

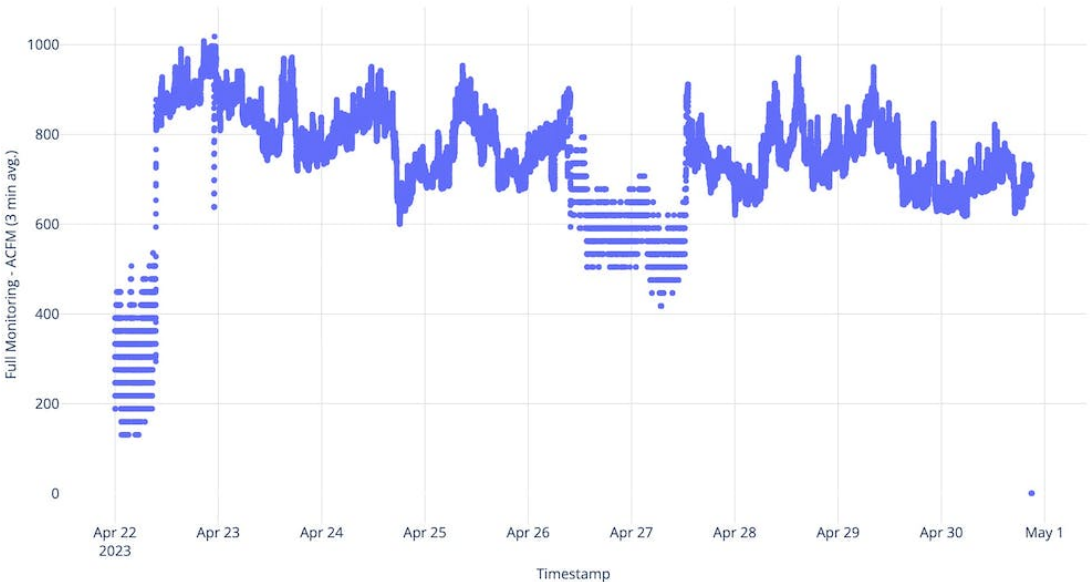
### 3.1 Energy Rates

Elec. - Demand Rate	\$	21.7	\$/kW - Winter (Dec - Feb)
Elec. - Demand Rate	\$	15.3	\$/kW - Spring (March-May)
Elec. - Demand Rate	\$	28.09	\$/kW - Summer (June-Aug.)
Elec. - Demand Rate	\$	15.3	\$/kW - Fall (Sept.-Nov.)
Elec. - Use Rate	\$	0.0565	\$/kWh On Peak
Elec. - Use Rate	\$	0.0565	\$/kWh Off Peak

### 3.2 Compressed Air Use Data

Data Summary	Schedule		Flow		Power	Pressure - PSIG	KPI
	Op. Period		ACFM Made	Hours/yr	kW	P1	kW/ACFM
	1	Weekdays uid	722	6240	143.6	91.6	0.199
	2	Weekends	734	2496	140.6	92.1	0.192
	Peak Demands		Make Air	Peak ACFM	Peak kW		
	15 Minute Peak		980		172.8	94.5	0.176
	10 Minute Peak		988			94.7	
	5 Minute Peak		994			95.1	
	3 Minute Peak		1018			95.4	
	2 Minute Peak		1023			95.5	
15 Minute Low		0		0			


ACFM Monitoring Period



### 3.3 Compressor Capacity

Capacity	100% Redundancy	134	ACFM
	100% Redundancy - 15m max	-112	ACFM
	100% Redundancy - 2m max	-155	ACFM
	Supply Capacity - 0% Redundancy	1371	ACFM

### 3. 4 System KPIs & Diagram

KPI's	Winter (Dec - Feb) Demand	21.7	\$/kW
	Spring (March-May) Demand	15.3	\$/kW
	Summer (June-Aug.) Demand	28.09	\$/kW
	Fall (Sept.-Nov.) Demand	15.3	\$/kW
	Blended \$/kWh	0.0565	\$/kWh
	Weekdays uid	722	ACFM
	Weekends	734	ACFM
	Utility peak CFM (15 min)	980	ACFM
	Header Pressure	91.6	psig
	Air Quality Rating	3.2.1	ISO 8573-1
	Average CFM 	726	ACFM
	Energy Peak	172.8	kW

4 Supply - Compressed Air Supply Equipment

4.3 Condensate Removal (Drains, Oil Water Separators)

Summary

Removing condensate from your compressed air system is important. There are a total of 2 drains in the supply system and they are inventoried in Table 4.3 below. Overall, you have some opportunity to improve your condensate removal system.

Table 4.3 - Condensate Drain Inventory

Drain #	Location	Installed	Working	Type	Bypass	Off (min)	On (sec)	Cost/yr	kW/yr	Recommendations
1	Compressor Room	AC1	Yes	OEM - Zero Loss Drain	No	0	0	\$0	0	Consider External No loss Drain with Bypass Valve
2	Compressor Room	AC2	Yes	OEM - Zero Loss Drain	No	0	0	\$0	0	Consider External No loss Drain with Bypass Valve

6 Demand - Usage Information

Summary

Type here...

Uses

Type here...

6.1 Leak Detection - Ultra Sonic

Summary

Type here...

ards

Type here...

Type here...

