



BELTING
Technology

Conveying Solutions
Meat Industry



The Next Step in Belting

Simply Hygienic Belting for Safe Meat Processing & Packaging

Volta's homogeneous thermoplastic elastomers (TPE) food grade belts ensure the safe and hygienic manufacturing of raw and cooked meat and poultry. Our highly durable moisture-resistant belts comply with the strict hygiene requirements of the food industry, EU (1935/2004), FDA, USDA and are HACCP compatible. In addition, Volta's range of belt material does not contain the chemical Bisphenol A.

Volta's Clean & Simple Hygienic Solution



Hygiene Inspired

With a smooth non-porous homogeneous surface that does not absorb water or grease, preventing product residue and contamination from penetrating the belt to preserve and prolong product shelf life.



Food Safety Awareness

Made from strong abrasion resistant material that is completely sealed with no cracks, crevices or hinges to support the harboring of micro-organisms, resulting in low bacteria counts and reduced risk of food spoilage and product recall.



Reduced Cost of Ownership

Volta's high performing belts hold heavy loads and are safe and easy to install. They offers significant savings on processing lines, requiring reduced usage of water and chemicals and allow easier and faster sanitation procedures that do not involve the removal of belts from conveyors thereby saving labor costs and freeing up more production time. With less maintenance, easy on-site repair and production downtime you can concentrate on maximizing your product output.



Environmentally Responsible

Our simple to clean belt design will significantly reduce your water consumption and sanitizing energy, saving you high costs of harsh detergents, water treatments and cleaning labor.



Work Safety Awareness

The belts run at lower noise levels making the working environment safer. Belt cleanliness and the reduction of dangerous bacterial elements contribute not only to food safety but also to worker safety.

Homogeneous Safety & Quality

- ✓ **Advanced Cleanliness** – the easy to clean surface of our belts minimizes downtime for sanitation and waste management while extending production time.
- ✓ **Homogenous Structure** – with no moving parts that can harbor the growth of bacteria and no fabric layers that can soak up water, delaminate or fray to contaminate your meat product.
- ✓ **Improved Shelf Life** – reduced bacteria growth on your assembly lines will improve the quality of your meat products and extend shelf life.
- ✓ **Hydrolysis Resistance** – the tough belt material is impervious to fluids including blood, oils and fats.
- ✓ **Self Tracking Design** – our SuperDrive™ positive drive system has a built in guide mechanism that prevents off-tracking and requires minimal tensioning for reduced belt wear and tear.
- ✓ **Low Noise Conveyor Belt** – will improve working conditions.
- ✓ **Substitution Option** – some modular belts with a 2" pitch can usually be changed to Volta's DualDrive positive drive conveyor belt with no retrofit.
- ✓ **Easy On-Site Repair** – keeping downtime to a minimum for improved productivity.



The SuperDrive™ & DualDrive Positive Drive Belting Systems in the Meat Industry

Volta's SuperDrive™-6mm and DualDrive-5mm are heavy duty positive drive belts that meet the strict hygiene standards directed by the food industry, complying with NSF/ANSI/3-A 14159-3 – 2010 Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing.

These tough positive drive belts meet the most demanding challenges in the meat processing industry. They are resistant to cuts caused by knives and bone fragments and can work in high impact applications, absorbing the shock that would fracture or rip other belts. The easy to clean surface keeps contamination risks in check and better preserves the quality of your meat product. With minimal tensioning required, the belts are easy to maintain with low belt wear and tear.

The Super Drive™ and the Dual Drive belts clearly offer an improved performance over the modular belts, with their many advantages and conveniences.


Boning & De-Boning Lines

Volta's positive drive belting systems are designed to absorb high impacts without the risk of off-tracking. Its flexible belting material will not crack or break from heavy products and is resistant to cuts caused by sharp bone fragments.



Cutting Lines

Volta's tough TPE belts are highly resistant to cuts and abrasions and are built to last in this application. The belts will remain hygienic for longer and can be cleaned easily and effectively without having to be removed from the conveyor. Cuts are superficial and clean out perfectly as the belt structure is dense and homogeneous even inside the cut line.

 **Offal Lines** producing variety meats or organ meats – require a belt surface that will preserve the product from mechanical or bacterial damage. Hygiene requirements on offal lines often surpass that of raw meat and poultry. Here Volta's smooth anti-absorbent surface will out-perform all other belts, with its high resistance to blood, fat and grease, and capacity to carry the product without snagging or tearing. Your profits are maximized through significant cuts in waste.



Frozen Meat Blocks

The belts will not abrade even from constant contact with frozen products. As a result, the possibility of belt fragments entering the product, which cannot be traced by metal detectors, is virtually impossible (a problem that is rife with more friable modular belts). Where high durability and hygiene levels are essential, homogeneous belts can be relied on to ensure the highest standards observed to safeguard the meat product.

Shock Freezing

Volta's SuperDrive™ positive drive system can withstand very low temperatures (the Low Temperature-LT belts are specified for use from -35°C to 35°C/-31°F to 95°F). The thick homogenous material will not break (like modular belts can) or peel (like plied belts may). Belts can be perforated to allow air circulation.



