

PULSE REPORT

May/ June

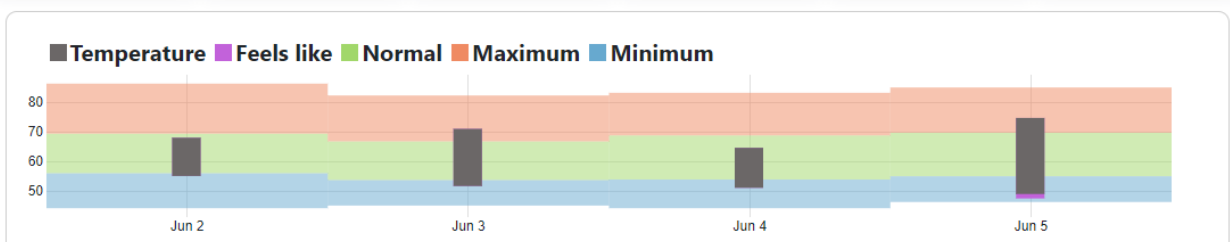
Generic Production Facility Inc.



Executive Summary

The following report details the performance of 3 units servicing the GPF building in May and June. This facility has a machining room with a high heat load, as well as a critically controlled space that needs to maintain low temp and low humidity or they will lose their product. Currently, the roof units work together to maintain the critical space and the ground unit takes care of the machining room.

This facility operates M-F 5:00a.m. - 10:00p.m. The observations are derived by analyzing the telemetry data and graphs on the nClarity dashboards; also rolled up into a higher level overview, shown as a 'grade'. This report can be used as a template for your own data review, or can be edited to be shared with your client at whatever level of detail you wish to share.



RTU Scorecard

This is a high level summary of the units as well as an overall simplification of the units performance.

RTU Status	Efficiency	Performance	Space Temp Control
Ground Unit 1	Green	White	Green
Rooftop Unit 2A	Green	Red	White
Rooftop Unit 2B	Red	Red	Red

Grading system:

Electrical Consumption evaluation

- Run time (peak/ off peak)
- Run time- ability to satisfy the envelope with current load
- Unit performance within the RLA design

Refrigeration Design

- pressure range
- ΔT
- ΔH
- Cycling of compressor(s)
- High amp spike frequency of the units.

Unit ability to Satisfy Demand

- Run time- ability to satisfy the envelope with current load
- Unit satisfies $\Delta T/ \Delta H$ within first stage of cooling based on load
- Unit satisfies $\Delta T/ \Delta H$ within first stage of cooling based on load

Ground Unit 1

Pulse ID: XXXXX

Profile: Machining area- 25 ton package unit (1 compressor, R410A)

Period: June

Weather: Cool and Dry

Assessment

Approximate run time:

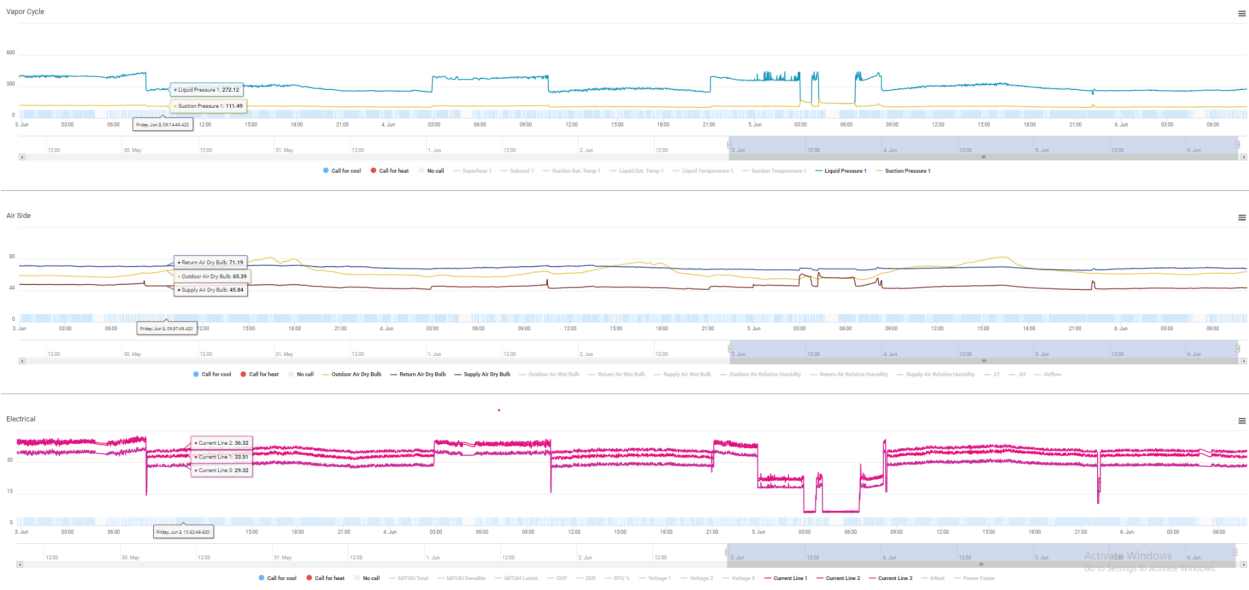
Operation	Weekday	Weekend	Unit Setback?	Temp. setpoint
IFM	24hrs/day	24hrs/day	Fan ON	1 st Shift: 65°F
Cooling	24hrs/day	24hrs/day	NO	2 nd Shift: 65°F
Heating	NA	NA	NA	3 rd Shift: 65°F

