



***Volta Belting
Technology***

/// Motech

About Volta Belting

Volta Belting Technology Ltd. has been a world leader in the manufacture of Thermoplastic Elastomer (TPE) belting and profiles for over 50 years. Volta Belting's homogeneous belts are known for their high material strength, superior dimensional exactitude and stability. The materials are cut and wear -resistant and impervious to water, oils and other fluids. They are easy to install on-site, with a minimum of contamination to the work area, and, if damaged, can be repaired efficiently by closing tears or replacing sections. Volta belting's positive drive flat belts are uniquely designed to overcome the numerous shortcomings associated with conventional conveyor belts: suitability in wet (even submerged) conditions without off-tracking and without the need for friction rollers, thereby saving on conveyor design and bringing the food processing industry closer to its goal of providing safe, affordable food for all. The food-grade belts are FDA/USDA/USDA Dairy approved and confirm to EC regulations. The materials also support HACCP principles and are suited to CIP procedures. In general industries, the belts come into their own by offering superior durability (for a "lifetime") and savings in maintenance and downtime. Volta Belting serves specialized industries such as wood and furniture, paper and packaging production, metal processing, automotive, recycling and mechanized logistic facilities. Volta Belting offers the largest range of round and trapezoid (V) profiles. In a number of key industries, the profiles can be used as rings to drive roller beds. Volta Belting provides experienced sales and technical service support in more than 50 countries, covering major industrial centers throughout North and South America, Europe, Asia and Africa. On site training is available at Volta Belting's main fabrication centers in North America and Europe. Volta Belting's innovative belting technology guarantees extended productivity, lower costs of ownership and optimal operation in every installation.



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



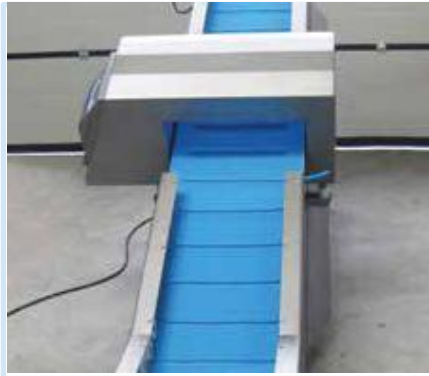
After



Meat Industry



Support Flights



Metal Detector



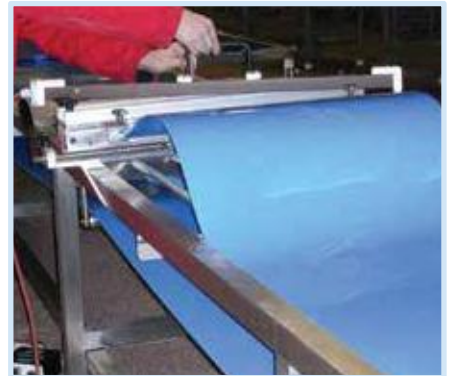
Heavy Weight Movement



Meat Elevator



Cutting Line



On-site Welding



HF Welded Flights



Volta Spikes



Meat Conveyor



The Next Step in Belting



Flat Belts- Poultry Industry
Conveying Solutions



Simply Hygienic Belting for Safe Poultry Processing & Packaging

Volta's homogeneous thermoplastic elastomers (TPE) food grade belts ensure the safe and hygienic processing of raw and cooked poultry. Our highly durable moisture-resistant belts comply with the strictest hygiene requirements for the food industry, EU No.-10/2011 amended by 2017/752, 1935/2004 and 2023/2006 and FDA Art. 21. CFR.177.2600.,USDA and are HACCP compatible.



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 extend 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.



Reduce 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 reduced 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, enabling savings on harsh detergents, water treatments and sanitation labor.



Work Safety Awareness

Volta belts run at significantly 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.

Positive Drive Belting Systems in the Poultry Industry

Volta's SuperDrive™, DualDrive™, Mini SuperDrive™ and Mini DualDrive™ are positive drive belts that meet the strict hygiene standards directed by the food industry. In addition, Volta's range of belt material does not contain the chemical Bisphémol A.

