

Colour-coding For Contamination Control

The webinar will begin shortly.
Thank you for attending!



Colour-coding For Contamination Control



Moderator:

→ Jack Burnett – North American Hygiene Specialist, Vikan



Presenters:

→ Deb Smith – Global Hygiene Specialist, Vikan

→ Neil Bogart - Principal Scientist, Post Consumer Brands

→ Alex Mollmann - Business Development Manager, Vikan

Webinar housekeeping

- The webinar will run for ~1 hour.
- The presentations will take ~45 mins.
- These will be followed by a panel discussion with our experts. Please submit your questions via the Q&A box.
- We will reach out after the webinar to answer any questions we do not address during the session.
- The webinar will be recorded, & we will send you the recording in a few days via email.



About Vikan

Vikan is the world's leading supplier of hygienic cleaning tools for the food & beverage industry & other hygiene-sensitive environments.

For more information, visit us at vikan.com



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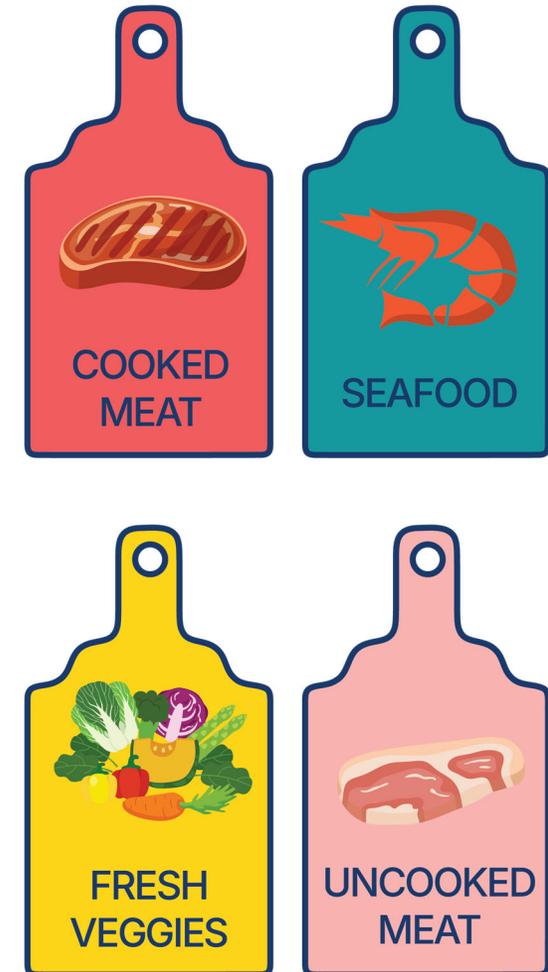
Why cross-contamination matters

- Cross-contamination is a **major cause of food safety incidents.**
- **Microorganisms, allergens, chemicals, & foreign bodies** can easily move between areas, zones, equipment & products if no controls are in place.



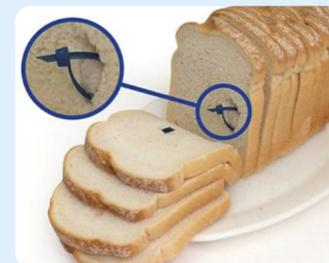
Colour-coding: What it is & how it works

- Based on HACCP principles colour-coding is a, key, voluntary (but recommended) control measure used to prevent cross-contamination & cross-contact.
- Provides an easy visual check that the right thing (cleaning tool, utensil, protective clothing etc) is in the right place & being used for the right task



Colour-coding: What it is & how it works

- **Prevent Cross-Contamination:** Physically separates equipment used for raw foods, cooked foods, & produce to prevent bacteria transfer.
- **Manage Allergen cross-contact:** Utilises tools of a dedicated colour for use only with "free-from" or allergen-specific products.
- **Visualise foreign bodies:** Uses items of a contrasting colour to the food product to aid visualisation of any physical contamination.
- **Universal Language:** Acts as a training tool for staff, regardless of nationality, to quickly identify the correct tool for the job.



