

8.3% fuel saved annually through condensate recovery at a rice noodle and flour processor

 **Thailand**

 **Food**

Problem

A rice noodle and flour processing plant in Nakhon Pathom, Thailand was not recovering condensate or flash steam due to an inoperational tank and electrical pump based conventional condensate recovery system. Condensate was being drained locally and flash steam was being vented. Boiler feedwater temperature was 30°C (86°F) and feedwater consumption was high. There was no live steam being used in the deaerator head.

Solution

Forbes Marshall conducted a plant survey to assess the condensate recovery network. We recommended replacing the existing condensate tank and electrical pump setup with a FlashJet™ Pump (FJP). After installation, the plant recovered 100% flash steam and condensate to the feedwater tank.

Before

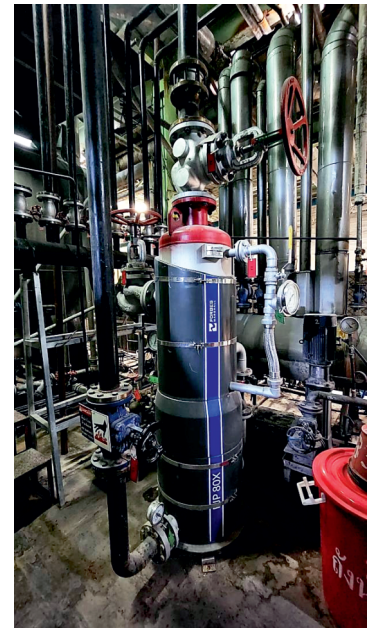
After



Flash steam vented



Condensate tank overflowing



FlashJet™ pump installed to enable 100% flash steam and condensate to the feedwater tank

Benefits delivered

Fuel saved	8.3% annually
Feedwater temperature increased	from 30 to 80°C (86 to 176°F)
Condensate recovered	60 Tonnes (132K Pounds) per day
Flash steam recovered	4.6 Tonnes (10K Pounds) per day
Water saved	18,000 Kilolitres (4755K Gallons) annually
Heat energy recovered	343,030 kcal (1.36 million Btu) per hour
CO₂e reduced	49 Tonnes (108K Pounds) annually
Monetary savings	THB 3,355,042 (~USD 97,690*) annually <small>*converted based on exchange rate</small>