These tough positive drive belts meet the most demanding challenges in the poultry 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. Some modular belts with a 2" pitch can usually be changed to Volta's DualDrive™ and 1" pitch to Volta's Mini DualDrive™ positive drive conveyor belt with minimal or no retrofit. Volta positive drive belts clearly offer an improved performance over the modular belts, with their many advantages and conveniences.



“Because of the homogeneous Volta material we find out that these belts were lasting much longer compared to regular PVC multiply and modular belts. We have now in our plant 20 SuperDrive™ belts. Since the SuperDrive™ belts were installed on the new and existing conveyors the headache of bad surfaces, fraying of the sides, unwanted liquids in the belt and broken/missing belt parts stopped at once. We did not change the belts anymore after we bought SuperDrive™ belts. The Dutch VWA food authority and our own quality control measures the bacteria level on the Volta belts and still after 4 years these belts perform excellent. The belts are cost saving for example the aspect of cleaning, less consumption of cleaning water and chemicals we minimize our downtime. Also maintenance has been reduced tremendously. We don't have to inspect the belt on and on because the SuperDrive™ belt has an integrated teeth row which tracks and guides the belt, no slippage and problems with guiding the belts at all. We saved a lot of money using the Volta SuperDrive™ in our plant.”

says Mr. Wim Clazing the owner of Export slaughterery in Holland.



✓ Slaughtering Lines

Volta belts are highly resistant to scratching and impact as well as impervious to water, body fluids and fats. The belts are suited to difficult work on slaughter lines and enable the most effective control of pathogens by means of CIP or cost effective disinfection. No other belt technology hinders the development of bacteria like thermoplastic belts.



✓ Evisceration Lines

Volta belts can transfer blood and organs with a minimum of spillage, making the working environment cleaner and safer as well as permitting the hygienic collection of delicate material.



✓ Chilling

Poultry coming out of chilling systems is volatile and sensitive material and handling on a flexible yet firm surface is essential. Thermoplastic belting provides the most hygienic conditions and Volta Positive Drive technology prevents slipping and off-tracking even under water.



✓ Portioning

These lines are often characterized by hands-on work with the ensuing dangers of human intervention. Conveyor belting must be of both the highest hygienic standard and the most failsafe mechanical construction - only Volta belts fulfill these criteria.

Volta offers a wide range of textured top belts for the slicers, dicers and flatteners.

✓ Pre-Cooked and Breaded portions

Volta material is ideally suited to handling the excess fats and particles that accumulate on lines where processed poultry is handled. Thermoplastic materials permit fast and cost-efficient wash downs combined with durable custom-made fabrications that permit elevation and automated handling of irregular portions and the accompanying residue.



✓ Sausages, Nuggets, Ground meat

Many factories are involved in further processing and the more the product is handled, the greater the risks of contamination. The added investment in the foodstuff being processed makes any loss due to contamination more expensive than for raw foods. Volta belts are used extensively to handle sausages and minced poultry.

Volta fabricates a special right-angled profile (65/90) for use on sausage transfer machines. The non-stick IRT & ITO50 texture surface tops provide excellent product release as well as reduced waste in the Hamburgers 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.



✓ Packaging & Shock Freezing lines

Conveyors for handling packed materials can often be the source of mechanical failure and involve the waste of time for maintenance staff and expense. Volta fabricates long-lasting belts which also protect against cross-contamination. The Volta SuperDrive™ LT (Low Temperature) material can be used for conveying to and from IQF lines and withstands temperatures of down to -35° Celsius. The thick homogeneous material will not break (like modular belts can) or peel (like plied belts may). Belts can be perforated to allow air circulation.



✓ Metal Detectors

Metal Detectors are an integral part of all food lines. Where open food is checked, Volta belts offer enhanced hygiene and even for packed food they will last longer and give more reliable service by reducing the incidences of calibrating the detection unit and other maintenance issues which go with belt changeovers.



