

Complying With The Food Safety Modernization Act

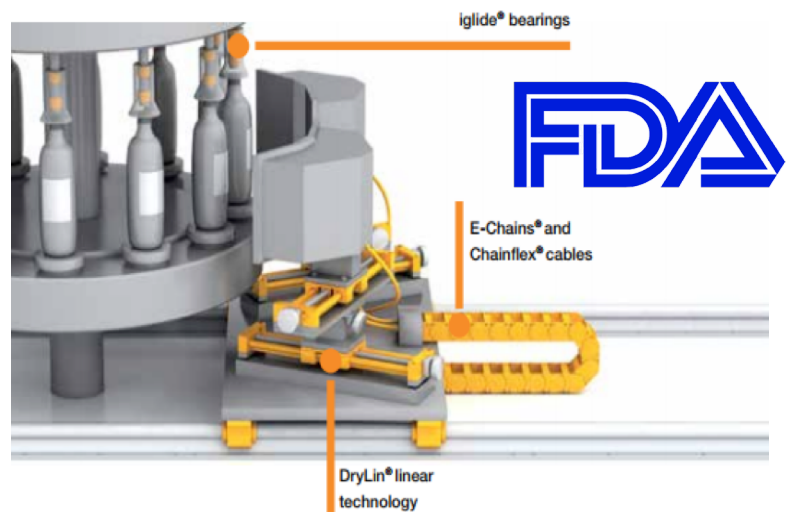
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Enacted by the U.S. Food and Drug Administration (FDA), The Food Safety Modernization Act (FSMA) was signed into law in 2011. The piece of legislation aims to ensure that food supply in America, and worldwide, is safe from bacteria, illness or adverse side effect as a result of contaminated or spoiled food. Rather than responding to contamination, the act focuses on effective prevention of food safety issues at the source. This is an aggressive approach to an age-old problem. Thus, the FSMA should be of concern for those in the packaging industry.

Compliance can sometimes seem daunting for companies, but there are easy and proven methods to abide by the act. Here, we will discuss how making the switch from metal to plastic bearings in the packaging

world can be a significant step towards meeting the terms of the act through eliminating corrosion, external lubricants and other possible sources of contamination.



Five Easy and Proven Ways to Comply to the FSMA:

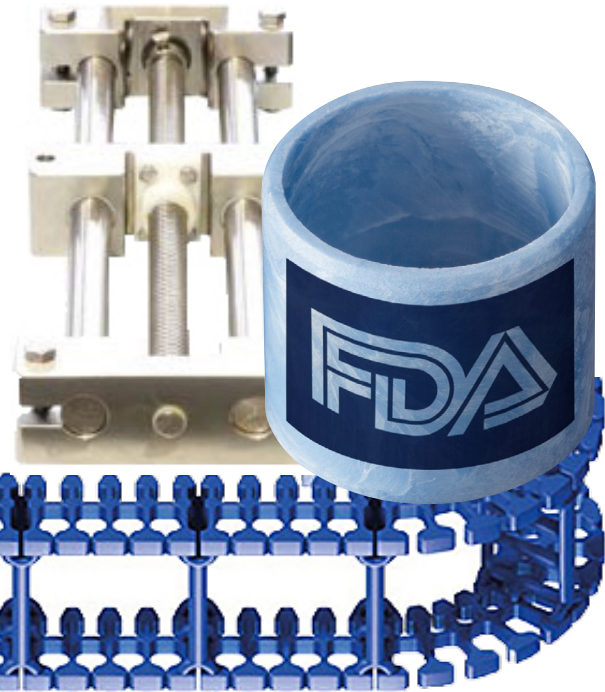
1) Eliminate Lubrication: Adding external lubricants to metal machinery is a major risk in the packaging industry. Lubricants have led to contamination in facilities, resulting in large fines and even shutdowns of the facilities. By switching from metal bearings to plastic bearings, companies can eliminate this risk from the start since no lubricants would be present to get into the food or drugs. There have been multiple cases of fines being handed out for lubricants in food packaging, including a multiple dollar fine for a processor of vegetables. These fines were handed out after the enactment, but it would have been best to be already eliminating lubricants to avoid any possible fines. Eliminating this potential source of contamination is an important step towards compliance with the act and mitigating costs for food suppliers.

2) Eliminate Corrosion: All types of metals eventually corrode when reacting with their external environments. When this inevitably happens, the chemicals that decompose off of the metal (which are loaded with contaminants) can spoil the products being packaged. Contaminants caused by corrosion can even include lead, resulting in a life-threatening illness if consumed. In addition to the FSMA, RohS compliance is becoming a very crucial topic, and metallic bearings containing lead are not in compliance. By using FDA and RohS compliant material, it will be clear that mitigation is happening.

3) Have Safe and Adequate Wash-Down Procedures: By consciously cleaning machinery, companies can drastically reduce the risk of causing contamination. If certain chemicals in cleaning products are used against certain bearing materials, chemical resistance can occur and produce contaminants. It is imperative that companies use cleaning products that are safe and symbiotic with their bearings

4) Use Hygienic Designs: By utilizing designs that do not have areas for contaminants to become trapped, you are eliminating the risk of contagion. Common problem areas within machinery are bolt holes and smaller crevices because there is nowhere for wash-down solutions to escape, leading to possible bacteria and mold caused by trapped contaminants within the system. Look for stainless steel and FDA compliant options for your machinery, as they help reduce contamination risks and keep you within the FSMA guidelines.

5) Incorporate FDA-Compliant Components Whenever Possible: Simply ensuring that your company is using FDA-compliant components will prevent a host of complications. igus® offers many FDA-compliant self-lubricating bearings such as iglide® A180, iglide® A181, iglide® A200, iglide® A350, iglide® A500, and iglide® T220. igus® also offers an FDA-compliant plastic e-chain®, the hygienic design e-chain®, which is highly resistant to aggressive cleaning agents and chemicals. Using FDA-compliant materials is a great step towards complying with the FSMA.



Additional benefits for packaging manufacturers who switch bearing materials include:

- Reduced maintenance costs since no re-lubricating is required
- Reduced downtime as a result of no maintenance
- Cleaner and more durable equipment
- Less warranty concerns or issues as a result of improper maintenance

To learn more about igus® dry-tech bearings, visit www.igus.com/drytech