



HACCP, 5S & HILLBRUSH

FOOD SAFETY

The food that is sold in supermarkets, on market stalls, in shops, service stations, restaurants and even the food we eat at school or work is expected to be safe, and as far as many people are concerned, there is no reason to think otherwise.

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Food safety is defined as a scientific discipline describing handling, preparation, and storage of food in ways that prevent food-borne illness. This includes a number of routines that should be followed to avoid potentially severe health hazards. (Wikipedia, 2016)

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The steps that go into making sure our food is safe for human consumption goes much further than us just checking that the packaging isn't damaged when we buy it, and making sure that we store, re-heat or cook our food properly according to the packet it came in.

Governing and food regulatory bodies around the world set out legal requirements for the food that is grown, manufactured, processed, and sold for human consumption, and they go into great detail to make sure that every aspect is covered, so that all of our food is safe to eat. These regulations also extend to the processing factories that handle the food we eat.

General Food Law according to the European committee states that:

“

Food and feed business operators at all stages of production, processing and distribution within the businesses under their control shall ensure that foods or feeds satisfy the requirements of food law which are relevant to their activities and shall verify that such requirements are met¹.

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In order to meet these requirements, operators must employ hygienic practices from the very beginning of the process by ensuring that they are using and cleaning suitable equipment and the facility properly. Hillbrush are experts in manufacturing cleaning equipment, and among a vast range of other products offer an extensive range of hygienically designed and manufactured tools and brushware approved for use in the food and beverage industry.

According to the European Commission, food contact approved materials (FCMs) should be sufficiently inert so that their elements neither adversely affect consumer health nor influence the quality of the food². All of the products in the Hillbrush Hygiene range are FDA (Food & Drug Administration (USA)) and EU food contact approved, therefore are suitable for use in the food and beverage industries. Food safety laws, as stated above, ensure that any company handling food must adhere to the requirements governed by law. In support of those laws, various systems, approaches and protocols have been created to facilitate the preparation and handling of food.

HACCP & 5S

HACCP is a recommended management system in which food safety is addressed through the analysis and control of biological, chemical and physical hazards from raw material production, procurement and handling to manufacturing, distribution and consumption of the final product.

The 7 HACCP principles are:

1. Perform a hazard analysis
2. Decide on the Critical Control Points (CCP)
3. Determine the critical limits
4. Establish procedures to monitor CCPs
5. Establish corrective actions
6. Establish verification procedures
7. Establish a record keeping system

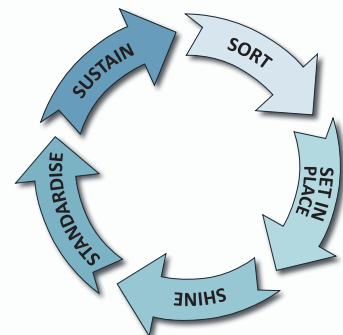


Basic sanitation and facility evaluation is a good starting point for food safety environments, where Good Retail Practices (GRPs) or Standard Operating Procedures (SOPs) are the foundation of any successful food safety programme. Cleaning and maintaining equipment used in food preparation, cleaning the surrounding areas, and monitoring & preventing cross contamination is paramount for compliance to food safety laws.

Salmon® Hygienic Tools, a sub-brand of Hillbrush provide a vast range of products for operators to use in order to keep their workplace organised and hygienic, to avoid cross contamination and therefore comply with food safety laws. By following the above principles of HACCP, which are recommended by various food safety bodies, including those in the EU and the FDA in America, it is clear that maintaining clean facilities and equipment is important for any food service operation.

5S is a Japanese system designed to eliminate waste in order to create value in the company or organisation. The 5S approach is:

1. Sort - Cleaning the workplace
2. Set in place - organise, identify and arrange everything
3. Shine - regularly clean/maintain equipment & environment
4. Standardise - make sure everyone is doing the same thing
5. Sustain - ensure adherence to the system



Along with quality cleaning equipment, it is good practice to organise your workplace according to colour-coded sections to avoid cross-contamination. Hillbrush offer the entire hygiene range in up to 10 colours to support HACCP and 5S through organisation. To match the brushware and tools, Hillbrush also provide Anti-Bacterial Shadow Boards which allow operators to separate each area of the facility into sections to prevent cross contamination, and to maintain organisation. These boards are bespoke to each client and include 'shadows' of each product required for that section of the workplace, with either a HOLD or HOOK method to raise the product off the floor (which is a common breeding ground for bacteria) and to keep them separate. This method is becoming very popular and is often recommended by food safety officials as a way to eliminate the spread of bacteria and maintain cleanliness in the workplace.

HILLBRUSH

Hillbrush products boast a variety of hygienic features, including the world's strongest [brush] filament retention system (Resin-Set DRS®), Biomaster protected Anti-Microbial Hygienic Tools™, and the Total MDX (metal and x-ray detectable) range, all of which are designed to improve the effectiveness of any cleaning regime, help operators to follow food safety recommendations, and to ensure efficiency when cleaning facilities, equipment or tools.

Over the course of history, Silver has been known to offer anti-microbial properties, and was even used by the Pharaohs in Ancient Egypt to prevent the growth of bacteria without the high risk associated with other metals; Australians even used to put a silver spoon in their water tanks to keep them clean. Each component in the Anti-Microbial Hygienic Tools™ range from Hillbrush is manufactured with Biomaster Silver Ion Additive technology, which prevents the growth of bacteria on the product.

Fused brushware has been found to harbour bacteria in crevices near the base of the filaments. DRS® brushware however provides the world's strongest filament retention system through the use of folded filaments being held in place by food grade stainless steel staples which are then surrounded by a substantial layer of anti-microbial epoxy resin that undergoes an extensive process ensuring that it gets into every crevice, eliminating any areas for bacteria to harbour.

'Plastic contamination' is an all-too-familiar phrase within the recall world, so ensuring effective measures to prevent contamination is a major concern for food manufacturers. These accidents tend to incur lengthy production stoppages and huge costs, both money- and reputation-wise. By incorporating food safe, detectable additives into the production process of the tools and brushware used, fragmented plastics can be detected by a metal detector or x-ray inspection system, enabling food manufacturers to prevent contaminated products reaching the market. Each component across the Total MDX range has been manufactured with metal detectable additives so that manufacturers can avoid recalls caused by plastic contamination. The colour-coded economy MDX range offers metal and x-ray detectable filaments as these are the most common parts to break off the product.

There are various approaches, regulations and rules that are put in place to ensure that food safety laws are adhered to, in order to keep food safe for human consumption. The entire Hillbrush Hygiene range is food contact approved by the FDA and EU authorities making each product suitable for use in food processing industries, without causing any adverse effects through their use. Both HACCP and 5S are recommended rather than required by law, however many food handling operations base their food safety practices on these approaches. Hillbrush manufacture hygienic tools and brushware for companies to use for cleaning and maintenance of their tools and facilities in order to comply with the practices laid out in these approaches.



¹ (Anon. 2002. Regulation (EC) no178/2002 (Food Law). Official Journal of the European Committees [online] Available from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:031:0001:0024:EN:PDF> [Viewed 21 June 2016]

² (Anon. 2016. Food Contact Materials – European Commission. Available from: http://ec.europa.eu/food/safety/chemical_safety/food_contact_materials/index_en.htm. [Viewed 21 June 2016]