✓ Feather Collection

Waste product and bi-product is often a difficult issue in food factories and more so for feathers which are full of harmful organisms. Safe handling can only be done on a fully homogeneous belt which gives both hygienic and mechanical safety as well as ensuring good containment of the bi-product.



Homogeneous Belting for Longer Belt Life & Better Hygiene

In comparison with plied belts:

- ✓ Plied mono-filament style belts typically require finger splicing methods requiring more sophisticated belt welding equipment compared to the simple butt welding process offered by Volta style homogeneous materials.
- ✓ Flights on a plied belts are only adhered to the thin layer of material 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.
- ✓ Plied belts can be susceptible to fraying on the edges and can delaminate between the plies causing finger splice belts to fail prematurely. 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 homogeneous material and the sealed and recessed edge belt technologies prevent bacteria from absorbing into the belt and contaminating products on the conveyor.



In comparison with modular belts:

- ✓ Modular belts with the brick layered design and use of hinges and pins prove to be very difficult to clean effectively.
- ✓ To obtain the required bacteriological results and a truly sanitized belt, plastic modular belts typically need to be removed from the conveyor and soaked for hours in high concentrations of chemicals or be subjected to high pressurized washing resulting in increased water and chemical usage, and manpower hours.
- ✓ When subjected to conveying heavy or frozen products, their brittle and fragile structure breaks and chips easily. This feeds undetectable hard plastic fragments into the food they are carrying. The common argument that modular belts are selfservicing 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.



**EHEDG members and
co-authors of Guidelines 43**

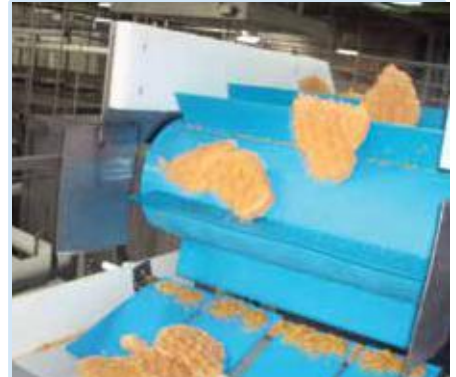
Poultry Industry



SuperDrive™ on portioning line



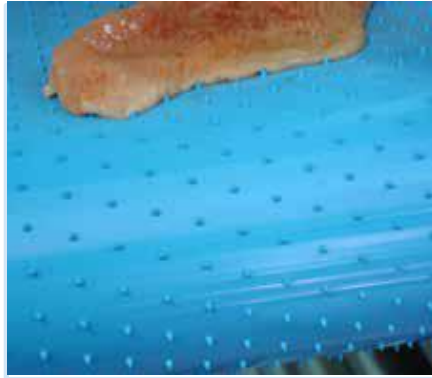
Portioning line



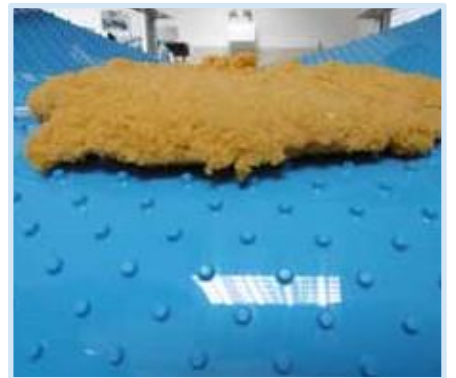
DualDrive™ on breaded chicken breast line



Crescent Top (CT) Texture



Spikes (SP) Texture



Impression Nub Top (INT) Texture



Meat Cleat (MC) Texture



Impression Roof Top (IRT) Texture



Frozen nuggets



Flat Belts Food Industry
Conveying Solutions

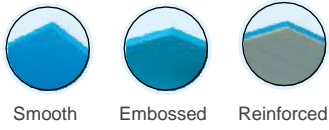
/// Motech

- Volta has been manufacturing belts from homogenous Thermoplastic Elastomer (TPE) materials for over 55 years.
- The base belts are cut and abrasion resistant and have no ply or hinged elements which harbor bacteria.
- Volta products are the optimal choice where superior hygiene, conveying and cost efficiency are targets.