Where colour-coding can help

- Principles apply across **all food environments**.
 - Food & beverage manufacturing
 - Professional kitchens
 - Retail & supermarkets
 - Scale doesn't matter – risk does
- Often a **legal & food safety standard requirement**
 - Strengthens a food business's HACCP plan
 - Provides visual evidence of a rigorous food safety management system



Colour-coding of cleaning tools & utensils: Industry best practice

- Late 1990's - British Institute of Cleaning Science developed a universal colour-coding system for the *professional cleaning industry*.
- **Vikan** pioneered production of fully-coloured cleaning tools & utensils for the *food industry*
- Now a proven & widely adopted **industry standard worldwide**
- Designed to ensure that tools & utensils are only used in their **intended area &/or for their intended purpose**



Colour-coding of cleaning tools & utensils: Industry best practice

Which colours & where?

- **BICS – professional cleaning industry**
 - Code Yellow – clinical use (+ viral outbreaks)
 - Code Red – high risk areas – washrooms, toilets
 - Code Green – general food & bar
 - Code Blue – general lower risk areas
- **Food industry**
 - As per company requirements
 - Based on equipment/colour availability
 - Based on users, e.g., colour-blindness



Are there any legal & food safety standard requirements for colour-coding?

Colour-coding: FSMA requirements

- Clothing - uniforms, footwear, gloves
- Containers
- Equipment
- Tools
- Labels
- Facility maps



FSPCA

FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE

**Preventive Controls
for Human Food**

First Edition - 2016



Participant Manual

<https://www.ifsh.iit.edu/fspca/fspca-preventive-controls-human-food>

Global food safety standard requirements

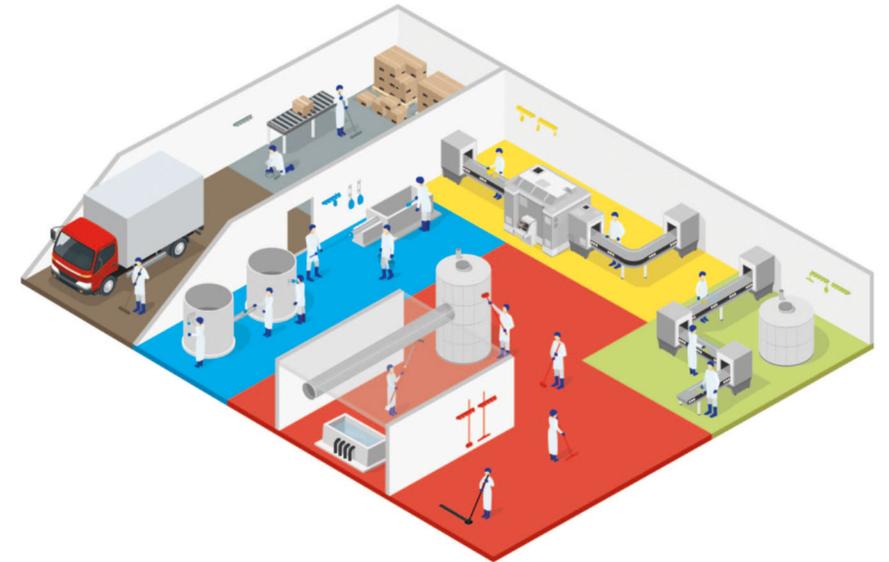


- 4.11.6 Cleaning equipment suitably identified for intended use (e.g. colour-coded or labelled).
- 4.9.4.2 Dedicated cleaning equipment (e.g. colour-coded) for removal of container breakages, e.g. glass
- 5.5.2 Product liners & bags to be of contrasting colour to the product
- 7.2.3 All cuts & grazes to be covered by coloured plaster (different from product colour, preferably blue)
- 7.4.5 Use gloves of a distinctive colour (blue where possible)



Global food safety standard requirements

- 12.2 Prevention of microbiological cross-contamination through **implementation of a segregation (zoning) plan, including use of dedicated tools.**
- 12.3 *Prevention of unintended allergen cross-contact, including **use of dedicated tools/equipment***
- 13.2 Cleaning tools should be **clearly identified**
- 8.3 Waste containers should be **clearly identified**



Global food safety standard requirements



- **11.3.1.3:** Minor cuts or abrasions shall be covered with a **colored, metal-detectable bandage** or suitable waterproof & **colored dressing**.
- **11.4.1.1: iv.** Waste shall be contained in the bins **identified** for this purpose.
- **11.2.5.5** Cleaning equipment, tools, racks, & other items used in support of the cleaning & sanitizing program shall be clearly **identified**.
- **11.5.1.5: ii.** Non-potable water piping & outlets are clearly **identified**.



