

Raising the Bar: Hygienic Equipment Design in the Baking Industry

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From “B” to “Z”

- BISSC (Baking Industry Sanitation Standards Committee) formed in 1949
 - Originally known as the BISSC Standards
 - Converted to an ANSI standard in 2003
- Now referred to as the ANSI/ASB Z50.2 or “Z50.2”
- American Society of Baking (ASB) owns the standard while BISSC offers equipment certification to the Z50.2 standard

BISSC Standard

- Loss of recognition and support within the industry
- Lack of regulatory recognition

Objective

To re-establish relevance of the ANSI/ASB Z50.2
American National Standard for Bakery
Equipment – Sanitation Standards

SAGE's Role

- Facilitator
- Coordinator
 - Scheduling
 - Rosters
- Secretary
 - Minutes
 - Redlining
- Spokespeople

Work In Process

- Formed 11 working groups
- Addressed equipment types ranging from dough troughs to proofers to ovens to cooling and conveying equipment, and so on.
- Consensus standard

Mission Statement

In order to enhance food safety, our mission is to make recommendations on updating the requirements for the design, construction and installation of baking equipment to facilitate cleaning and sanitation.

Work In Process

- 98 conference calls
- 298 line changes
 - 63 sections added, 34 removed
- 77 individuals involved
 - Started with 55

Work In Process

■ Representation

- 47 companies represented
- 1 trade association

■ Balance

- Manufacturers (66%)
- Users (21%)
- General Interest (13%)

Accomplishments

- New updates submitted for ANSI approval in 2012
 - Additional revisions have been submitted to ANSI for 2013

Future Work

- Continue Working Groups
- Enlist additional help from bakers
 - Bakery sanitors, plant engineers, production managers, quality control managers and microbiologists
- Market the Standard

Why the Importance?

- Proper design and installation of food processing equipment minimizes food safety risk
 - Reduced opportunity for a recall
 - Allergens, microbiological
- Hygienically designed bakery equipment is more cost effective to operate, clean and maintain
 - Reduced labor, shortened disassembly and reassembly time, reduction in chemical use, shortened cleaning time, shortened maintenance time and reduced down time

Why the Importance?

- FSMA and other government regulations
 - Validation of the cleaning process
 - Emphasis on sanitary design and construction
 - Ability of FDA to mandate a recall or shut a plant down due to non-compliance
 - Ability of FDA to stop operations when they find equipment that cannot be cleaned

Why the Importance?

■ GFSI

- Focus on sanitary design of processing equipment

- BRC:

- “All equipment shall be properly specified before purchase, constructed of appropriate materials, be of a suitable design to ensure it can be effectively cleaned, and shall be tested and commissioned prior to use.”

Why the Importance?

- Post-processing contamination
- Allergens are the leading cause of bakery recalls
- Bakery recalls are the most prevalent

Why the Importance?

- To be effective, the ANSI Z50.2 standard must have value to those that purchase and use equipment meeting this standard.
- Equipment buyers and users must place value on the standard by understanding the *importance of sanitary design*

Bakery Equipment Certification Process

- “Owned” by BISSC (AIB)
- Self-certification
 - The most popular option (70% in 2012)
 - Inexpensive
- Third-party verification
 - AIB

Food Equipment Design Standards

- 3-A
- NSF
- EHEDG
- AMI
- GMA

Certification Process

- 3-A
 - Dairy equipment
- NSF
 - General equipment types
- EHEDG
 - Hygienic design guidelines
 - Verification/validation of in-place cleaning methods

Sanitary Design Principles

- While AMI and GMA guidelines do not offer certification, they have become the most popular choice
- Not specific to bakery equipment

Certification Process

- While baking industry has used a self-certification process for some time, this process is under review.
- How can it be enhanced to serve the industry?

Current Status

- Z50.2 is where 3-A was several years ago
 - Need to enhance the standard and the certification process

Interested?

- Copies of the current standard are available from American Society of Baking at www.asbe.org
- Contact Jennifer Frankenberg at 513-265-3185 or jfrankenberg@sagefoodsafety.com for additional information