

Saving 9,315 Litres (2,460 Gallons) of fuel by reducing steam consumption for a Bottle Washer

 **Thailand**

 **Beverage**

Problem

A leading beverage plant in Nakhon Ratchasima, Thailand, was experiencing a temperature overshoot of 3 - 5°C (37.4 - 41°F) against zone wise set points in Bottle Washer 1. This resulted in excess steam consumption. Additionally, the process temperature was not being monitored.

Solution

Forbes Marshall conducted a detailed survey of the plant and recommendations per zone were implemented. For Bottle Washer 1 we found the temperature control valve was unable to regulate the temperature precisely (to the set value). We recommended and installed a PID temperature control valve (eVALV) at each zone of Bottle Washer 1. This ensured precise temperature control and reduced Bottle Washer 1 steam consumption.

Before



After



Benefits delivered

Fuel saved	9,315 Litres (2,460 Gallons), i.e. 3% annually
Water saved	326 Kilolitres (86K Gallons) annually
CO₂e reduced	26 Tonnes (57K Pounds) annually
Monetary savings	THB 414,698 (~USD 12,839*) annually *converted based on exchange rate