- **3.2.6:** Plasters/bandages must be **colored differently from the product color**.
- **3.2.8** Usage rules shall be implemented for work areas/activities where it is required to wear gloves (**coloured differently from the product colour**).

Advice:

- Check your local legal & operational food safety standards carefully & act accordingly.

Colour-coding & 5S



5S: A systematic workplace organisation method designed to improve efficiency, safety, & productivity.

"5S" represent a sequential, five-step process:



Sort:

Distinguish between necessary & unnecessary items in the workplace & discard the latter.

Set in Order:

Arrange all necessary items in the most logical & efficient manner—"a place for everything & everything in its place".

Shine:

Clean & inspect the workplace & equipment regularly to prevent deterioration & identify problems early.

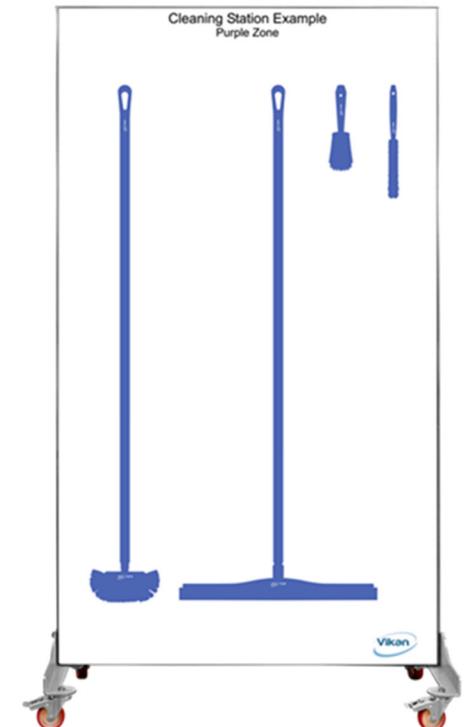
Standardise:

Create a consistent set of rules & procedures to maintain the first three steps.

Sustain:

Build the discipline to follow the established standards daily, turning them into a permanent part of the organisational culture

Further information available on our website.



Colour-coding top tip #1:

Keep it simple

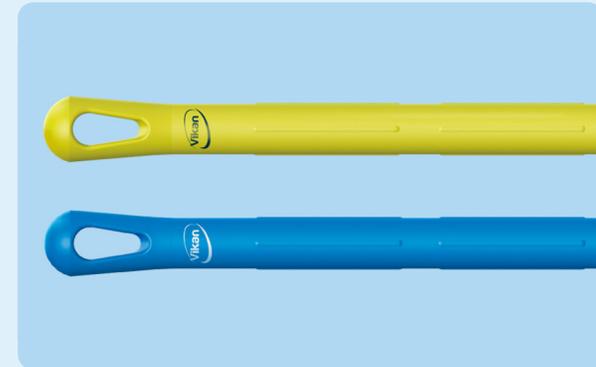
- Limit number of colours
- Over-complex systems fail
- Simplicity increases compliance & consistency
- Avoid mixed-colour items
- Use fully coloured items



Colour-coding tip #2:

Develop colour-blind friendly colour-coding set ups

- Colour blindness (specifically red-green deficiency) affects roughly 1 in 12 men (8%) & 1 in 200 women (0.5%) worldwide.
- Assess individuals for colour range perception.
 - Should be part of company Equity, Diversity, & Inclusion (EDI) framework but often overlooked.
- Use colours with high contrast & shade differentiation



Colour-coding tip #3

Colour-coding for control of microbial cross-contamination:

- Use colour-coded segregation of areas, on the basis of microbial risk
- Use different coloured utensils for handling raw & ready to eat foods
- Use different coloured protective clothing in high-risk & low-risk food production areas
- Use different coloured cleaning tools on food contact surfaces & non-food contact surfaces.