Volume of Leaks Found: 6 ACFM

Number of Leaks Found: 3

Leak Repair Cost Savings: \$9,943 \$/yr 100% repaired

## 7 Baseline & Proposed Operations ↺

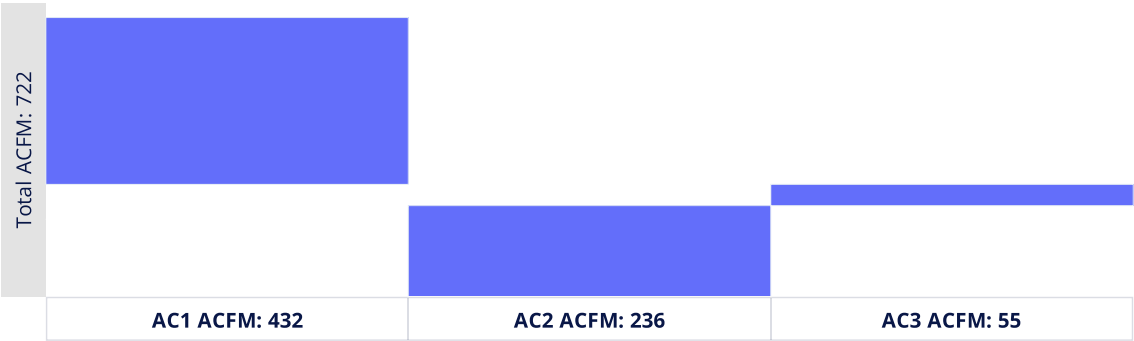
7.1 Baseline Annual Operation Detail

"Make" Air Flow		Pressure	Hours	kW Demand		kWh		Cost to Operate	Off (min)	On (sec)	Cost/yr	kW/yr
Recommendations												
1	Compressor Room	AC1	Yes	OEM - Zero Loss Drain	No	0	0	\$0	0	Consider External No loss Drain with Bypass Valve		
2	Compressor Room	AC2	Yes	OEM - Zero Loss Drain	No	0	0	\$0	0	Consider External No loss Drain with Bypass Valve		

### 7.2 Compressor Run Schedule with all compressors working and online

					15 Minute Peak			2 Minute Peak		
Weekdays...	Control Type	kW	%Flow	ACFM	kW	%Flow	ACFM	kW	%Flow	ACFM
Model	OLOL		99%	432	82	100%	434	82.4	100%	434
modelvfd	VFD		47%	236	79.8	99%	498	86.5	109%	546
modelac3	OLOL		13%	55	92.6	100%	434	92.8	100%	434
Total				722	254.3		1366	261.6		1414

Weekdays uid



### 7.3 Compressor Run Schedule with all compressors working and online

					15 Minute Peak			2 Minute Peak		
Weekends	Control Type	kW	%Flow	ACFM	kW	%Flow	ACFM	kW	%Flow	ACFM
Model	OLOL		93%	403	80.7	100%	434	81	100%	434
modelvfd	VFD	53	61%	306	90	113%	571	92.8	118%	591
modelac3	OLOL	7.8	6%	25	80.1	75%	324	90	100%	434
Total				734	250.8		1329	263.8		1459

Weekends



Total			
	AC1 ACFM: 403	AC2 ACFM: 306	AC3 ACFM: 25

# Appendix

## A Energy Rates & Operational Hours

Elec. - Demand Rate	\$	21.7	\$/kW - Winter (Dec - Feb)
Elec. - Demand Rate	\$	15.3	\$/kW - Spring (March-May)
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Elec. - Use Rate	\$	0.0565	\$/kWh On Peak
Elec. - Use Rate	\$	0.0565	\$/kWh Off Peak

\*These rates are provided by and do not include sales tax, fuel clause adjustment factors, along with other riders and fees. You realized savings typically will be higher than stated in the report.

### System Operational Information

1 Weekdays uid	6240	hr/yr
2 Weekends	2496	hr/yr
Total	8736	hr/yr

## B Equipment Details

HRS	Nameplate HP	Compressor #	Make / Age	Model Number	BHP	kW at Full Load	Type	Flow ACFM	PSI Rating	Yr
83,000	100	AC1	Make	Model	125	93.3	Oil Flooded, OLOL, Rotary Screw, Air Cooled, Fan Motor HP = 3	434	125	2003
60,000	100	AC2	Makevfd	modelvfd	125	93.3	Oil Flooded, VFD, Rotary Screw, Air Cooled, Fan Motor HP = 3	503	125	2016
80,000	100	AC3	Make	modelac3	125	93.3	Oil Flooded, OLOL, Rotary Screw, Air Cooled, Fan Motor HP = 3	434	125	2003
Total / Max / Min			n/a	n/a	375	279.75		1,371	125	

Filters #	Make of Filter	Model Numbers	Type	Micron Rating	SCFM Rating
AF-01	AC	PD+210	Coalescing	0.01	445
AF-01	AC	PD+210	Coalescing	0.01	445

Dryers #	Make	Model Numbers	Capacity (SCFM)	Technology	Type (If Desiccant Dryer)	Control	Full Load kW
1	Atlas Copco	0	500	Refridgerated	0	Non-Cycling	3.09

Storage Tank #	Size in Gallons	Storage Type (Wet or Dry)	Location
DT1	1040	Dry	Compressor Room

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### C Leak Log

Work...	Location	Note	Flow...	Fixed
1	Dryer #6	On the regulator near the...	5	no
2	Dryer #5	asdIkfhba nsdkl lakjd ;sak	1	no
3				no

<b>Total 6 CFM</b> <b>Percentage of Load to Tagged Leaks 11%</b> <b>Percentage of repaired Volume: 0%</b>
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