

1. Purpose

1.1. Issues Addressed

Research conducted across a wide selection of food service operators in the QSR market and focused upon the management of Hot Food to Go operations has indicated a general lack of understanding regarding the operational requirements of Hot Food Product holding and management. This is particularly clear when looking at the relation between food product, food packaging, hot holding equipment and the food service operations that would normally be seen to support these.

A number of potentially serious issues have been identified, including: a.) use of inappropriate packaging, b.) use of incorrect heating and holding methods, c.) failure in equipment to maintain required temperature, d.) use of bespoke and adapted equipment with compromised functionality, e.) use of commercial hot holding equipment with design and functionality issues, f.) insufficient knowledge by operators and service providers of hot holding product health and safety requirements, and g.) lack of operational and performance standards regarding hot holding equipment

To address the multiplicity of concerns, it is proposed that in the first instance a new Performance Standard for Hot Food Display Equipment (Merchandisers) be created that specifies a performance requirement that the display equipment should meet and a test method for validating the ability of the Hot Food Display Equipment to achieve this performance requirement.

The Hot Food Display Performance Standard will identify capabilities such as that of holding food product (food product simulator) at a given temperature (> 63C) for a period of time.

The accompanying Hot Food Display Test will identify the procedures and environment necessary for testing the ability of the Hot Food Display Equipment to achieve the Hot Food Display Performance Standard. The agreed procedure will ensure consistency in the assessment of the performance of Hot Food Display Equipment (Merchandisers).

The Performance Standard and accompanying Test will function in a complementary way and will ensure the safe management of Hot Food Product when held in Hot Food Display Equipment.

1.2. Use of Standard

The development of a new Performance Standard for Hot Holding Equipment (Merchandiser) and the establishment of a Test Standard for assessing the equipment's ability to achieve this Performance Standard will provide commercial credibility and secure industry acceptance for this rapidly evolving food service technology. With existing manufacturers providing an array of new products and multiple manufacturers now entering the market, certification from BSI, will give standing to both established and new products, help to legitimise QSR innovation in the food service sector and help manufacturers succeed in the market.

Knowledge and acceptance of the new standards will be achieved through: a.) cross party stakeholder engagement in the creation of the standard, b.) sponsorship from Food Service Retail and Trade Associations, c.) the use of the BSI kite mark (BSI Group), d.) the endorsement by Food Service Equipment Manufacturers of the Standards, e.) the appointment of an appropriate auditor to ensure continuing compliance by manufacturers, and f.) Retail Trade Association publicity campaigns for the new standard.

1.3. Stakeholders (Examples)

Principal QSR Providers (Pret A Manger, EAT, CRUSH, Aboko)
Food Delivery Service Providers (Just Eat, Deliveroo, Uber Eat, etc.)
Supermarket Food Service Providers (Sainsbury, ASDA, Waitrose)
Food Suppliers (Greencore, Charlie Bighams, Sainsbury)
Café Providers (Café Costa, Starbucks)
Hot Food Display Manufacturers (Alan Nuttalls Partnership, Victor, Counterline, Fri Jado, Lincat, Victor Manufacturing, E&R Moffat, etc)
Food Service Health & Safety Consultants
Food Equipment Manufacture Consultants
Food Retail Associations: (British Hospitality Association, British Sandwich Association, Food and Drink Federation)
Foodservice Equipment Trade Associations: (Catering Equipment Suppliers Association, Catering Equipment Distributors Association)
Foodservice Safety Associations: (British Safety Council, Royal Institute of Public Health)
Food Safety Regulators (FSA)

2. Aims of Standard

The food industry is undergoing rapid change with the food-to-go market growing exponentially. The dramatic increase in the design and development, manufacture and consumption of new hot food-to-go items, often packaged and held in hot holding units, will require cooperation between food and packaging suppliers, equipment manufacturers, food service operators, standards bodies and regulators to ensure that new standards and regulatory frameworks are introduced that ensure appropriate testing and validation of food products prior to commercial launch.