Low risk – Raw product



COOK

High risk – Cooked product



Colour-coding tip #4

Colour-coding for control of allergen cross-contact:

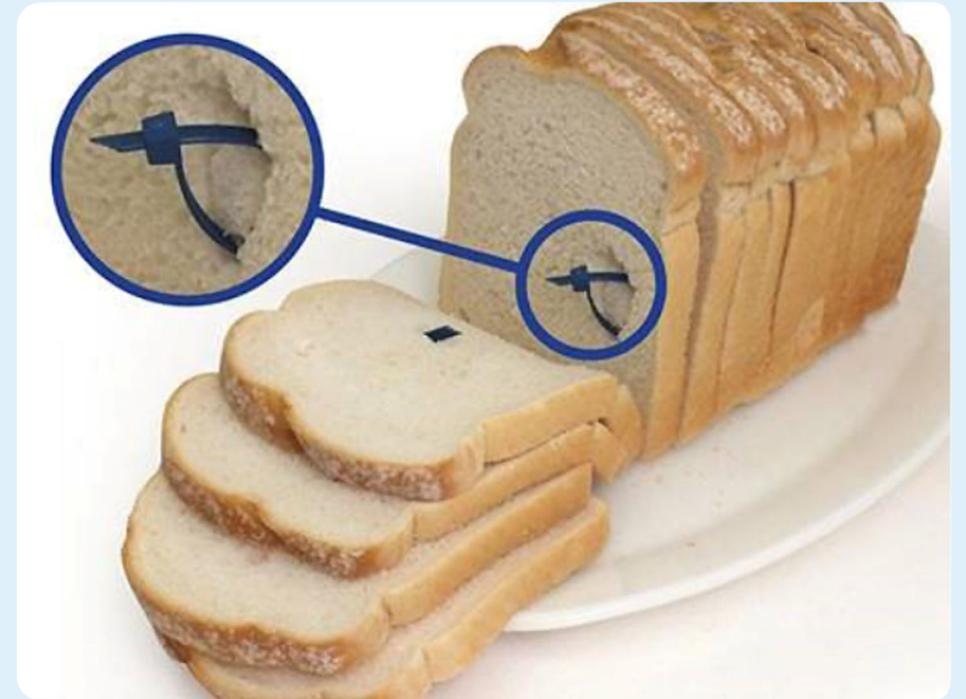
- Visual verification of correct items being use
- Dedicated colours for allergen areas &/or items
- Use of distinctive colours for allergens - Lime, orange, pink, purple
- Use of secondary colour coding bands
 - Secondary colour-coding of items used in the same area but on different lines
 - Vacuum attachments



Colour-coding tip #5

Colour-coding for foreign body control

- Use
 - equipment
 - Utensils
 - packaging
 - bags & bin liners
 - gaskets
 - protective clothing
 - wound dressings
 - pens
 - tie wraps of a contrasting colour to the food product to aid visual detection



Colour-coding tip #6

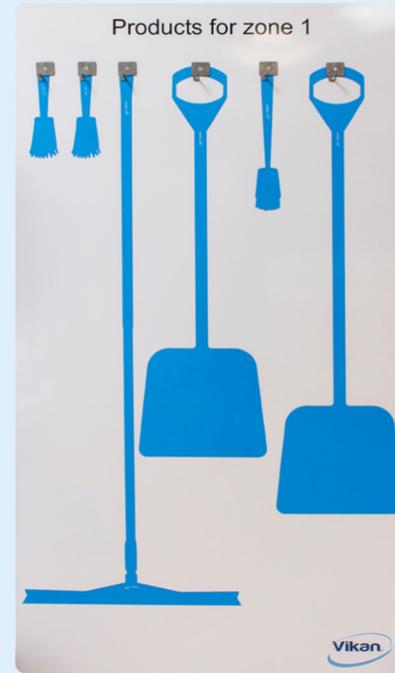
Use colour-matched storage

- For cleaning tools & utensils - Racks, hooks, trolleys, shadow boards
- Storage of allergenic ingredients

Avoid mixing

- utensils used in contact with a product containing a controlled allergen with those that are allergen-free, or
- cleaning tools used for non-food contact surfaces with those used for food contact surfaces

on the same rack, hook, trolley or shadow board



Colour-coding: Development & Implementation

- Management led
- Consult with site teams – Purchasing, Production, Quality, Hygiene, Engineering etc...
- Develop a clear, simple, consistent colour-coding approach
- Train everyone
- Implement in all areas as appropriate, at the same time with a clear start date



Colour-coding: The human factor

- **People** are the most common reason behind control failure.
- **Visual controls** help reduce reliance on memory & language.



Cross-contamination by clothing
Use separate colour-coded clothing, disposable aprons, change between tasks

Cross-contamination by hands:
Wash & dry hands/change gloves between tasks. Use coloured gloves to aid visual identification of gloves in product.

Cross-contamination by footwear:
Use different coloured footwear or footwear that is dedicated to an area. Clean & disinfect as appropriate.

