

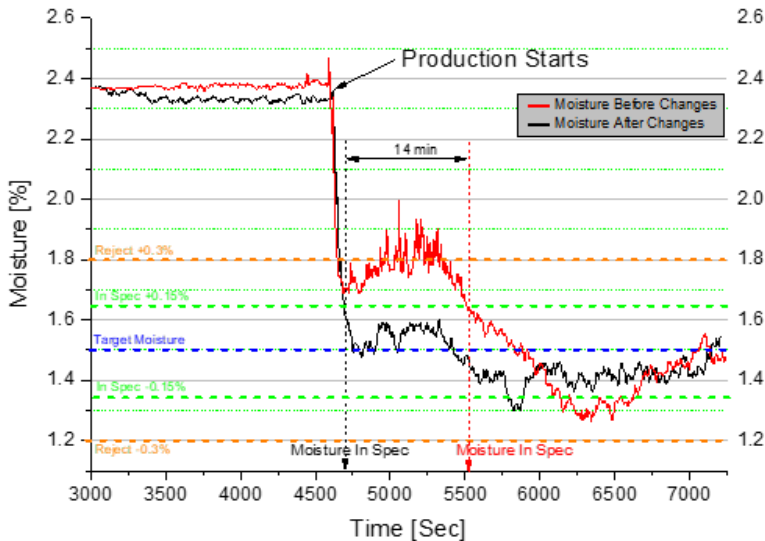
## Operation Crispy Crisp..

EnerTherm Engineering Ltd saves energy and waste in the food and processing industries. One of their customers operates a very large crisp production. These large production lines are capable of delivering 3.2 ton per hour of crisp, which is about 1million bags of crisps per day.

Crisp moisture is one of the critical KPIs. The crisp moisture must be in spec for the product to be bagged, if the level is either too wet or too dry it will affect not only the shelf-life but also the taste and texture.



We worked with a crisp production site to reduce waste from **700kg to 30kg** for each production run and save **180** cubic metres of gas emissions. Overall savings for this project equated to **£10K** per line.



Our customer presented a problem during the line start-up which was creating a large amount of waste (700kg) due to moisture levels not being in spec.

EnerTherm Engineering created an optimisation method based on data captured during the line start-up. Process control algorithms were changed to improve the line responsiveness.

A number of control loops were also tuned over a 4-day period to reduce the time to bring the line back into control and reduce the start-up time by 14 min.

**Result:** Waste was reduced to **30kg**. In addition, **180 m<sup>3</sup>** of gas was saved during the line start-up. Production lines will typically carry around 10-20 start-up a week.

Enertherm Engineering focus on solving production-related issues and fixing non-optimal plant operation, where reducing energy waste is at the heart of customers focus.



Francois Pierrel

15 Minute Meeting

15 min

*“EnerTherm Engineering– Thrive To Optimise”*