

# ENSURING QUALITY AND PROTECTING HEALTH IN THE FOOD AND BEVERAGE INDUSTRY

The Food and Beverage Processing and Storage industry plays a critical role in delivering safe and high-quality products to consumers worldwide. Temperature calibration and validation are paramount in this industry, much like in the Pharmaceutical sector.

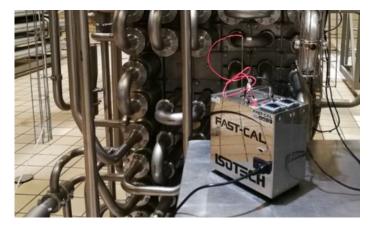
Hygiene and product safety are of utmost importance, necessitating easily accessible components that can be efficiently cleaned. Our company has been working diligently to address the unique challenges faced by the Food and Beverage Processing market, providing specialised solutions that ensure precision and accuracy in temperature measurement and calibration.

### **Industry Challenges**

The Food and Beverage Processing market presents various challenges in temperature calibration and validation, primarily due to the nature of the products being handled and the strict hygiene requirements.

One major issue is the use of specialised sensors that can be easily removed for cleaning. These sensors are often mounted using clamp or plug-in style arrangements. However, a common problem arises due to the sensor retention disc's larger dimension compared to the dry block calibrator used for calibration.

Additionally, some sensors have short lengths below the clamping disc, making it difficult to calibrate them accurately.



#### **Custom Solutions**

To tackle these issues, we have developed custom inserts for our Hyperion/Drago dry block calibrators, catering to dairy applications.



These inserts enable precise calibration of short and stubby sensors, which are common in the Food and Beverage Processing industry. Additionally, using a liquid bath as a heat source enhances calibration accuracy, combined with engineered special inserts with a reference sensor at the unit's delivers for even greater precision.

#### **Success Stories**

To tackle these issues, we have developed custom metal inserts for our Hyperion/Drago temperature calibrators, catering to dairy applications. These inserts enable precise calibration of short and stubby sensors, which are common in the Food and Beverage Processing industry. Moreover, the Hyperion and Drago can be used as liquid baths, with a reference probes, offering even higher calibration accuracy.



## **Application Areas**

Our products find versatile applications across various stages of Food and Beverage Processing, including:

- · Food Preparation Ensuring precise temperatures.
- Processing / Pasteurisers / Homogenisers Calibration and validation of equipment.
- UHT Treatment Systems Verifying temperature accuracy in Ultra-High-Temperature processes.
- Centrifuges (Separation Equipment) Calibrating temperature sensors in centrifuges.
- Fermentation Equipment Maintaining precise temperatures during fermentation.
- Pastry Rising Control Ensuring optimal conditions for pastry rising.
- Cooking, Chilling, and Freezing Accurate temperature control in ovens and chilling/freezing equipment.
- Freeze-Drying Equipment Calibrating sensors used in freezedrying processes.
- Packaging Ensuring temperature accuracy during packaging.
- Storage and Process Temperatures on Ingredient Storage Tanks -Monitoring ingredient storage conditions.
- Finished Product Storage Verifying temperature integrity in finished product storage.
- Food Transportation Ensuring temperature control during transportation.
- In-Transit Logging and Local Indicators Monitoring temperature during product transportation.
- Bulk Collection and Delivery Ensuring temperature accuracy during bulk product collection and delivery.

Our products also cater to plant and service applications, such as calibrating air supply installations, monitoring environmental conditions, calibrating refrigeration and freezer units, and verifying temperature accuracy in ingredient and finished product storage.

In the dynamic Food and Beverage industry, precise temperature calibration is crucial for product quality and consumer health. Our solutions have transformed temperature measurement, helping clients tackle challenges effectively.

Contact us today to see how we can help you tackle your challenges.