Cross-contamination by cleaning tools & utensils:
Use colour-coding to reinforce task/hazard segregation. Regularly inspect & replace. Clean & disinfect as appropriate

Colour-coding: Management & review

- **Ongoing monitoring**
 - It must be part of routine hygiene checks.
- **Record non-conformances & rectify in real-time.**
 - Root cause analysis of consistent failures
- **Regular review & revision (as appropriate)**
 - Colour-coding is not "set & forget".



Colour-coding for contamination control

Key takeaways:

- Colour-coding reduces the risk of microbial, allergen & foreign body contamination
- It supports legal & food safety standard compliance
- It is most effective when clear, simple, & consistently applied
- Colour-coding is a tool, not a silver bullet.
- Must be aligned with people, training, management & a strong food safety culture.





Color-Coding for Contamination Control

Implementing a Zoning & Tool
Control System

Why Color-Coding Matters

Visual control to prevent contamination transfer

Supports GMPs and sanitation programs

Helps prevent allergen and microbial cross-contamination

Simplifies training for operators

Challenges in Dry Sanitation



CLEANING MAY OCCUR
MONTHLY INSTEAD OF
DAILY



EMPLOYEES MAY ONLY
PERFORM SSOPS 4–6
TIMES PER YEAR



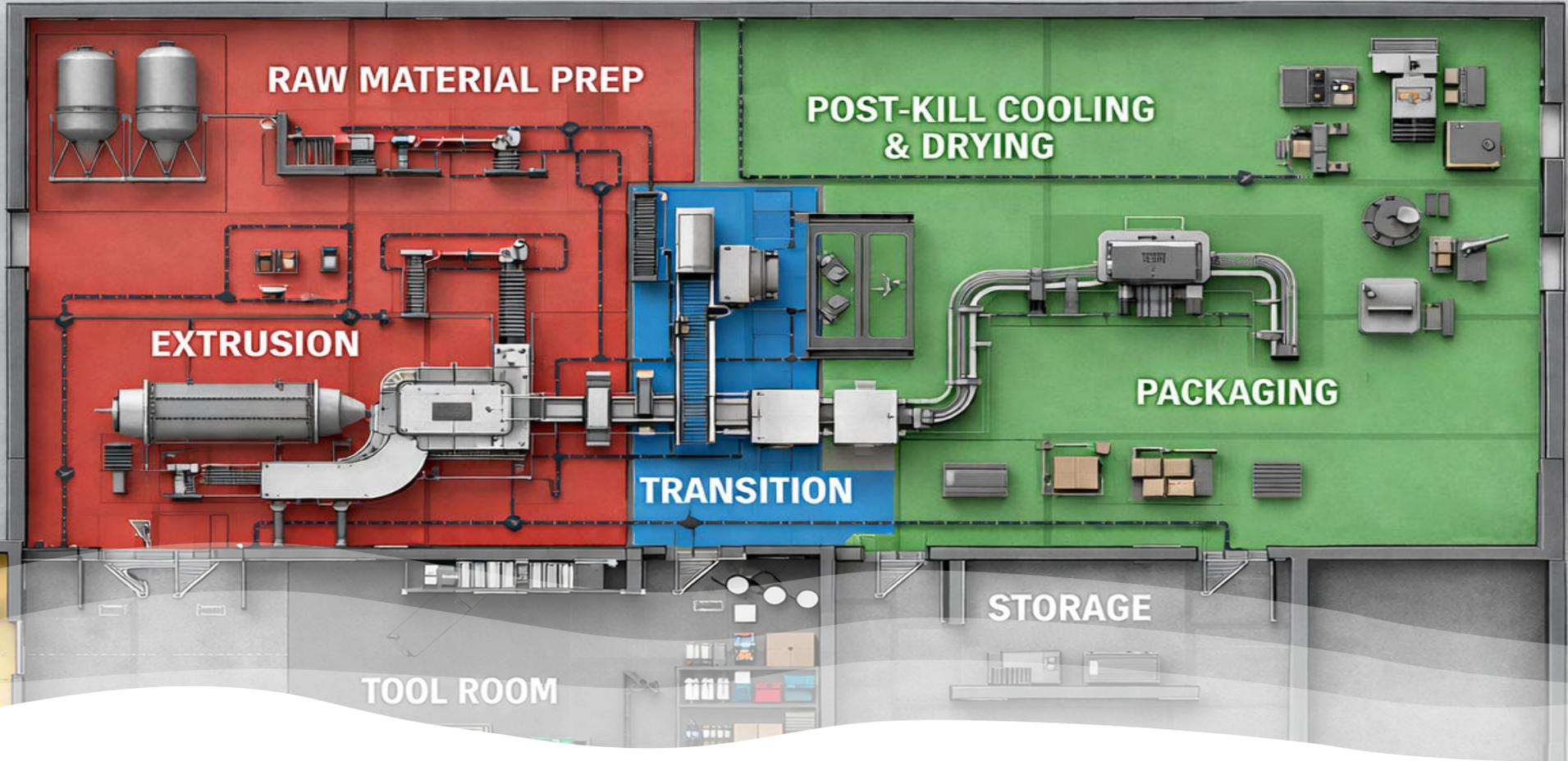
HARD TO REMEMBER
PROCEDURES



VISUAL SYSTEMS HELP
SIMPLIFY
EXPECTATIONS

Color-Coded Zoning Map - Extrusion Plant

-  Red - Prekill
-  Blue - Transition
-  Green - Post-kill
-  Yellow- Bathrooms
-  Black - Drains
-  White - Zone 1 Product Contact



Plant Zoning Structure

- Red – Pre-Kill
- Blue – Transition
- Green – Post-Kill
- Yellow – Bathrooms
- Black – Drains
- White – Zone 1 Product Contact

