



The Next Step in Belting



Meat Industry

Conveying Solutions

Simply Hygienic Belting for Safe Meat Processing & Packaging

Volta's thermoplastic, elastomeric (TPE) belts ensure safe and hygienic processing of meat and poultry. The durable, moisture-resistant belts comply with the strict requirements of food processing regulations; EU No.-10/2011 amended by 2017/752, 1935/2004 and 2023/2006 and FDA Art. 21. CFR.177.2600., USDA, NSF/ANSI/3-A 14159-3 - 2010 (Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing). FDA, USDA, NSF/ANSI/3-A 14159-3 - 2010 (Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing). They are certified as not containing Bisphenol A and are HACCP compatible.



Hygiene Inspired

Volta materials have an impervious, homogeneous surface that will inhibit product residue from building up and does not harbor bacteria, thereby reducing the risk of recalls and giving longer product shelf life.



Food Safety Awareness

No cracks, links or hinge pins which turn into breeding grounds for micro-organisms.



Reduce Cost of Ownership

Volta's belts can carry heavy (frozen) loads and are simple and quick to install. Their use provides significant savings with cleaning procedures being rationalized. Water and manpower are reduced and the downtime becomes available production time. Belts can be cleaned on the conveyors. Maintenance is minimal and the hidden costs of ordering and installing spare parts as found with modular belts, disappear.



Environmentally Responsible

Reduced water consumption and lower environment levies.



Work Safety Awareness

Compared to modular systems, the belts are quiet and reduce the risk of certain industrial illnesses to workers. Belt hygiene also contributes to a cleaner and safer working environment.

Homogeneous Safety & Quality

- ✓ **Advanced Cleanliness** - the belt surface minimizes downtime for sanitation and waste management while extending production time.
- ✓ **Homogenous Structure** - no moving parts and links and no fabric layers or exposed fabric edges. Welded features do not detach, fracture or abrade into the product flow.
- ✓ **Improved Shelf Life** - reduced bacteria counts increase product shelf life.
- ✓ **Hydrolysis Resistance** - impervious to fluids including blood, oils, salt and fats.
- ✓ **Self-Tracking** - the extruded teeth of the SuperDrive™ belts are used to track belts even under water.
- ✓ **Low Noise** - improved working conditions.
- ✓ **Easy On-Site Repair** - keeping downtime to a minimum for improved productivity



Slaughter House

SuperDrive™ & DualDrive Positive Drive Belting Systems

Volta's SuperDrive™ is suited to all heavy duty meat processing applications and a 6mm version can cope with high impact and heavy accumulation.

✓ Slaughterhouse Lines/Boning and De-Boning Lines

The belts meet the most demanding challenges in the meat processing industry. They can be used on boning lines where high impact and heavy wear and tear are commonplace. They outperform modular belts where parts are replaced frequently and provide superior hygiene.



✓ Primary Processing Lines

Volta's belts are highly resistant to cuts and abrasion. The belts will maintain low bacteria counts and require less maintenance and cleaning than any other belt on the market. Cleaning can be done on the conveyor and the belts are suited to CIP solutions.



✓ Frozen Meat Blocks

The belts will not abrade even from constant contact with frozen products. Belt fragments will not enter the product flow. Resistance to wear and tear from frozen products is a critical failing of modular belts. While Volta materials are not prone to the problem of fragmentation and entry into the product flow, the issue is very much in vogue and Volta Metal Detectable (MD) belting can act as an 'insurance policy' for QA procedures and help allay any fears of this occurring.



✓ Shock Freezing Sub Zero conveying

Volta materials can be used down to -20° Celsius. A special material, M LT (medium hard Low Temperature) enables the belt to work on minimum pulleys at sub-zero temperatures and is rated down to -35°C.



Further Processing

✓ Slicing Lines

Volta produces a range of food grade profiles and flat strips for conveyors used for sliced products like salami. They are suited to direct contact and the transferring of semi-packed products into vacuum packing machines.



