Rules and Regulations for Food Production

A range of regulations prohibit migration into foodstuffs of any substances harmful to health. The most important directives and hygiene concepts for conveyor belts that come into direct contact with food are explained below.

FDA/EU

FDA/EU Approved Belting (Declaration of Compliance)

Compliance with FDA (Food and Drug Administration) and/or EU (European Union) regulations simply means belt types are suitable for direct contact with unpackaged food. All materials must comply with the FDA 21 CFR, (EC) 1935/2004, (EU) 10/2011, (EU 2015/174), (EU) 2016/1416 and (EC) no. 2023/2006 regulations, regulations on the materials used and migration thresholds.

USDA

USDA Equipment Acceptance Certification (Dairy and Meat/Poultry)

USDA (U.S. Department of Agriculture) Guidelines for the Sanitary Design and Fabrication of Dairy Processing Equipment
Dairy Grading Branch policy fully supports and utilizes established 3-A Sanitary Standards and Accepted Practices. 3-A Sanitary Standards provide criteria for materials and fabrication for specific types of dairy equipment. The standard outlines requirements for (1) Materials (plastic and rubber [flexible, soft-type] materials), (2) Fabrication and (3) Special considerations for exposed product conveyors.

Plastic materials must comply with FDA 21 CFR Parts 170 to 199 and 3-A Sanitary Standards for Multiple-Use Plastic Materials Used as Product Contact Surfaces for Dairy Equipment.

Rubber materials must comply with FDA 21 CFR Part 177.2600 and 3-A Sanitary Standards for Multiple Use Rubber & Rubber-Like Materials used as Product Contact Surfaces in Dairy Equipment.

USDA Guidelines for the Evaluation and Certification of the
Sanitary Design & Fabrication of Meat and Poultry Processing Equipment
These guidelines set forth the principles and procedures for the evaluation, acceptance, and certification of the sanitary design and fabrication features of equipment and utensils intended for use in the slaughter, processing, or packaging of livestock and poultry products.

Dairy Grading Branch policy fully supports and utilizes the standards developed and published by the NSF/3-A Joint Committee on Food Processing Equipment. NSF/3-A Standards provide criteria for materials, design and fabrication of equipment or utensils used in the slaughter, processing and packaging of livestock and poultry products.

There are currently three standards available for use by the meat and poultry processing industry, however only one is applicable to Forbo Siegling belting – Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing, NSF/ANSI/3-A SSI 14159-3-2019.

NSF Certification for Prolink – NSF/ANSI/3-A SSI 14159-3-2019 – Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat & Poultry Processing

NSF/ANSI/3-A SSI 14159-3-2019 is the "Hygiene Requirement for Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing", which establishes minimum food protection and sanitation requirements for the materials, design, fabrication, construction, and performance of meat and poultry processing equipment.
From extensive product testing and material analyses to unannounced plant inspections, every aspect of a product's development is thoroughly evaluated before it can earn NSF certification.

HACCP

HACCP Programs

Due to the regulatory environment and customer requirements, more customers are requiring suppliers to have a documented Hazard Analysis Critical Control Point (HACCP) plan in place for all products, ingredients, and packaging materials manufactured for food industry. The HACCP system is a preventative approach to managing food safety. Philosophically, HACCP moves away from end-point testing to a more proactive, preventative approach to control potential hazards.

HACCP provides a mechanism to reduce risk in manufacturing and fabrication process. When utilizing HACCP, hazards are identified, associated risks are assessed, methods for control are identified, critical control points (CCPs) are specified, and criteria for compliance are clearly defined.

HOW FORBO CAN HELP YOU TO COMPLY

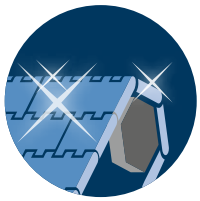
In order to comply with the directives and regulations stated above and to support our customers' HACCP concepts effectively, our product range for the food industry offers an array of special product characteristics and designs.

We would be happy to give you more detailed support on this issue.

Fabric-based and homogeneous belts

- **Manufactured to the standards of Forbo's own HACCP program.**
- **FDA/EU-compliant, hydrolysis- and UV-C-resistant belt materials**
- **Special belt designs**
  Fullsan: Homogeneous belts made of thermoplastic polyurethane; protected throughout from contamination by oil, grease, moisture or other contaminants.
  Elastic belts: Homogeneous elastic belts; protection from contamination by oil, grease, moisture or other contaminants.
  Prosan (Transilon): Fabric-based belts coated on both sides. This reduces the risk of oil, grease, moisture or other contaminants soiling the belt. Can be combined with *Frayfree*. Furthermore, applying the optional *Smartseal* belt edge sealing encloses the belt completely and protects it from contamination throughout.
  Frayfree (Transilon): Belt design that minimizes fraying of the belt edges
- **Belt edge sealing**
  Smartseal (Transilon): Belt edge sealing that requires no further sealing materials and is also suitable for knife edges. Prevents oil, grease, moisture or other contaminants from penetrating the conveyor belt at the side or textile fibers from extending out of the tension member.
- **Surface patterns**
  Special surface patterns improve grip and the release properties of many types of food.
- **Belt materials capable of detecting metals**
  Minimize the risk of the food being contaminated from parts of the belt
- **Blue belts for a strong color contrast**
  Blue belts provide a strong color contrast, therefore making it easier to spot soiling during the production process.
- **Belt scrapers**
  Hard materials are sometimes used to make one-piece, wear- and bend-resistant scrapers. The exceptionally elastic scraper lip lies very flat over the entire width of the belt.

HOW FORBO CAN HELP YOU TO COMPLY



Plastic modular belts

- **Manufactured to the standards of Forbo's own HACCP program.**
  All production and fabrication facilities are frequently audited.
- **FDA/EU-compliant, hydrolysis-resistant belt materials**
- **Easy-to-clean design**
  Large radii, wide hinge eyelets and flush-fitted hinge pins reduce the number of areas where contamination could occur. At the returns, the hinges open in lengthways and sideways to allow rinsing. On the underside, continuous channels make cleaning efficient without any ribbing getting in the way.
- **NSF compliance for several Prolink series**
  By achieving NSF 14159-3 standard, this certifies Forbo Prolink products and components meet a high sanitary design and cleanability requirement.
  All certified products/components and fabrication sites of Forbo Movement Systems can be found on the NSF Official Listing:
  http://info.nsf.org/Certified/Food_Processing/Listings.asp?Company=C0089301&Standard=14159-3
- **Surface patterns**
  Special surface patterns improve grip and the release properties of many types of food.
- **Incision-resistant surfaces**
  POM-CR modules are particularly impact- and incision-resistant. This minimizes the risk of dents in the material and delamination.
- **Belt materials with metal-detection capabilities**
  These minimize contamination of the food from parts of the belt.
- **Belts in strongly contrasting blue**
  Belts in strongly contrasting blue make it easier to identify any soiling during the production process.

Ref. no. 268-2
01/26 · UDH ·

MOVEMENT SYSTEMS

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