Mobile
Tooling:
HyGo
Cleaning
Station



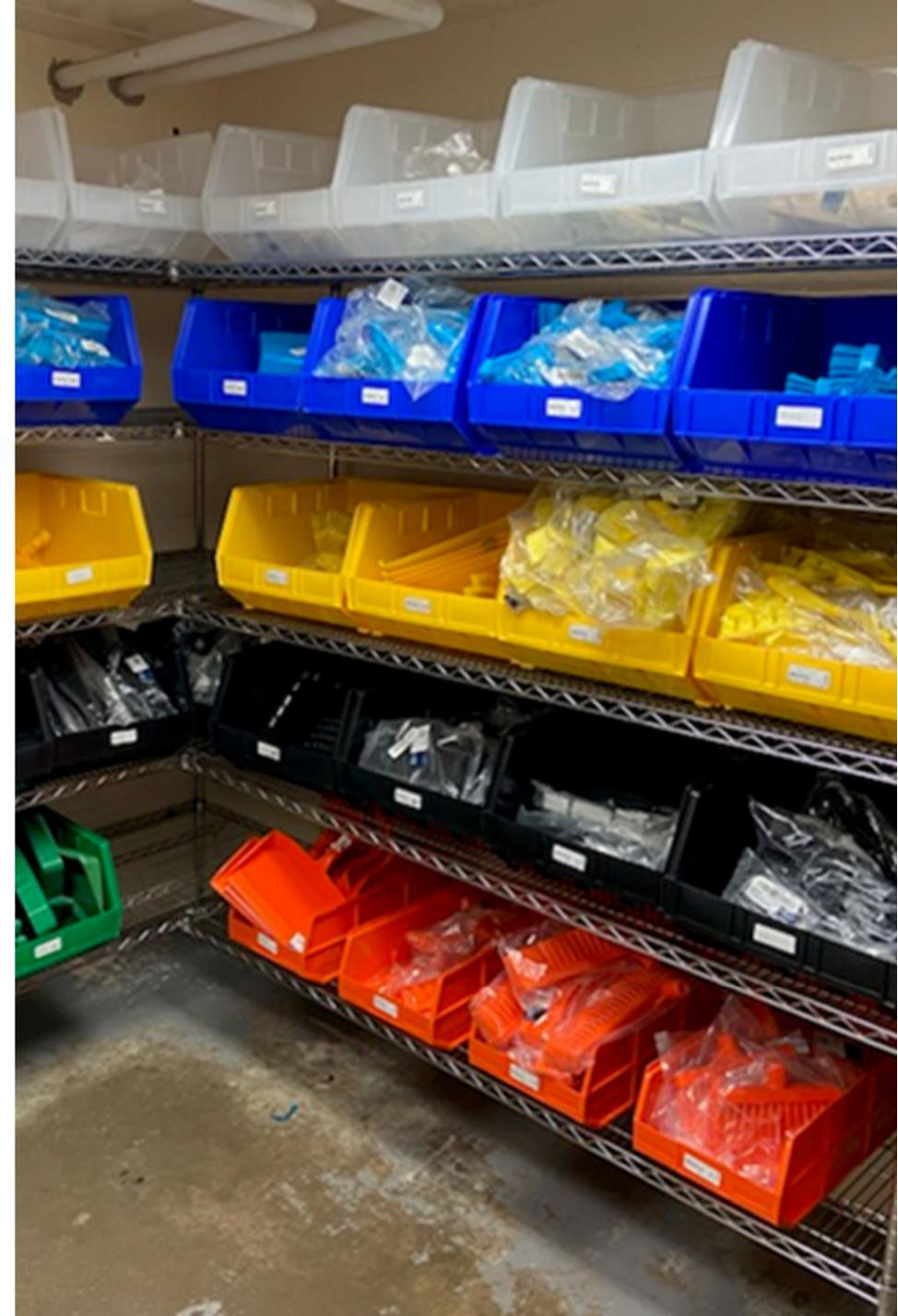
Vendor Managed Tool Rooms

Partnered with Fastenal for sanitation tool inventory

Barcoded tubs with required tools

Vendor visits 2–3 times weekly

Maintains minimum inventory levels



Operational Impact: Before vs After

Before:

- Missing tools from shadow boards
- Tools moving between areas
- Difficult sanitation training
- Low ownership of sanitation tools

After:

- Mobile HyGo tool stations
- Clear zoning compliance
- Easier operator training
- Stronger food safety culture

Building Employee Buy-In

Tested
several tool
management
systems

Asked
operators
what worked
best

Selected
systems
employees
preferred

Improved
acceptance
of program
changes

Top 5 Mistakes Plants Make with Color-Coding

Too many colors —
complex systems
confuse
employees

Color zones not
tied to
contamination risk

No defined storage
locations for tools

No ownership or
accountability for
tools

No verification or
audits to maintain
the system

Key Takeaways

Keep

Keep color systems simple

Align

Align zones with contamination risks

Use

Use visual management tools

Engage

Engage employees in program design

Final Thought

Color-coding is not about colored tools.

It is about creating a visual system that helps people consistently do the right thing — even on their busiest day.

Colour-coding for contamination control: Site survey service

We assist end-users in overcoming their hygiene and product safety challenges

- ✓ Helps our customers create, implement, and improve the colour-coding systems required by global food safety standards.
- ✓ Improves and standardises hygiene set up.
- ✓ Recommends maintenance-friendly and compliant cleaning tools and storage solutions.
- ✓ Assists our customers with their cleaning challenges.
- ✓ Ensures compliance with cleaning tool standards.