Processed Meats & Goods

Slicing Lines

Volta offers food grade round and flat narrow belts in a variety of colors including our special blue color for an improved modern image, which has been proven effective for visual identification of product contamination, resulting in less cross contamination, less risk to product liability and cleaner belt and conveyor. In recent years processors found that the blue color also relieved eye strain and improved employee performance. Optical scanners on these lines perform excellently on the blue surface of our belts.



Minced Meat Lines

The homogenous surface of the belt prevents liquid from leaking through the trough conveyors for increased product yield. The belts are easy to clean, minimizing the risks of contamination and product rejection. Volta's SuperDrive™ belt prevents the issue of off-tracking and works with minimal or no tensioning.

Frankfurter & Hamburger Machine

Volta's special 65/90 conveying belt was designed especially for the making of frankfurters. The non-stick IRT& ITO50 texture surface tops provide excellent product release as well as reduced waste in the hamburger processing lines. Special flexible belts are also available for hamburger pressing machines. These can be supplied with a variety of easy to clean textures for efficient product release.



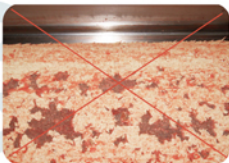
Sausage Machine

Conveyors running this delicate process must be hygienic, flexible, swift and durable. To ensure minimal damage to the sausage, a high grip surface is essential, which will not be at risk of fraying. Volta offers special profiles developed especially for machinery conveying and aligning sausages. Our HF (High Frequency) welded sidewalls and cleats can carry heavy weights and are especially suited for non-slip applications. Trough conveyors can be made from food grade flat belts or Super Drive™ and combined with hygienic conveyor designs for optimum factory conditions.

Homogeneous Belting for Longer Belt Life & Better Hygiene

In comparison with Ply belts:

- ✓ Ply belts (also known as coated fabric belts) are finger-spliced welded, unlike Volta's homogenous thermo-welded belts which are butt welded.
- ✓ Flights on a ply belts are stuck onto the top thin layer of plastic which cannot withstand flexing from product weights and in time, tear away from the base belt. Volta offers solid welded flights that cannot detach from the base belt even when carrying heavy loads.
- ✓ Ply belts fray at the edges and delaminate particularly on the finger splice. This problem is accelerated when frozen or abrasive products are carried. The damage on the belt becomes a breeding ground for bacteria, which in turn contaminates the product and releases very bad odors associated with decay.
- ✓ Volta's homogenous material and the sealed and recessed edge belt technologies (used in special cases) prevent bacteria from growing on the belt and contaminating products on the conveyor.
- ✓ Ply belts cannot withstand the demanding applications of the meat industry. They offer no resistance to cuts and abrasion, and will absorb liquids and fats that will readily cause them to crack over time and turn them into a perpetually contaminated and un-cleanable surface base in the processing line.
- ✓ Ply belts have a very limited lifetime for conveying food products during all of which they are suspect of harboring bacteria.



In comparison with Modular belts:

- ✓ Modular belts are very difficult to clean effectively, with their hidden joints, pins and recesses.
- ✓ To obtain the desired bacteriological results and a truly clean belt appearance, modular belts must be removed from the conveyor and soaked for hours or cleaned using high water pressure, and then dried thoroughly. This laborious process is costly in water, chemicals, manpower and results in massive downtime.
- ✓ When subjected to conveying heavy or frozen products, their brittle and friable structure breaks and chips easily. This feeds undetectable hard plastic fragments into the food they are carrying. The common argument that modular belts are self-servicing due to their easily replaceable parts does not take into account the high risk of contamination to the processed food or the additional high costs of replacement parts.



In comparison with Stainless Steel belts:

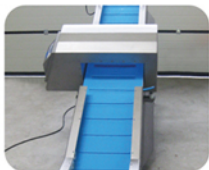
- ✓ Stainless Steel belts are very expensive to maintain and repair and their sharp edges represent a safety hazard to employees.
- ✓ Glued rubber guides wear in time and are very costly to renew.
- ✓ Volta's H Family belts can be fitted onto the large steel belt pulleys with minimum retrofit. The guide is thermo-welded under the homogeneous surface and is guaranteed not to separate for the full life of the belt.
- ✓ Volta's thermal repair tools can mend any form of tearing on-site.



Meat Industry



Support Flights



Metal Detector



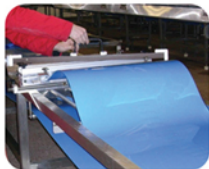
Heavy Weight Movement



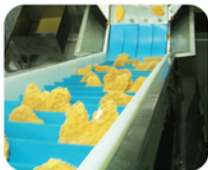
Meat Elevator



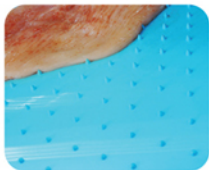
Cutting Line



On-site Welding



HF Welded Flights



Volta Spikes



Meat Conveyor



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