

**Quality in Motion Since 1970** 

## Stainless Steel Indexing Devices for Food Processing

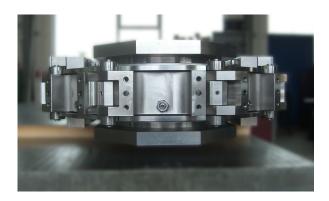


White Paper

1204 East Maple Troy MI 48083 Clean Room manufacturing involves eliminating small particles from contaminating products in the assembly process through a controlled environment. Every manufacturing environment is at risk of airborne microbes, dust, and chemicals. Clean Room machinery is critical in the medical, pharmaceutical, food processing, where these pollutants can inadversely affect the end product.

To eliminate food borne bacteria, automation equipment endures heavy wash downs on regular basis that most of the time contain heavy corrosive chemicals that would corrode standard steel components. The Motion Index Drives Stainless Steel Precision Link Indexing System is manufactured to meet and exceed requirements established for "wash" down environments conducive to food processing facilities.

Motion Index Drives precision links were manufactured with stainless steel components in order to endure the harsh chemicals that are sprayed on it and resist corrosion from these chemicals, converting it into a food handling conveyor. Corrosion of equipment can pose a threat to the safety of food products and can be extremely costly to food processing companies.



Stainless Steel Precision Conveyor

Today, a variety of foods are processed and packaged on stainless steel conveyors such as meat, fish, poultry, nuts, fruits, juice drinks and many more. The benefits of using stainless steel over alternative material for these applications is the stainless steel links ability to operate in a variety of conditions from extreme heat, humidity or cold.

Stainless steel is also the preferred choice in order to comply with the FDA regulations to use high grade materials in the manufacturing of food grade equipment. The "Corrosion-resistant" material upholds satisfactory surface cleaning features while in contact with food and the normal use of cleaning and sterilizing solutions. Because of its chemical and bacterial neutrality with food, the steel is non-threatening to consumption or taste to the food. Stainless steel adheres to requirements and conditions along with several other laws governed by the FDA states that states, "food processing equipment must be cleanable, corrosion resilient, and must have smoothly bonded seams."

The construction of the entire Precision Link Indexing System is a key attribute to preventing bacteria. The durability and corrosion resistance of stainless steel systems is also a vital factor, enabling it to last for decades.



## **OTHER OPTIONS**

- Stainless Steel or Nickle bolts as opposed to black oxide
- Completely enclosed fan motors
- Zero maintenance conveyors no contamination
- Stainless Steel plated
- Sealed to eliminate grease and oil
- Special Coatings



RT250 Rotary Index Table

Motion Index Drives RT250 rotary index table is used in the production line of a meat processing facility. The indexer that was replaced was misapplied to a specific food processing application. The customer had experienced premature failure of the previous indexer from extreme corrosion occurring shortly after production had started. Corrosion had not only developed on the outer surfaces of the indexer, it had also intruded to the internal components. The previous indexer was not sealed to prevent caustic cleaning agents from entering into the internal cavity.

We manufactured a replacement indexer with the following components that were better suited for caustic wash-down required for food processing equipment.

- Stainless steel output dial
- Stainless steel input shaft
- Stainless steel base
- Housing with special coating
- Food grade seals
- SEW Eurodrive food industry gear motor
- Euchner food industry rated limit switch

Motion Index Drives can customize our products to comply with Clean Room specifications in all the required manufacturing industries with our MedEx Line of indexers. Whether it be steel plating, special coatings, or having your unit completely sealed to eliminate intrusions, we can customize our products to your application needs.

President, Benedict Talan