Colour-coded tool program →



Regulatory compliance →



Gaps and optimisations ↓



↑
Inventory review



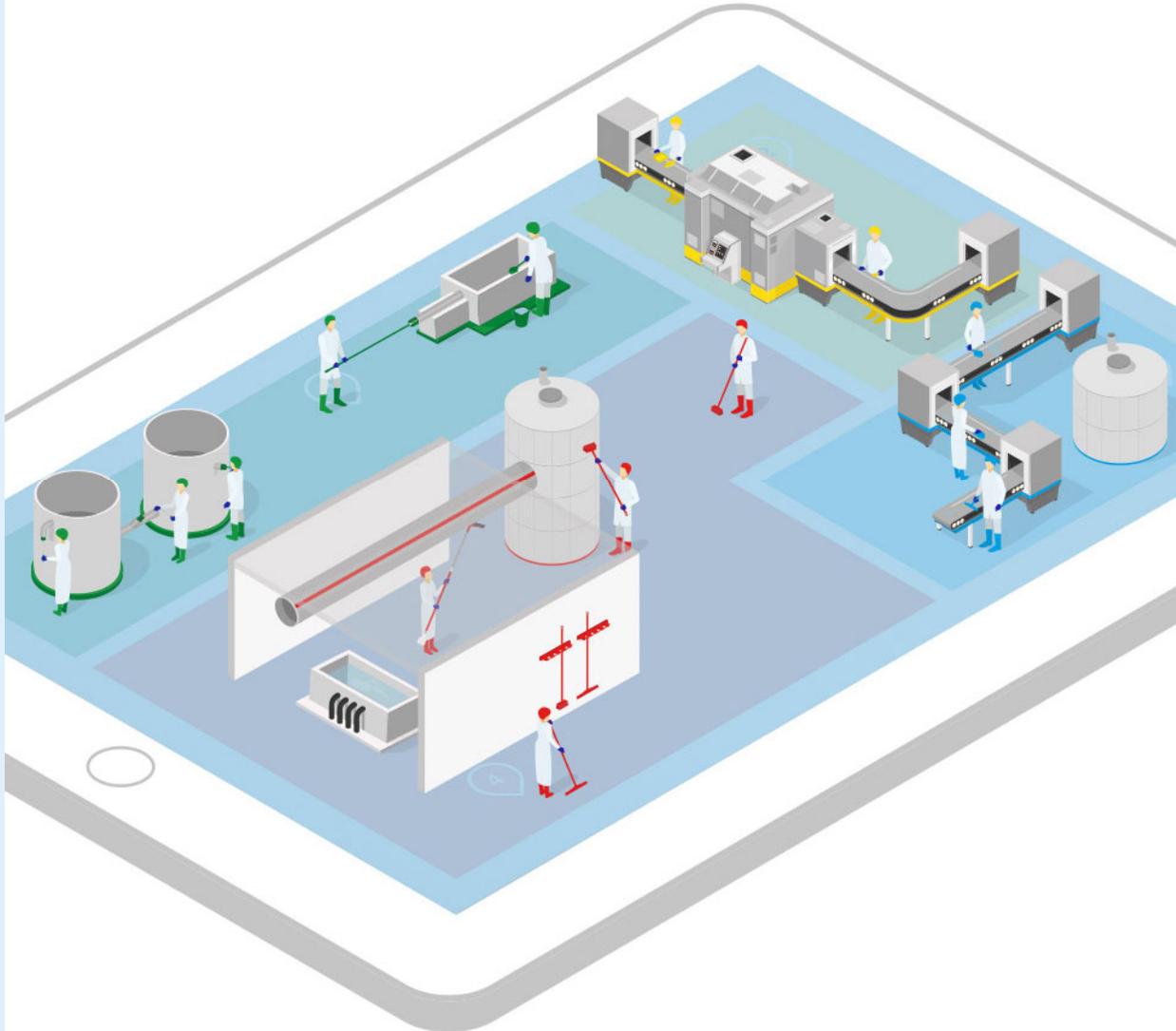
←
Cleaning tool storage



←
Efficiency recommendations

Align tool colours with zones, processes, and risk areas

- Support compliance with food safety standards
- Reduce cross-contamination risks
- Improve staff training and visual communication
- Recommend optimal colour-coding structure
- Validate tool materials for the environment



Regulatory Compliance

- Assess tools against GFSI Schemes
 - Identify non-compliant or outdated equipment
 - Verify hygiene design and safety requirements
 - Support documentation (DoCs, traceability)
 - Recommend compliant alternatives
 - Align with audit and certification demands

The logo for BRCS (BRCGS) features the letters 'BRCS' in a bold, green, sans-serif font. The 'C' is stylized with a white outline. A thin green horizontal line is positioned below the letters.

Food Safety



Gaps and Optimisations

- Review tool usage and routines
 - Identify missing or duplicated tools
 - Analyse ergonomic and workflow inefficiencies
 - Improve maintenance and replacement cycles
 - Enhance hygiene zoning and standardisation
 - Support continuous improvement



Efficiency Recommendations

- Recommend time-saving tools
 - Optimise cleaning methods by soil type
 - Improve ergonomic performance
 - Propose workflow improvements
 - Advise on maintenance-friendly design
 - Identify potential cost savings



Cleaning Tool Storage

- Assess condition and suitability of storage areas
 - Recommend hygienic storage solutions
 - Reduce contamination through proper drying
 - Improve organisation and traceability
 - Ensure accessibility and protection
 - Support 5S and colour-coding integration



Inventory Review

- Review full cleaning tool inventory
 - Identify missing tools for high-risk areas
 - Highlight worn or damaged items
 - Detect duplicates or unnecessary tools
 - Propose optimised tool sets
 - Support standardisation across zones



Questions?

Further information and support



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Vikan's food safety webinar series



Topic:

The Science of Cleaning



Date & time:

25 June 2026

3 p.m. CEST (9 a.m. EDT)



Presenters:

TBA

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→ [What's next?](#)