



SUCCESS STORY

GOLDEN GATE MEAT CO.

WHAT THEY NEEDED:

Golden Gate Meat Co., a USDA-certified meat-processing facility, was in the market for tools and measures that provided noticeable enhancements for their refrigeration systems.

First and foremost, they wanted comprehensive equipment monitoring and alerts for obvious food safety reasons. They couldn't afford to lose an entire facility's worth of product because a refrigeration issue wasn't obvious to the naked eye. They were also tired of common issues like their evaporator coils icing up forcing them to make unscheduled maintenance calls.

Because their customers demand the highest level of quality, having the highest level of control over their temperatures was of paramount importance. So they were also on the hunt for a set of controls that adapted their cooling to their specific, unique needs.

And lastly, they were looking for something that could incorporate their refrigeration systems into their aggressive, company-wide energy conservation plan.

WHAT NRM PROVIDED:

With one solution, NRM was able to help Golden Gate Meat Co. achieve all of their refrigeration goals. And because of the retrofit nature of the solution, they didn't have to replace any of their existing equipment aside from evaporator fan motors, which were upgraded to high-efficiency models.

The monitoring platform provided the management team the exact type of oversight they were looking for. Not only could they now assess when and where an issue occurred with the platform's visual diagnostics for speedy troubleshooting, the instant email and text notifications became a lifesaver, empowering them to address a problem before it became a catastrophe.

Through the same dashboard as the diagnostics and notifications, the management team now had both live and historical temperature data at their fingertips whenever they needed it. They gained the ability to change temperatures on-the-fly if they needed to, or instantly start a defrost from their phone if their coils were icing up.

And by optimizing the system to ensure cooling only initiated when it was needed, Golden Gate Meat Co. was able to drastically cut their system runtimes, which in turn reduced the amount of energy it consumed. This translated into actual money in their pockets with a lower commercial electric bill.



SOLUTION SNAPSHOT

Industry:

Meatpacking & Distribution

Location:

Richmond, CA

Implemented Measures:

Remote Site Manager™

CoolTrol® (on-site smart controls)

Smart Electric Defrost

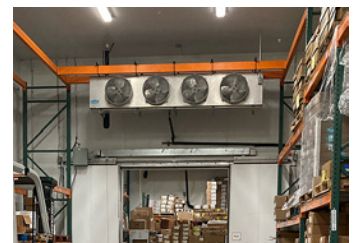
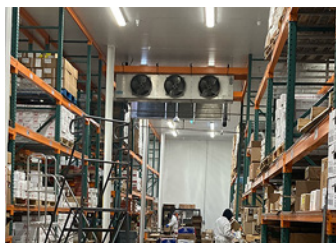
Actionable Alerts

Annual Energy Savings (Combined):

90,300 kWh

Annual \$ Savings (Combined):

\$14,500





“ The ability to change temperatures and start defrosts from my laptop or phone is very convenient. Additionally the monitoring and alarms have been a life saver. Not only in protecting tens of thousands of dollars in product but also helping to troubleshoot refrigeration issues that arise as equipment ages. Like all things mechanical, our refrigeration will fail someday. I sleep better knowing that when it does, NRM will sound the alarm to notify us. We use the system daily and have recommended it to others in the business.”

– Justin Offenbach, Owner

| NRM CoolTrol MC Series 4 | | | Temperature °F | | | | | | Status | | | | Amps | Starts 24 Hr. | | | % Run 24 Hr. | | | % Run 7 Days | | |
|--------------------------|--------------|--------|----------------|------|-----|-----|----|------|--------|-------|-----|-----|------|---------------|------|-----|--------------|------|------|--------------|------|------|
| Description | Notes | Status | Space | Evap | 3rd | Dif | SP | 24hr | Mode | Dfrst | Sol | Fan | Comp | Sol | Comp | Fan | Sol | Comp | Fan | Sol | Comp | Fan |
| Dry Age Cooler | CU1 Elec Def | | 33 | 31 | | 3 | 33 | 34.3 | Run | Off | Off | On | 0.1 | 25 | 41 | 73 | 14.1 | 11.3 | 45.1 | 14 | 12.3 | 45.5 |
| Freezer | CU3 Elec Def | | 16 | 9 | | 3 | 8 | 14.8 | Run | Off | On | On | 15.4 | 11 | 11 | 22 | 59.1 | 59.3 | 63.3 | 54.2 | 54.5 | 61.2 |
| Hanging Room | CU1 Air Def | | 33 | 32 | | 3 | 33 | 34.4 | Run | On | Off | On | 0.1 | 12 | 33 | 72 | 14.1 | 14.7 | 45.5 | 13.7 | 14.4 | 44.6 |
| Main Cooler Z1 Prod Side | CU4 Elec Def | | 34 | 33 | 32 | 3 | 33 | 34.5 | Run | Off | Off | On | 0.1 | 9 | 16 | 89 | 15.9 | 16.1 | 39.8 | 18 | 18.2 | 40.9 |
| Main Cooler Z2 Ship Side | CU4 Elec Def | | 36 | 33 | 33 | 3 | 33 | 34.5 | Run | Off | On | On | 19.9 | 6 | 20 | 95 | 10.6 | 10.9 | 36.4 | 8.1 | 8.2 | 34.3 |
| Poultry Cooler | CU1 Elec Def | | 33 | 33 | | 3 | 32 | 33.3 | Run | Off | Off | Off | 0.1 | 4 | 14 | 110 | 2.5 | 2.6 | 25.1 | 3.3 | 3.5 | 25.7 |
| Production | CU3 Air Def | | 37 | 27 | 31 | 4 | 35 | 45.6 | Run | Off | On | On | 26.4 | 5 | 8 | 5 | 20.9 | 21.4 | 26.1 | 14.5 | 14.9 | 18.3 |
| Receiving Cooler | CU2 Air Def | | 52 | 52 | 52 | 4 | 45 | 55.2 | Bypass | | | | -0.6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Roll Stock Cooler | CU | | | | | | | | | | | | | | | | 17.9 | 17.9 | 24.8 | 13 | 13 | 17.6 |
| Shipping Cooler | CU | | | | | | | | | | | | | | | | 0 | 25.4 | 0 | 0 | 20.8 | 0 |

Prior to NRM’s solution, the evaporator fansets ran 100% of the time. By optimizing the system to only run when needed to satisfy temps, runtimes were drastically reduced. This translated into massive energy savings.

OPTIMIZATION BENEFITS



SMART CONTROLS



24/7 MONITORING



PREDICTIVE DIAGNOSTICS



IMPROVED EFFICIENCY



ENERGY SAVINGS



EQUIPMENT ALARMS

40K

COOLERS & FREEZERS OPTIMIZED

1.5B

KWH IN ENERGY SAVED

20+

YEARS PROVIDING SOLUTIONS

40%

AVERAGE REDUCTION IN ENERGY USE

WHAT SETS NRM APART? Our small-business approach to big-business problems. Each of our sales, support, and installation teams are comprised of in-house, licensed NRM employees. Our hardware and software are designed, tested, manufactured in, and shipped from our Canton, MA-based facility.

The implementation of NRM’s solution is a true turnkey process and requires “zero finger lift” from you. With transparency and courteousness, we manage the project from idea to install. First, an Energy Advisor comes on-site to identify the areas to benefit from optimization, and then our team of engineers develops a custom outcome for your business. We also look for any utility-sponsored incentives to reduce the upfront cost of the project. The physical installation can be performed without interrupting your normal business operations, and all of our installers are factory-trained technicians. NRM is always here for training and support, with a 24/7 technical help line.