

Case Study: Improved Operations and the Impact of Celsius and C- DASS

Cerulean, Milton Keynes, UK

Introduction

The food industry is reliant upon high standards of product quality and safety, making accurate temperature measurement an essential element of their HACCP or HARPC practices during production and packaging.

Cerulean's customers' pursue Global Food Standard good practice to win customer confidence. They do this by ensuring that products are manufactured in environments that adhere to certain conditions, such as storing food at temperatures specified by legislation and packaging it hygienically. All of this impacts the consumer experience. If consumers have confidence in the products they purchase, more of that product will be bought and thus revenue is greater.

Measurement and Analysis

The customer, a leading London-based manufacturer, develops and produces bespoke sauces and marinades before supplying them to a variety of restaurants and food chains throughout the UK ranging from Michelin star to fast-serve.

With quality, consistency and integrity being core components of their ethos, it is imperative that temperature measurements are reliable, accurate and precise. Trust is an important element of business-to-business relationships so confidence in the monitoring of product quality is essential.

Previously, a temperature probe had been used for measurement. A quantity of vacuum sealed bags of sauce or marinade would be removed from the chiller for testing, whereby a probe would pierce the outer packaging and take a reading of the product over a period of time. This impacted efficiency in terms of time and costs due to wastage.

To address this, they invested in Cerulean's Celsius. They were keen to exploit the alternative, non-destructive measurement method offered by Celsius and improve their production process.

Feedback from the customer was positive with one Senior Production operative commenting "not only has this improved our efficiency, it's also contributing to a reduction in our food waste targets," supported by the automatic data capture facility of the C-DASS software removing the need to manually write down results.

The Celsius uses microwave thermometry to measure and record the equilibrium temperature rather than the surface or contact temperature. This produces fast, consistent and accurate readings because the temperature measurement is not reliant on the positioning of a temperature probe.

Easy to use, the operator training for Celsius is minimal, ensuring implementation into practice can be undertaken efficiently and with confidence in the readings given. The results produced are consistently accurate, as our customer found, and appear almost instantly.



Conclusions

The customer invested in Celsius to improve the efficiency of production after hearing that product wastage during temperature measurement could be eliminated without any loss of accuracy and in a time-saving manner.

Data produced by the Celsius was found to be consistent, accurate and independently verified but retaining the ability to gain those readings without damaging potential goods. This saved the company from wasting an average of one shipment per day. The monetary savings within the first year amounted to in excess of £25,000, which ensured the investment in switching to Cerulean equipment was a worthy one. With increased production efficiency, Celsius provides users with reliable, repeatable and robust measurements in a fast, simple and effective way.

Why Celsius?

It's not just in eliminating food and packaging waste where Celsius out-scores but in reducing the testing cycle time and providing a greater visibility to HACCP compliance.

If you'd like to better understand or analyse the positive impact that Celsius can make to your company's Sustainable Development Goal (SDG) contact us today.

Sell your product not bin it...



Figure 1: The Celsius Temperature measurement device

