair Optimizer™ Air-Fluid Separator

A high efficiency separator that will pay for itself (during the life of the separator) in reduced compressor fluid carryover and electrical power consumption.



Technical Specifications: 60 Hz Horsepower Rated Two-Stage Compressors, 100 to 600 Horsepower

Constant Speed Drive Performance

Enclosed Dimensions and Weights

Model	Motor hp	Full-Load Capacity				Length in	Width in	Height in	Weight lbs
		acfm @ 100 psig	acfm @ 125 psig	acfm @ 150 psig	acfm @ 175 psig				
TS-20-100	100	575	500	—	—	120	72	68	7350
TS-20-125	125	680	615	575	500	120	72	68	7600
TS-20-150	150	826	763	680	616	120	72	68	7900
TS-20-200	200	1051	960	868	820	120	72	68	8100
TS-20-250	250	1200	1132	1035	960	120	72	68	8450
TS-32-200	200	1105	—	—	—	154	78	86	12480
TS-32-250	250	1335	1240	1100	—	154	78	86	12720
TS-32-300	300	1640	1440	1330	1240	154	78	86	13270
TS-32-350	350	1875	1733	1575	1440	154	78	86	13620
TS-32S-400	400	2220	1943	1681	—	175	84	92	15900
TS-32S-450	450	2350	2135	1943	—	175	84	92	15900
TS-32S-500	500	2530	2350	2220	—	175	84	92	16400
TS-32S-600	600	3000	2700	2530	—	175	84	92	16400

Variable Speed Drive Performance

Enclosed Dimensions and Weights

Model	Motor hp	Full-Load Capacity				Length in	Width in	Height in	Weight lbs
		acfm @ 100 psig	acfm @ 125 psig	acfm @ 150 psig	acfm @ 175 psig				
V-200TS-100	100	550	495	—	—	120	72	68	7675
V-200TS-125	125	680	606	550	515	120	72	68	7975
V-200TS-150	150	800	720	653	610	120	72	68	8375
V-200TS-200	200	1000	918	815	750	120	72	68	8550
V-320TS-200	200	1105	945	—	—	154	78	86	12480
V-320TS-250	250	1300	1180	1050	—	154	78	86	12720
V-320TS-300	300	1550	1400	1250	—	154	78	86	13270
V-320TS-350	350	1800	1645	1480	—	154	78	86	13620
V-320TS-400	400	2075	1870	1695	—	175	84	92	15900
V-320TS-450	450	2310	2100	1900	—	175	84	92	15900

24KT™ Models are available for 100 and 125 psig offerings.
Data subject to change without notice.

Sullair Supplies Compressed Air Systems

For the lowest total cost of ownership, Sullair provides an air system designed to lower operating cost, improve reliability and maximize return on investment.



Sullair offers air systems to help compressed air users reduce their energy costs and improve their productivity by analyzing, managing and controlling total compressed air systems. Information on the compressed air system tailored to your specific needs can be obtained by contacting your local Sullair Distributor. To acquire local distributor contact information visit us online at www.sullair.com or call 219-879-5451.



Sullair Corporation

3700 East Michigan Boulevard, Michigan City, IN 46360

Telephone: 1-219-879-5451

www.sullair.com

Sullair Corporation is a subsidiary of Hamilton Sundstrand Corporation, a United Technologies Company. (NYSE: UTX)

© Copyright 2011 Sullair Corporation. All rights reserved.

The color green is a registered trademark of Sullair Corporation.

Specifications subject to change without notice.

TS01E 1101R2.5



The paper used in printing this literature was manufactured using recycled fiber, either pre-consumer or post-consumer waste, therefore less harmful to the environment because less virgin fiber is used, thereby reducing tree harvesting, water usage, energy consumption, emission of greenhouse gases and pollution.



Mercantile Customer Project Commitment Agreement
Cash Rebate Option

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT ("Agreement") is made and entered into by and between The Toledo Edison Company, its successors and assigns (hereinafter called the "Company") and Rexam Beverage Can Co., Taxpayer ID No. 36-2241181 its permitted successors and assigns (hereinafter called the "Customer") (collectively the "Parties" or individually the "Party") and is effective on the date last executed by the Parties as indicated below.

