

SUCCESS STORY 55

HOT SMOKE FISH CURING PROCESS



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How can temperature uniformity in the hot smoking process be validated to meet the requirements of HACCP?

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Situation and background

In 2012, a leading supermarket chain in the UK was forced to initiate a product recall on a range of hot smoked mackerel filet products. The recall resulted from a processing error that indicated some products had not been cooked correctly and therefore, should not be consumed. All products were withdrawn from sale. Following the recall, the supermarket chain directed all suppliers to provide full temperature validation data of their hot smoke processes to insure their products were safe to consume and that the hot smoke process complied with HACCP guidelines.

The winning solution

- A trial with the Datapaq® system quickly showed that the hot smoke kiln was not correctly balanced. Mackerel hung at the bottom left of the product racks did not achieve the critical 65 °C for 12 minutes required to prove safe cooking.
- Validation is now performed quickly and efficiently with the one system, capturing eight points of temperature measurement that includes both kiln and product core temperatures.
- Traceable and certified profile reports provide exactly the required information to comply with HACCP validation requirements.

Savings made

Validation by an external consultation service would have cost more than \$16K for the one test - double the purchase price of the Datapaq system. Following the product recall, one smoked mackerel supplier (without a Datapaq system) was unable to prove the validation of his kiln smoking process. This cost him \$95k in lost orders in a single week.

KEY FACTS

Customer's End Product
Mackerel filets

Max temperature reached
Ramped cook from 28 °C (82 °F)
to 99 °C (210 °F)

Duration of Process
3 hours

PRODUCT AND BENEFITS

TB5009 combined with Multipaq21 datalogger, PA1445 barbed short needle probe and Insight™ software, including certified HACCP report generation

- The end-user can now easily and frequently verify the process to the standard required by HACCP.
- Investment in the Datapaq system was repaid after the first week.
- The system enabled measurements of core product and process air temperatures to be taken at up to 8 points simultaneously.
- The Datapaq system is easy to use and eliminated any requirement to trail long thermocouples out from the kiln, which had previously resulted in thermocouples being pulled out of the product.

Contact us.

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