Temp and humidity split between supply and return:

ΔT Cool Mode	ΔT Heat Mode	ΔH Cool Mode	ΔH Heat Mode
25°F	NA	12°F ^{WB}	NA

Observations:

1. Economizer seems to be operating.
2. Fan is always on
3. Pressures seem high for outdoor temp
4. On cool dry days, unit is pulling 40A- RLA is approx 37.5



Rooftop Unit 2A

Pulse ID: XXXXX
 Profile: Critical Production Space- 7.5 ton package unit (1 compressor, R410A)
 Period: May
 Weather: Hot and Humid with a small thunderstorm

Assessment

Approximate run time:

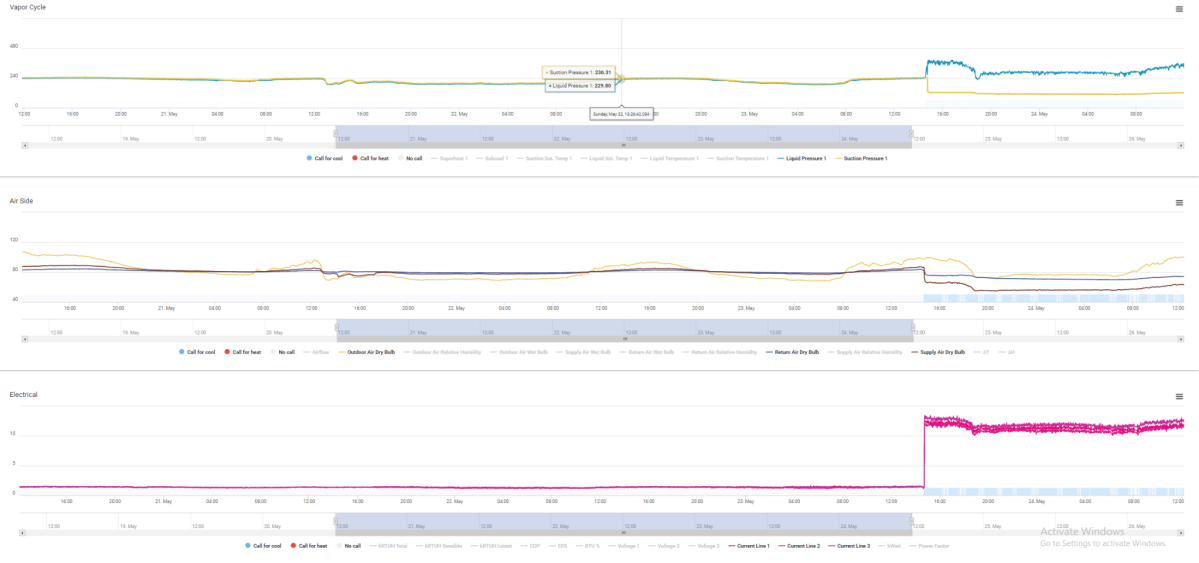
Operation	Weekday	Weekend	Unit Setback?	Temp. setpoint
IFM	24hrs/day	24hrs/day	Fan ON	1 st Shift: 65°F
Cooling	24hrs/day	<1hr	Weekend "off"	2 nd Shift: 65°F
Heating	NA	NA	NA	3 rd Shift: 65°F

Temp and humidity split between supply and return:

ΔT Cool Mode (system only 1 stage)	ΔT Heat Mode	ΔH Cool Mode	ΔH Heat Mode
9°F day/ 15°F night	NA	2°F ^{WB} day/ 7°F ^{WB} night	NA

Observations:

1. Fan always on
2. Has weekend setback
3. Does not have nightly setback
4. Unit is not able to properly cool the space unless ODB drops below 70 degrees
5. short cycles compressor below 70 degrees- 5-10 off, runs High amps (≈23A) for about 3-5 minutes, drops to 10 amps



Rooftop Unit 2B

Pulse ID: XXXXX

Profile: Critical Production Space- 10 ton package unit (2 compressor, R410A)

Period: May

Weather: Hot and humid with a small thunderstorm

Assessment

Approximate run time:

Operation	Weekday	Weekend	Unit Setback?	Temp. setpoint
IFM	24hrs/ day	24hrs/ day	Fan ON	1 st Shift: 60°F
Cooling	24hrs/ day	24hrs/ day	NO	2 nd Shift: 60°F
Heating	NA	NA	NA	3 rd Shift: 60°F

Temp and humidity split between supply and return:

ΔT Cool Mode	ΔT Heat Mode	ΔH Cool Mode	ΔH Heat Mode
12°F-13°F	NA	5°F ^{WB}	NA

Observations:

- Both stages are constantly running, even when conditioned space is returning 65 degree air
- CT 1 and CT 2 are reading 48A, CT 3 reads 13A **inspect immediately!** (note; tech believes it may be reheats activating, following up)
- No apparent schedule or setback

