

Saving 6,210 Litres (1,640 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 the set value of 65°C (149°F) in Bottle Washer 2. This resulted in excess steam consumption. Additionally, the process temperature was not being monitored.

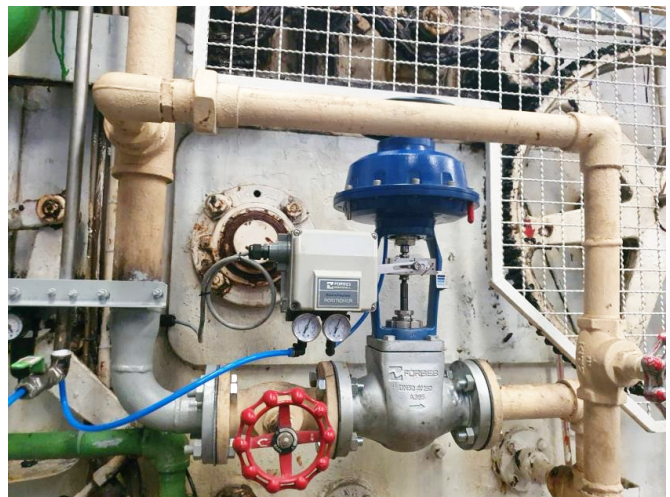
Solution

Forbes Marshall conducted a detailed survey of the plant and recommendations were implemented. For Bottle Washer 2 we found the temperature control valve was unable to regulate the temperature precisely (to the set value of 65°C / 149°F). We recommended and installed a PID temperature control valve (eVALV). This ensured precise temperature control and reduced Bottle Washer 2 steam consumption.

Before



After



Benefits delivered

Fuel saved	6,210 Litres (1,640 Gallons), i.e. 2% annually
Water saved	71 Kilolitres (18K Gallons) annually
CO₂e reduced	5.7 Tonnes (12K Pounds) annually
Monetary savings	THB 90,606 (~USD 2,847*) annually *converted based on exchange rate