The principal aims of the Hot Food Display Requirement and Test Standard are as follows:

- 1.) To provide Foodservice Equipment Manufacturers with a Performance Standard and Test for Hot Food Display Equipment (Merchandisers) that will guide them in the design, development and manufacture of appropriate units.
- 2.) To support Food Retail Companies with guidelines that will assist them in identifying appropriate Hot Food Display Equipment to suit their operations.
- 3.) To support those Commercial Companies seeking to develop or enhance their foodservice operations.
- 4.) To provide a Standards framework that helps to ensure the safety of hot food product delivery and display.

3. Type of PAS Application Sought

As stated above, it is recommended a Performance Standard be sought with an accompanying Test for the purpose of Performance verification.

- 3.1. Specification (Performance) – The Performance Criteria is meant to capture the minimum performance level for ensuring the safe operations and display of Hot Food Product in Hot Food Display Cabinets.
- 3.2. Test (Method - repeatable and reproducible procedures with consistent outcomes for the assessment of the Hot Food Display Equipment in meeting the Performance Specification)
The Test Standard will reference two key components: 1.) Food Item Analogue that has been created to mimic the reaction of food product when held under conditions of temperature, 2.) Test Environment – Environment in which the test is carried out.

4. Benefits

Numerous benefits will result from the introduction of the Performance Standard including:

- 1.) Establishment of base configuration and minimum functionality for all Hot Food Display Cabinets
- 2.) Verified Test Process for ascertaining whether current and future Hot Food Display Equipment meets minimum requirements
- 3.) Improvements in product safety
- 4.) Facilitation of compatibility between food products and Hot Food Product Display units
- 5.) Guidance for Retail Companies in their choice of Hot Food Display Cabinets
- 6.) Support for new market entrants
- 7.) Promotion of competition

5. Who will use this PAS

The Hot Food Display Performance PAS will be used by the following sectors:

- 1.) Food Service Equipment Manufacturers
- 2.) Food Retail Companies (QSR, Supermarkets, etc.)
- 3.) Food Product Manufacturers
- 4.) Food Product Suppliers
- 5.) Food Service Consultants
- 6.) Food Standards Agencies

6. What this PAS will cover

The PAS will specify the minimum performance level that Hot Food Display Cabinets must conform to in order to provide a safe environment in which to hold Hot Food Product for sale. The Performance Standard will reference a Test Procedure which validates the capability of the equipment to meet this standard.

7. What this PAS will not cover

The PAS will not reference materials, technologies or heating methods used to achieve the Requirements Specification, referring only to the functionality that the Hot Food Display Cabinet must achieve in order to be able to hold Hot Food Product safely and under operational conditions regularly encountered in commercial environments.



8. What this PAS will reference

The PAS will reference all Health and Safety Regulations regarding the display and holding of Hot Food Product under conditions of temperature. The PAS will also reference Food Service Equipment Manufacture Regulations for equipment to be used in Food Service operational settings as well as standard Health and Safety Regulatory Documents (example: HSE – Safe Use of Work Equipment)



9. Structure and page count

- 1) Introduction
- 2) Abbreviations
- 3) History of Manufacture
- 4) Current Market Size and Specification
- 5) Hot Food Operations Systems – Display Equipment Context
- 6) Performance Requirements (functional)
 - a) Temperature
 - b) Display Environment
 - c) Display Period (time of product on display)
- 7) Operational Requirements
 - a) Surface Temperature (Maximum- Health & Safety)
- 8) Environmental Requirements (Specification for Test Environment)
- 9) Manufacture and Design Requirements
 - a) Operational Safety
- 10) Certification and Accreditation
 - a.) 3rd Party Conformity Assessment
 - b.) Evaluation Against Standard
 - c.) Granting of BSI Mark
 - d.) Surveillance of Conformity
 - e.) Product Certification Scheme
- 11) List of Accreditors
 - a.) Product Certifier
 - b.) Test of conformity
 - c.) Test Laboratory
- 12) References

10. Target publication date - With the first round consultations now underway, we would seek a publication date of November 2019.

11. Publication (hard copy or POD, colour)