WITNESSETH

WHEREAS, the Company is an electric distribution utility and electric light company, as both of these terms are defined in R.C. § 4928.01(A); and

WHEREAS, Customer believes that it is a mercantile customer, as that term is defined in R.C. § 4928.01(A)(19), doing business within the Company's certified service territory; and

WHEREAS, R.C. § 4928.66 (the "Statute") requires the Company to meet certain energy efficiency and peak demand reduction ("EE&PDR") benchmarks; and

WHEREAS, when complying with certain EE&PDR benchmarks the Company may include the effects of mercantile customer-sited EE&PDR projects; and

WHEREAS, Customer has certain customer-sited demand reduction, demand response, or energy efficiency project(s) as set forth in attached Exhibit A (the "Customer Energy Project(s)") that it desires to commit to the Company for integration into the Company's Energy Efficiency & Peak Demand Reduction Program Portfolio Plan ("Company Plan") that the Company will implement in order to comply with the Statute; and

WHEREAS, the Customer, pursuant to the Public Utilities Commission of Ohio's ("Commission") September 15, 2010 Order in Case No. 10-834-EL-EEC, desires to pursue a cash rebate of some of the costs pertaining to its Customer Energy Project(s) ("Cash Rebate").

WHEREAS, Customer's decision to commit its Customer Energy Project(s) to the Company for inclusion in the Company Plan has been reasonably encouraged by the possibility of a Cash Rebate.

WHEREAS, in consideration of, and upon receipt of, said cash rebate, Customer will commit the Customer Energy Project(s) to the Company and will comply with all other terms and conditions set forth herein.

NOW THEREFORE, in consideration of the mutual promises set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties, intending to be legally bound, do hereby agree as follows:

1. **Customer Energy Projects.** Customer hereby commits to the Company and Company accepts for integration into the Company Plan the Customer Energy Project(s) set forth on attached Exhibit 1. Said commitment shall be for the life of the Customer Energy Project(s). Company will incorporate said project(s) into the Company Plan to the extent that such projects qualify. In so committing, Customer acknowledges that the information provided to the Company about the Customer Energy Project(s) is true and accurate to the best of its knowledge.
 - a. By committing the Customer Energy Project(s) to the Company, Customer acknowledges and agrees that the Company shall control the use of the kWh and/or kW reductions

resulting from said projects for purposes of complying with the Statute. It is expressly agreed that Customer may use any and all energy related and other attributes created from the Customer Energy Project(s) to the extent permitted by state or federal laws or regulations, provided, and to the extent, that such uses by Customer do not conflict with said compliance by the Company.

- b. The Company acknowledges that some of Customer's Energy Projects contemplated in this paragraph may have been performed under certain other federal and/or state programs in which certain parameters are required to be maintained in order to retain preferential financing or other government benefits (individually and collectively, as appropriate, "Benefits"). In the event that the use of any such project by the Company in any way affects such Benefits, and upon written request from the Customer, Company will release said Customer's Energy Project(s) to the extent necessary for Customer to meet the prerequisites for such Benefits. Customer acknowledges that such release (i) may affect Customer's cash rebate discussed in Article 3 below; and (ii) will not affect any of Customer's other requirements or obligations.
 - c. Any future Customer Energy Project(s) committed by Customer shall be subject to a separate application and, upon approval by the Commission, said projects shall become part of this Agreement.
 - d. Customer will provide Company or Company's agent(s) with reasonable assistance in the preparation of the Commission's standard joint application for approval of this Agreement ("Joint Application") that will be filed with the Commission, with such Joint Application being consistent with then current Commission requirements.
 - e. Upon written request and reasonable advance notice, Customer will grant employees or authorized agents of either the Company or the Commission reasonable, pre-arranged access to the Customer Energy Project(s) for purposes of measuring and verifying energy savings and/or peak demand reductions resulting from the Customer Energy Project(s). It is expressly agreed that consultants of either the Company or the Commission are their respective authorized agents.
2. **Joint Application to the Commission.** The Parties will submit the Joint Application using the Commission's standard "Application to Commit Energy Efficiency/Peak Demand Reduction Programs" ("Joint Application") in which they will seek the Commission's approval of (i) this Agreement; (ii) the commitment of the Customer Energy Project(s) for inclusion in the Company Plan; and (iii) the Customer's Cash Rebate.