✓ Minced Meat Lines

The dense and continuous surface of Volta material allows for moist product to be transported even where juices can ooze from product. Trough conveyors can provide a simple alternative to containment. Flat belts with non-stick IRT & ITO50 texture surface tops complete the range for minced products such as Hamburgers and flexible belts are available for hamburgers pressing machines.



✓ Sausage Machine

A number of specialty machines are on the market and Volta belting material is well-suited to this application giving maximum hygienic protection to this easily contaminated product type. Special profiles have been developed for carrying in single file after alignment such as the 65/90 profile. Trough conveyors provide a convenient solution for mass conveying and permit quick and efficient product transfer.



✓ Offal Lines

A special fabrication enables offal to be collected in separate compartments for each animal until the carcass has been cleared for consumption by veterinary services. The economic value of this is that where a carcass is rejected, the matching reject organs can be traced and removed without having been mixed with other offal parts.



Homogeneous Belting for Longer Belt Life & Better Hygiene

In comparison with Plied belts:

- ✓ Plied belts (plastic coated fabric belts) are finger-spliced; Volta belts are butt welded. The joint is longer-lasting - it will not open - and not prone to contamination.
- ✓ Flights fabricated on a plied belt detach with ease from product impact and render belts unusable after a fraction of their potential lifetime. Volta flights will not detach even under extreme loads. Gussets can be welded on to prevent flexing.
- ✓ Plied belts fray at the edges and delaminate particularly on the finger splice. This problem is accelerated when frozen or abrasive products are carried. The open fabric is a breeding ground for bacteria that cannot be sanitized. The fabric underside also harbors micro-organisms and is often overlooked as a serious source of contamination.
- ✓ Volta belting material does not suffer from any of these hygienic weaknesses.



In comparison with Modular belts:

- ✓ Modular belts cannot be cleaned effectively without hours of attention.
- ✓ To obtain the a desired bacteriological results they must be removed from the conveyor and soaked for hours (often this is a food industry requirement) The cost of this in terms of water, chemicals, manpower and production downtime is enormous.
- ✓ Modular belts abrade and even fragment when carrying frozen product or joints with bone. Plastic particles enter the product flow and reach the consumer. The common practice of replacing worn modules does not account for either the contamination caused by the worn parts nor the cost of the replacements (both the actual cost of parts and the maintenance staff who do the fitting).



In comparison with Stainless Steel belts:

- ✓ Stainless steel belts are the most expensive belts available and maintenance is costly.
- ✓ Glued rubber guides are expensive to repair. The belts are dangerous to the working environment and apart from sharp edges, a sudden break can be disastrous.
- ✓ Volta's H material can be retro-fitted to steel belt conveyors.

Before



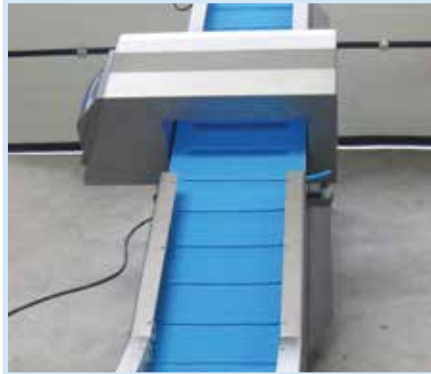
After



Meat Industry



Support Flights



Metal Detector



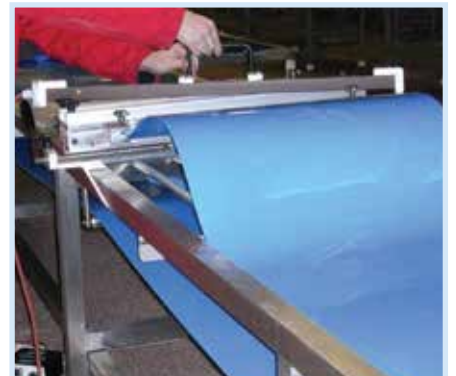
Heavy Weight Movement



Meat Elevator



Cutting Line



On-site Welding



HF Welded Flights



Volta Spikes



Meat Conveyor