

SUCCESS STORY 90

HACCP VALIDATION FOR LARGE COOKED HAMS



Q

How did a major meat processing company validate the complete ham cook and chill process efficiently and economically with a single monitoring system?

A

Situation and background

As part of any HACCP program, new ham products need to have both cook and chill processes validated independently of the oven/chiller control system. With a range of product types and different oven/chiller lines, this can be a time consuming and expensive operation. A large ham producer in the UK was required by a supermarket chain to provide a complete set of validation data for the ham variants supplied. The existing method of inserting miniature single channel data loggers into the center of sample ham logs was not practical and the accuracy of data was questionable.

The winning solution

- A single Datapaq® MultiPaq21 system was used to validate the complete steam cook and brine shower chill process with 8 measurement points.
- Automatic lethality calculations accurately proved that the product is not only safe, but possible key process improvements were identified.
- Special long thermocouples (300mm needle) allowed accurate ham temperatures to be measured.
- Validation method now results in no product waste during the measurement process.

Savings made

- Process validation time was reduced by 30 minutes due to easier set-up and quicker reporting and analysis.
- From the validation studies performed, it was shown that for each cooking line, a 40 minute reduction in cook time could be safely made. This productivity improvement equated to a \$100k per annum due to enhanced product throughput and increased yield (reduced moisture loss during cook process).

KEY FACTS

Customer's End Product
Pre-cooked hams

Max Temperature Reached

Cooking 80°C/176°F
Chilling - 8°C /18°F

Duration of Process

Cooking: 6.5 hours
Chilling: 6.5 hours

PRODUCT AND BENEFITS



Datapaq MultiPaq21 DP2182
TB5016 thermal barrier
PA1425S needle probe
Food Insight™ software

- 8 Channel IP67 logger with +/- 0.2 °C accuracy
- IP67 thermal barrier for protection against steam and brine shower
- Special needle probe allows easy, accurate insertion into product core through product tin.
- Insight software provides fully certified and traceable validation report with accurate lethality data.