Sanitary Conveyors





Sanitary Construction Levels





There are two significant trends affecting sanitary conveyor construction: One, governmental compliance regulations continue to be more stringent and two, companies are looking to cut operational costs by improving cleaning efficiencies.

In order to help food production customers, Nercon's engineering and fabrication team have enhanced manufacturing processes to innovate on conveyor design and converge on universal components to create engineering efficiencies.

As a result, Nercon is able to help customers leverage six levels of conveyor construction with four levels for the sanitary conveying industry.

This system was engineered for handling bulk frozen food in a -20°F environment. A high level sanitary system, temperatures were elevated to normal levels for sanitation procedures.



The Sanitary Level I conveyors handle primary packaged food products such as ice cream and other dairy products. This bolted construction design features food grade bearings and sanitary motors/reducers and will handle high pressure, corrosive wash down procedures.



The Sanitary Level II conveyor provides high caustic and high pressure wash-down processes for minimizing bacteria growth. Featuring CIP and COP options, this design offers additional welded surfaces.



The wash - down design is suitable for basic, non-cultured food handling, such as baked goods or snack foods. It is designed for a low-pressure hose wash with moderate use of corrosive chemicals.



The Sanitary Level III defined as the same environment as Sanitary Level II, is an open frame design, highly polished stainless steel material to facilitate removal of bacteria and biofilms.



CIP, SIP & COP Options

Nercon's approach in recommending sanitary design features, is to build the system to the agency compliance specification with the collaboration of the food safety specialist and the project team.

Out of that collaboration, smart CIP (clean-in-place,) SIP (sanitize-in-place,) and COP (clean-out of-place) designs and processes are created to increases cleaning efficiencies and exceed food safety goals. Some of these options include:

- · Chain lift with lever
- · Chain release take up
- · Lift-up idle ends
- · Sanitary design covers
- · Removable guide rails
- · Chain wash tank
- Spray nozzles
- · Clean-out holes



Nercon's conveyor systems and equipment has been engineered for USDA, FDA, BISSC, 3A, Dairy and F.S.M.A. compliance.



A chain lift is often used in combination with a chain release or a lift-up idle to provide slack in the chain for access for cleaning.



Shown is a clean-in-place spray nozzle apparatus on the chain return path under the conveyor.



A quick release take-up does not require tools to release the belt for cleaning and maintenance.



This sanitary incline conveyor shows clean-out holes and removable guide rails.



A chain wash tank is a clean-in-place option.



White epoxy motor shown with sanitary channel support.

Process Room Conveyors



The conveyors highlighted here represent the extreme caustic wash down Sanitary Construction Levels II and III.



Thermoplastic Polyurethane Belt Conveyors benefit from safer food contact with an endless spliced belt with no hinges. Belts can be cleaned in place.



This ceiling hung cantilever design trough conveyor is cleanable to a micro-biological level. The c-shape design allows for ease of belt removal for access to inspection and cleaning.



This bead-blasted stainless steel Sanitary Level II design is movable and features a liftup Idle ends.



These wash-down raw meat handling elevators are all stainless steel, seal-welded construction with stick-free stainless steel textured plate used on the hopper chute.



This flighted reversing process room conveyor was designed to elevate totes of shredded cheese for unloading and lower the empty totes back to floor level.



Nercon's frozen dairy process room conveyors utilize the closed top design with welded stand-offs and cut-outs for access for cleaning.



Designed for BISSC sanitary design requirements, this trough conveyor line conveyed bulk ingredients.



This all welded sanitary incline conveyor features a flighted chain and sanitary cover.



The conveyor frame combined with a quick belt release allows quick removal of the belt for cleaning.