

Case Study

Energy Consumption Project

Background

Our client is one of the largest manufacturers of domestic cooking appliances across the globe and holds a significant global market position in domestic appliances, cooling, ventilation, and renewable energy solutions.

Challenge

Following the challenging climate throughout the COVID-19 pandemic and other contributing factors, the resulting energy crisis resulted in our client seeing huge increases in their energy costs, requiring urgent action to mitigate and remain profitable.

Solution

Manufacturing electrical cooking and heating appliances requires enamelled parts to pass through extremely hot furnaces which were the main consumers of the site's energy flow.

With demand fairly consistent, the solution was simple; manufacture the same amount of units with less asset operational time. This would enable energy-hungry assets to be shut off sooner releasing the financial benefits.

The project required an initial process analysis phase to understand the current throughput rates and the bottlenecks impacting performance. With this completed by the end of week one, actions were identified and agreed with the client on how to remove these bottlenecks on the priority lines. Solutions included area workflow redesign, line labour balancing and several identified engineering fixes.

With speed of the essence to begin to combat the hiked energy rates, the remainder of the engagement was action-focussed and required overall project governance to drive through the agreed changes to the deadlines.



Results

>
36%

A 36% increase in throughput on enamelling lines

380K

Over £380k annualised energy savings implemented within the 6 week period



50% reduction in shift hours



Initiation of a site-wide SIC process to provide the control needed to sustain the improvements



Further site opportunities identified from replicating this process on other areas of production