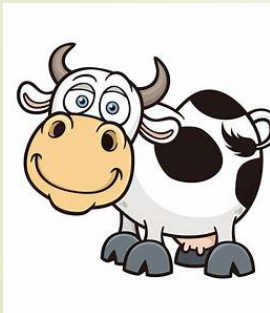


USDA DAIRY VS. USDA MEAT AND POULTRY

AN OVERALL LOOK AT THE KEY DIFFERENCES BETWEEN THE HYGIENIC REQUIREMENTS OF THE TWO USDA PROGRAMS.



Dennis Glick
USDA Dairy Programs
Plant Survey and
Equipment Review Coordinator



USDA DAIRY

USES 3-A SANITARY STANDARDS AND ACCEPTED PRACTICES WHERE THEY APPLY.



 Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE

**USDA GUIDELINES
FOR THE SANITARY
DESIGN AND FABRICATION OF
DAIRY PROCESSING EQUIPMENT
02/2022**

**USDA GUIDELINES FOR THE SANITARY DESIGN AND
FABRICATION OF DAIRY PROCESSING EQUIPMENT**

USDA MEAT AND POULTRY

- **NSF/ANSI/3-A 14159-1-2019 HYGIENE REQUIREMENTS FOR THE DESIGN OF MEAT AND POULTRY PROCESSING EQUIPMENT.**
- **NSF/ANSI/3A 14159-2-2019HYGIENE REQUIREMENTS FOR THE DESIGN OF HAND HELD TOOLS USED IN MEAT AND POULTRY PROCESSING.**
- **NSF/ANSI/3A 14159-3-2019HYGIENE REQUIREMENTS FOR THE DEISIGN OF MECHANICAL BELT CONVEYORS USED IN MEAT AND POULTRY PROCESSING.**



**USDA GUIDELINES FOR THE
EVALUATION AND CERTIFICATION
OF THE
SANITARY DESIGN AND
FABRICATION
OF
MEAT AND POULTRY
PROCESSING EQUIPMENT**

The cover of the NSF/ANSI 3-A 14159-1-2019 standard book. It features a blue background with the NSF and ANSI logos at the top. The text reads: 'NSF International Standard / American National Standard / 3-A Sanitary Standard', 'NSF/ANSI/3A 14159-1 - 2019', and 'Hygiene Requirements for the Design of Meat and Poultry Processing Equipment'. A red 'RELINE' stamp is visible, indicating a revision from the previous version. At the bottom, there are three circular images: a person in a white lab coat, a close-up of a mechanical part, and a person in a white lab coat. The NSF logo is in the bottom right corner.



MEAT AND POULTRY EQUIPMENTS USES LEVELS OF RISK ASSESSMENT

HYGIENE LEVEL

DESCRIPTION

- 1. Equipment which, following a hygiene risk assessment, needs only to partially conform to the requirements of this standard to meet the identified risk(s) and to produce safe product.**
- 2. Equipment which, following a hygiene risk assessment, conforms to the requirements of this standard, but requires planned disassembly for cleaning.**
- 3. Equipment which, following a hygiene risk assessment, conforms fully to this Standard and can be cleaned without disassembly**
- 4. Equipment which, following a hygiene risk assessment, conforms fully to this standard and has been designed for a specified heat, chemical, or physical treatment to free the equipment from relevant microorganisms.**
- 5. Equipment which, following a hygiene risk assessment, will prevent microbial ingress and has been designed for a specific heat, chemical or physical treatment to free the equipment from relevant microorganisms.**

United States Department of Agriculture



Accepted Equipment

**MEAT AND POULTRY
OFFERS AN
OPPORTUNITY FOR
APPLICANTS TO REQUEST
PERMISSION TO APPLY
THIS SHIELD TO USDA
ACCEPTED EQUIPMENT.**

**SIMILAR TO THE GRADE
LABEL SHIELD ON USDA
GRADE AA BUTTER**





PRODUCT CONTACT SURFACES

DAIRY

- ▶ ALL SURFACES FROM WHICH MATERIAL OR LIQUID MAY DROP, DRAIN, OR BE DRAWN INTO THE PRODUCT, ONTO A PRODUCT CONTACT SURFACE, PACKAGING MATERIALS, ETC.
- ▶ KNURLED SURFACE NOT ALLOWED IN A PRODUCT CONTACT AREA.

