



Case Study

# Implementation of Low Temperature Washing with Clax<sup>®</sup> Advanced

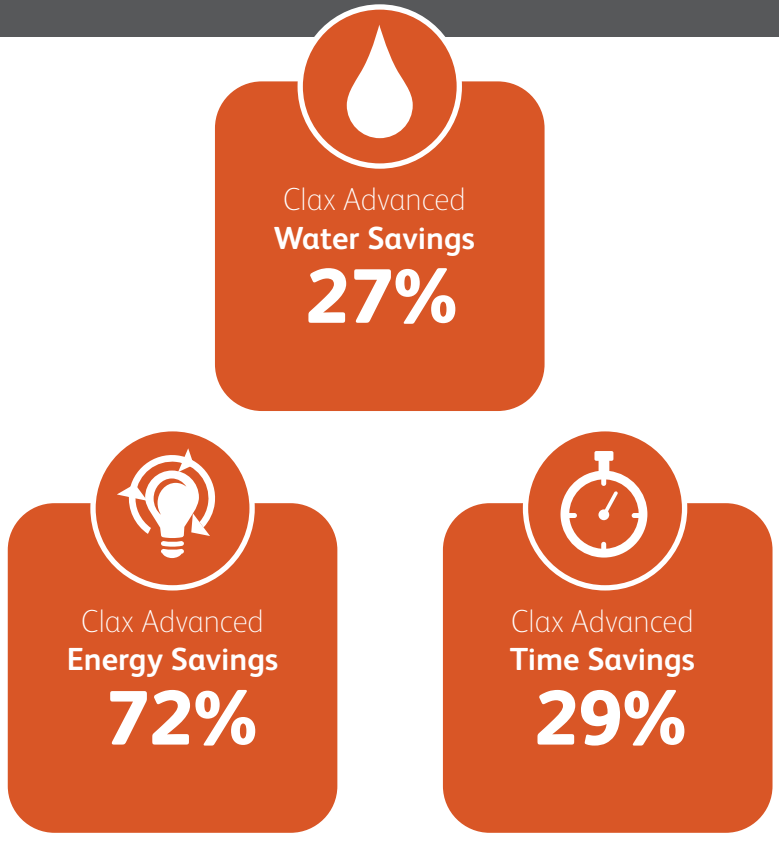
## INTRODUCTION

Washing at lower temperatures saves costs because less energy is needed to heat the water. In addition, less water is needed for cooling down the wash load, thus enabling a reduction in the number of rinses. The wash cycle can be completed more quickly at lower temperatures since time is not spent heating the water in the machine. All else being equal, any machine can wash more loads in the same period which means better productivity for the operator with reduced costs. Lower temperatures and shorter cycle times normally result in less scale deposited on a machine's heating elements which improves equipment efficiency and lifetimes.

Independent studies have shown that by reducing the wash temperature to 90°F – in combination with the right detergents and program - you can save water and energy by more than 20% and 30% respectively.

## Results

### ANNUAL COST COMPARISON : *Current vs Clax Advanced*





## Solution

A 145-room hotel currently using the low temperature program of a key competitor of Diversey wanted to assess potential savings for their on-premises laundry with the Diversey Clax Advanced program. The hotel was not convinced their current system was providing them with the savings and performance they were promised.

To determine the exact temperature profile, a temperature logger was washed together with the linen inside the washer extractor. The temperature logger measured the temperature at pre-set intervals and stored the information, resulting in a very precise overview of the temperature profile over the full length of the wash cycle.

## Results

It was determined that although the current system was a cold water solution, there were temperatures reaching 120°F in both the towel and sheet main wash cycles.

The machines on site were reprogrammed to the Clax Advanced wash programs and the hotel saved 27% in monthly water bills and saw a 72% reduction in thermal energy costs during the trial. Shorter cycle times allowed more washes to be completed than were possible in the previous configuration. The overall annual CO2 footprint was reduced by 2,753 lbs. and the annual utility cost was reduced by 29%.

Utility Cost	Trial Results
Total Energy Cost (\$)	<b>72%</b> savings
Hot Water Cost (\$)	<b>27%</b> savings
Total Wash Cost (\$)	<b>38%</b> savings

The cost and saving benefits of lower temperature laundry are clear for any hotel business with a mix of items such as towels, robes, bed linen, clothing and table cloths.

In most cases the changes required amount to little more than the choice of innovative products, simple reprogramming of existing equipment and some basic staff retraining.