The Joint Application shall include all information as set forth in the Commission's standard form which, includes without limitation:

- i. A narrative description of the Customer Energy Project(s), including but not limited to, make, model and year of any installed and/or replaced equipment;
 - ii. A copy of this Agreement; and
 - iii. A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results.
3. **Customer Cash Rebate and Annual Report.** Upon Commission approval of the Joint Application, Customer shall provide Company with a W-9 tax form, which shall at a minimum include Customer's tax identification number. Within the greater of 90 days of the Commission's approval of the Joint Application or the completion of the Customer Energy Project, the Company

will issue to the Customer the Cash Rebate in the amount set forth in the Commission's Finding and Order approving the Joint Application.

- a. Customer acknowledges: i) that the Company will cap the Cash Rebate at the lesser of 50% of Customer Energy Project(s) costs or \$250,000; ii) the maximum rebate that the Customer may receive per year is \$500,000 per Taxpayer Identification Number per utility service territory; and iii) if the Customer Energy Project qualifies for a rebate program approved by the Commission and offered by the Company, Customer may still elect to file such project under the Company's mercantile customer self direct program, however the Case Rebate that will be paid shall be discounted by 25%; and
- b. Customer acknowledges that breaches of this Agreement, include, but are not limited to:
 - i. Customer's failure to comply with the terms and conditions set forth in the Agreement, or its equivalent, within a reasonable period of time after receipt of written notice of such non-compliance;
 - ii. Customer knowingly falsifying any documents provided to the Company or the Commission in connection with this Agreement or the Joint Application.
- c. In the event of a breach of this Agreement by the Customer, Customer agrees and acknowledges that it will repay to the Company, within 90 days of receipt of written notice of said breach, the full amount of the Cash Rebate paid under this Agreement. This remedy is in addition to any and all other remedies available to the Company by law or equity.

4. **Termination of Agreement.** This Agreement shall automatically terminate:

- a. If the Commission fails to approve the Joint Agreement;
- b. Upon order of the Commission; or
- c. At the end of the life of the last Customer Energy Project subject to this Agreement.

Customer shall also have an option to terminate this Agreement should the Commission not approve the Customer's Cash Rebate, provided that Customer provides the Company with written notice of such termination within ten days of either the Commission issuing a final appealable order or the Ohio Supreme Court issuing its opinion should the matter be appealed.

5. **Confidentiality.** Each Party shall hold in confidence and not release or disclose to any person any document or information furnished by the other Party in connection with this Agreement that is designated as confidential and proprietary ("Confidential Information"), unless: (i) compelled to disclose such document or information by judicial, regulatory or administrative process or other provisions of law; (ii) such document or information is generally available to the public; or (iii) such document or information was available to the receiving Party on a non-confidential basis at the time of disclosure.
 - a. Notwithstanding the above, a Party may disclose to its employees, directors, attorneys, consultants and agents all documents and information furnished by the other Party in connection with this Agreement, provided that such employees, directors, attorneys, consultants and agents have been advised of the confidential nature of this information and through such disclosure are deemed to be bound by the terms set forth herein.

- b. A Party receiving such Confidential Information shall protect it with the same standard of care as its own confidential or proprietary information.
 - c. A Party receiving notice or otherwise concluding that Confidential Information furnished by the other Party in connection with this Agreement is being sought under any provision of law, to the extent it is permitted to do so under any applicable law, shall endeavor to: (i) promptly notify the other Party; and (ii) use reasonable efforts in cooperation with the other Party to seek confidential treatment of such Confidential Information, including without limitation, the filing of such information under a valid protective order.
 - d. By executing this Agreement, Customer hereby acknowledges and agrees that Company may disclose to the Commission or its Staff any and all Customer information, including Confidential Information, related to a Customer Energy Project, provided that Company uses reasonable efforts to seek confidential treatment of the same.
6. **Taxes.** Customer shall be responsible for all tax consequences (if any) arising from the payment of the Cash Rebate.
7. **Notices.** Unless otherwise stated herein, all notices, demands or requests required or permitted under this Agreement must be in writing and must be delivered or sent by overnight express mail, courier service, electronic mail or facsimile transmission addressed as follows:

If to the Company:

FirstEnergy Service Company
 76 South Main Street
 Akron, OH 44308
 Attn: Victoria Nofziger
 Telephone: 330-384-4684
 Fax: 330-761-4281
 Email: vmnofziger@firstenergycorp.com

If to the Customer:

Rexam Beverage Can Co.
 8770 W. Bryn Mawr
 Chicago, IL 60631
 Attn: Gene Pawula-Director, Supply Chain
 Telephone: 773-399-3616
 Fax: 773-399-3216
 Email: gene.pawula@rexam.com

or to such other person at such other address as a Party may designate by like notice to the other Party. Notice received after the close of the business day will be deemed received on the next business day; provided that notice by facsimile transmission will be deemed to have been received by the recipient if the recipient confirms receipt telephonically or in writing.

8. **Authority to Act.** The Parties represent and warrant that they are represented by counsel in connection with this Agreement, have been fully advised in connection with the execution thereof, have taken all legal and corporate steps necessary to enter into this Agreement, and that the undersigned has the authority to enter into this Agreement, to bind the Parties to all provisions herein and to take the actions required to be performed in fulfillment of the undertakings contained herein.
9. **Non-Waiver.** The delay or failure of either party to assert or enforce in any instance strict performance of any of the terms of this Agreement or to exercise any rights hereunder conferred, shall not be construed as a waiver or relinquishment to any extent of its rights to assert or rely upon such terms or rights at any later time or on any future occasion.
10. **Entire Agreement.** This Agreement, along with related exhibits, and the Company's Rider DSE, or its equivalent, as amended from time to time by the Commission, contains the Parties' entire understanding with respect to the matters addressed herein and there are no verbal or collateral representations, undertakings, or agreements not expressly set forth herein. No change in, addition to, or waiver of the terms of this Agreement shall be binding upon any of the Parties unless the same is set forth in writing and signed by an authorized representative of each of the Parties. In

the event of any conflict between Rider DSE or its equivalent and this document, the latter shall prevail.

11. **Assignment.** Customer may not assign any of its rights or obligations under this Agreement without obtaining the prior written consent of the Company, which consent will not be unreasonably withheld. No assignment of this Agreement will relieve the assigning Party of any of its obligations under this Agreement until such obligations have been assumed by the assignee and all necessary consents have been obtained.
12. **Severability.** If any portion of this Agreement is held invalid, the Parties agree that such invalidity shall not affect the validity of the remaining portions of this Agreement, and the Parties further agree to substitute for the invalid portion a valid provision that most closely approximates the economic effect and intent of the invalid provision.
13. **Governing Law.** This Agreement shall be governed by the laws and regulations of the State of Ohio, without regard to its conflict of law provisions.
14. **Execution and Counterparts.** This Agreement may be executed in multiple counterparts, which taken together shall constitute an original without the necessity of all parties signing the same page or the same documents, and may be executed by signatures to electronically or telephonically transmitted counterparts in lieu of original printed or photocopied documents. Signatures transmitted by facsimile shall be considered original signatures.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized officers or representatives as of the day and year set forth below.

Rexam Beverage Can Co.
(Customer)

By: _____

GENE PAWULA

Title: _____

DIRECTOR

Date: _____

10/31/11

The Toledo Edison Company
(Company)

By: _____

John C. Quinn

Title: _____

V.P. Energy Efficiency

Date: _____

11-15-11

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

3/1/2012 11:18:54 AM

in

Case No(s). 12-0054-EL-EEC

Summary: Application to Commit Energy Efficiency/Peak Demand Reduction Programs of The Toledo Edison Company and Rexam Beverage Can Co. electronically filed by Ms. Jennifer M. Sybyl on behalf of The Toledo Edison Company and Rexam Beverage Can Co.