MEAT AND POULTRY

- ▶ SAME DEFINITION
- ▶ ZONE 1
 - ▶ SURFACES THAT ARE DESIGNED AND INTENDED FOR DIRECT CONTACT WITH PRODUCT
- ▶ ZONE 2
 - ▶ SURFACES SUBJECT TO INCIDENTAL OR INDIRECT CONTACT WITH PRODUCT.
 - ▶ ROUGHENED BY KNURLING, GROOVES, RIBS, INDENTATIONS OR SIMILAR SURFACE FEATURES.



BELT CONVEYORS





CONVEYOR BELTING

DAIRY

- ▶ **PRODUCT CONTACT SURFACES OF PLASTIC BELTING. (63 μ in Ra.)**
- ▶ **NOT SUBJECT TO CLEANABILITY TESTING.**
- ▶ **MUST COMPLY WITH THE USDA GUIDELINES.**

MEAT AND POULTRY

- ▶ **PLASTIC BELTING IS EXEMPT FROM SURFACE FINISH REQUIREMENTS**
- ▶ **MUST PASS THE NSF CLEANABILITY TEST DESCRIBED IN NSF 14159-3-2019.**

MATERIALS

MEAT AND POULTRY

- 300 SERIES STAINLESS (ALL)
- CARBON STEEL MAY BE USED FOR CUTTING SURFACES
- NO GLASS
- NO UNCOATED ALUMINUM
- NO UNCOATED ANODIZED ALUMINUM
- RTV SILICONE (FDA) MAY BE USED IN PRODUCT CONTACT AREAS.

DAIRY

- 300 SERIES STAINLESS (LESS 301 AND 302)
- CARBON STEEL NOT ALLOWED
- GLASS IS ALLOWED IN CERTAIN APPLICATIONS.
- SPECIFIC GRADES OF ALUMINUM ARE ALLOWED IN DRY APPLICATIONS.
- RTV IS ONLY ALLOWED AS A PRODUCT CONTACT SURFACE IN 3-A SANITARY STANDARD 26-.

RUBBERS, PLASTICS AND NON METALS

DAIRY

MEAT AND POULTRY

- ▶ A REGULATION LISTED IN TITLE 21 CODE OF FEDERAL REGULATIONS, PARTS 170-199.
- ▶ MEETS THE CRITERIA FOR GENERALLY RECOGNIZED AS SAFE (GRAS) STATUS (INCLUDING BUT NOT LIMITED TO A GRAS REGULATION OR GRAS NOTICE).
- ▶ A PRIOR SANCTION LETTER, UNLESS PREVIOUSLY RESCINDED.
- ▶ A VALID THRESHOLD OF REGULATION (TOR) EXEMPTION REQUEST.
- ▶ IS THE SUBJECT OF AN EFFECTIVE FOOD CONTACT SURFACE (FCS) FOOD CONTACT NOTIFICATION (FCN)? SECTION 409(H)(2)(C) OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT (THE ACT) STATES THAT AN FCN IS EFFECTIVE FOR THE MANUFACTURER, THE FOOD CONTACT SUBSTANCE (FCS), AND THE CONDITIONS OF USE IDENTIFIED IN THE NOTIFICATION ONLY.
- ▶ DETERMINATION THAT MIGRATION HAS NOT BEEN MADE AND IS SUPPORTED BY A CURRENT LETTER OF NO OBJECTION (OR OPINION LETTER), ISSUED BY THE UNITED STATES FOOD AND DRUG ADMINISTRATION (USFDA).

