

Forward-Thinking Five Guys Franchise Sees Big Savings in Energy Efficiency with Upgrades to HVAC Motors

Five Guys built its reputation serving fresh burgers cooked on a grill along with fries cooked in pure peanut oil. With close to 1500 locations and hundreds of franchises, it has earned a loyal following around the world. They are committed to providing great food, a great customer experience, and a great place for employees to work. Their results speak for themselves. Forbes has, at various times, named Five Guys as the fastest growing restaurant chain and America's favorite burger chain. It has also been listed on Forbes Best Employers list.

It's no surprise then that Five Guys franchise owners would be on the forefront of sustainability for quick-service restaurants (QSRs). According to Technomic survey results not only do 79 percent of customers report that they prefer dining at green restaurants, 78 percent of employees report that they would be more excited to work at one.

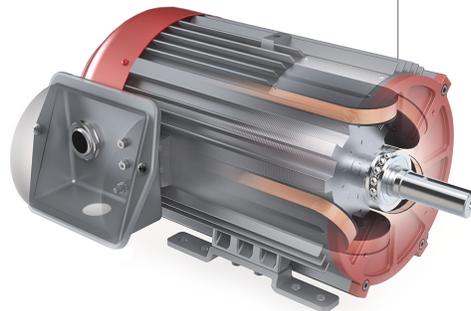
The Challenge

Energy efficiency is a key component of cost-effective and sustainable operations. QSRs are some of the most energy-intensive buildings in the US. LED lighting and building envelope play a role in efficiency but HVAC has by far the biggest impact - composing upwards of 20-30 percent of total utility expenses and playing a major role in customer comfort.

In a business that operates long hours at a low margin, reducing HVAC energy use can have a big impact on the bottom line and the environment. The challenge is balancing energy efficiency with customer and employee comfort. Energy solutions must not effect the system's ability to minimize food odors and smoke from cooking, manage kitchen temperatures, and maintain good air quality and temperature in the dining area.

The Solution

To address this complex set of needs, Five Guys Franchise Owner Neal Starling - Gold Valley Development DBA Five Guys, chose to retrofit two existing RTU motors with two SMC Smart Motor Systems at a site in Montgomery, AL. With its ultra-high efficiency and inherent intelligence, the SMC Motor System enables nimble operation that only uses energy when needed as well as insights into overall energy use.



Profile

One of America's fastest growing burger restaurants known for their freezer-free restaurants, fresh ingredients, cult following, and great workplace.



Building Square Footage:
2,000 sq. ft.



2 RTU HVAC System
Motor Replacements

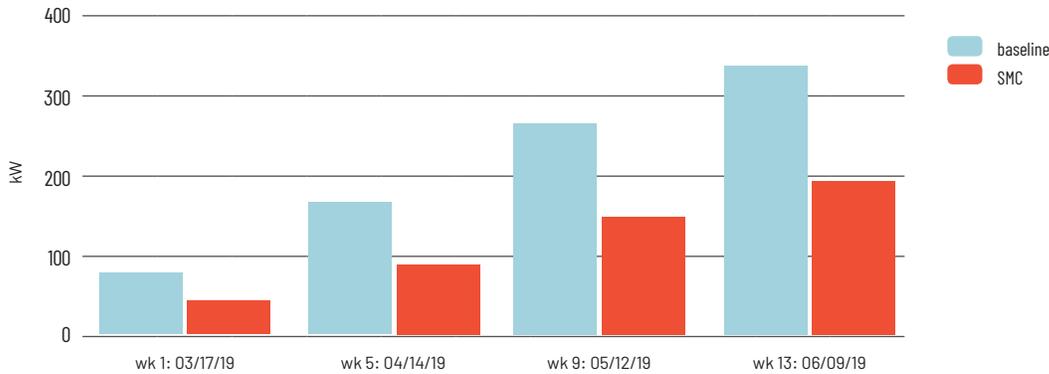


SMC SMART MOTOR
SYSTEM SIZE
(2) 3 HP

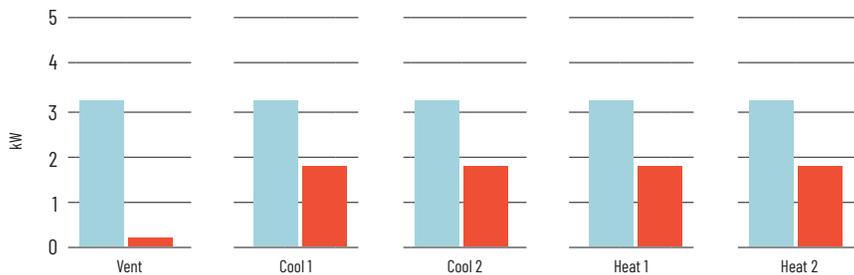
Results

After four weeks of M&V to establish a baseline, the SMC Motor Systems were installed. Since the retrofit, Five Guys has decreased energy consumption an average of 70 percent. This decrease has not impacted the comfort and safety of customers or employees but will have an impact on energy bills and the environment.

SMC POWER DRAW VS. BASELINE (ALL MOTORS)



SAVINGS BY MODE (ALL MOTORS)



ROI

Price	\$3,600
Savings	\$2,300
Payback	1.6 Years

Savings

\$2.3k

COMBINED ANNUAL SAVINGS GAINED BY INSTALLING OPTIMAL EFFICIENCY MOTORS

70%

kWh SAVINGS ANNUALLY FROM COMBINED RETROFITS OF THE TWO RTUS

1.6

YEARS TO RETURN ON INVESTMENT



The Silicon Valley based Software Motor Company is setting a new standard of efficiency, reliability, and intelligence with the SMC Smart Motor System. SMC combines modern computing and software control with the proven reliability of switched reluctance motor technology to achieve an unprecedented optimal efficiency. The patented SMC Smart Motor System only uses energy when it is needed, thereby significantly reducing space conditioning and refrigeration energy costs. A fully programmable IoT controls package facilitates maintenance savings and easy integration with existing building systems.

POWER IS VALUABLE. USE IT INTELLIGENTLY.

© Software Motor Company. All rights reserved. July 2019v1