▶ FDA REGULATION 21 CFR PART 174-189

▶ GRAS

▶ EXEMPT UNDER 21 CFR PART 170.39

▶ PREMARKET NOTIFICATION

RADIUS

(FOR INTERNAL ANGLES LESS THAN 135 DEGREES)



DAIRY

- ▶ 1/4 INCH (FORMED OR MACHINED)
- ▶ 1/8 INCH FOR WELDED ANGLES WHEN THINNER MATERIAL IS 3/16 OR LESS.
- ▶ SMALLER RADII MAY BE USE FOR FUNCTIONAL REASONS. NO RADII LESS THAN 1/32 INCH.
- ▶ PRESS FITS, SHRINK FIT AND FLAT SEALING SURFACES MAY HAVE ZERO RADII.

MEAT AND POULTRY

- ▶ 1/8 INCH
- ▶ 1/32 INCH FOR FUNCTIONAL REASONS
- ▶ PRESS FITS, SHRINK FIT AND FLAT SEALING SURFACES MAY HAVE ZERO RADII.
- ▶ INTERNAL 3 PLANE INTERSECTIONS SHALL HAVE 1/4 INCH RADII.





LUBRICATED BEARINGS

DAIRY

- ▶ AT LEAST 1 INCH OPEN CLEARANCE BETWEEN BEARING AND PRODUCT CONTACT SURFACE.
- ▶ CONVEYORS USING PERMANENT FACTORY SEALED BEARINGS THAT CANNOT BE GREASED, SHALL HAVE AT LEAST ½ INCH OPEN CLEARANCE

MEAT AND POULTRY

- ▶ LUBRICATED BEARINGS SHALL BE LOCATED OUTSIDE PRODUCT CONTACT WITH ADEQUATE CLEARANCE OPEN FOR INSPECTION BETWEEN BEARING AND THE PRODUCT CONTACT SURFACE.



SPRAY DEVICES

DAIRY

- ▶ SHALL COMPLY WITH 3-A SANITARY STANDARD 78- IF LEFT IN PLACE DURING PRODUCTION.
- ▶ 1/8 INCH RADII ARE REQUIRED EXCEPT FOR BEARING SURFACES WHICH MAY BE 1/32 INCH

MEAT AND POULTRY

- ▶ RADII MAY BE LESS THAN 1/32 INCH. WHEN LESS THAN 1/32 INCH, THE INTERNAL ANGLES MUST BE CLEANABLE AND INSPECTABLE.

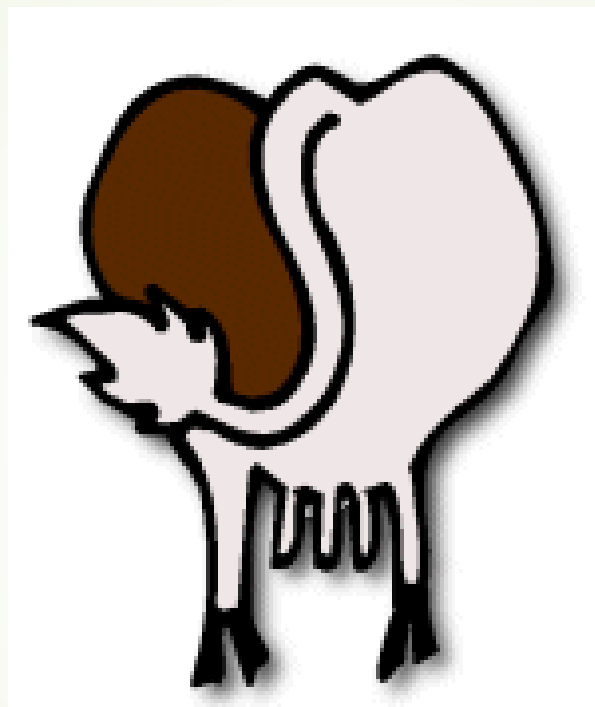


QUESTIONS?





THE



END