| Homogeneous Belts | | | | | | | | | | | |
|---|-----------|----------------|-------------------------------------|---|-----------|--|-------------------------|--------------------------------|------------------------------|--------|----------------|
| Product & Color | | Shore Hardness | Temperature Range | Coefficient of Friction on S.Steel (Bottom) | Thickness | | Minimum Pulley Diameter | | Pull Force: Pretension of 1% | | Certifications |
| | | | | | mm | | mm | Inch | kg/cm | lbs/in | |
| FHB | Blue16 | 59D | -20° C to 75° C -5° F to 170° F | 0.28 | 2 | | 70 | 2 ³ / ₄ | 2 | 11.20 | FDA/USDA /EU |
| | | | | | 3 | | 90 | 3 ⁹ / ₁₆ | 3 | 16.80 | |
| | | | | | 4 | | 110 | 4 ³ / ₈ | 4 | 22.40 | |
| | | | | | 5 | | 150 | 5 ⁷ / ₈ | 5 | 28.00 | |
| | | | | | 6 | | 180 | 7 | 6 | 33.60 | |
| FHB | Blue13 | 59D | -20° C to 75° C -5° F to 170° F | 0.28 | 4 | | 110 | 4 ³ / ₈ | 4 | 22.40 | FDA/USDA /EU |
| FHW | Off white | 59D | -20° C to 75° C -5° F to 170° F | 0.28 | 1.5 | | 50 | 2 | 1.50 | 8.40 | FDA/USDA /EU |
| | | | | | 2 | | 70 | 2 ³ / ₄ | 2 | 11.20 | |
| | | | | | 3 | | 90 | 3 ⁹ / ₁₆ | 3 | 16.80 | |
| | | | | | 4 | | 110 | 4 ³ / ₈ | 4 | 22.40 | |
| | | | | | 5 | | 150 | 5 ⁷ / ₈ | 5 | 28.00 | |
| | | | | | 6 | | 180 | 7 | 6 | 33.60 | |
| FMB | Blue | 95A/46D | -30° C to 70° C -20° F to 158° F | 0.40 | 2.5 | | 35 | 1 ³ / ₈ | 1.50 | 8.40 | FDA/USDA /EU |
| | | | | | 3 | | 40 | 1 ⁵ / ₈ | 1.80 | 10.10 | |
| | | | | | 4 | | 60 | 2 ³ / ₈ | 2.40 | 13.50 | |
| | | | | | 5 | | 80 | 3 ¹ / ₈ | 3 | 16.90 | |
| | | | | | 6 | | 90 | 3 ⁹ / ₁₆ | 3.60 | 20.25 | |
| FMW | Beige | 95A/46D | -30° C to 70° C -20° F to 158° F | 0.40 | 2.5 | | 35 | 1 ³ / ₈ | 1.50 | 8.40 | FDA/USDA /EU |
| | | | | | 3 | | 40 | 1 ⁵ / ₈ | 1.80 | 10.10 | |
| | | | | | 4 | | 60 | 2 ³ / ₈ | 2.40 | 13.50 | |
| | | | | | 5 | | 80 | 3 ¹ / ₈ | 3 | 16.90 | |
| | | | | | 6 | | 90 | 3 ⁹ / ₁₆ | 3.60 | 20.25 | |
| FMWC | Clear | 95A/46D | -30° C to 70° C -20° F to 158° F | 0.40 | 2.5 | | 35 | 1 ³ / ₈ | 1 | 8.40 | FDA/USDA /EU |
| | | | | | 3 | | 40 | 1 ⁵ / ₈ | 1.2 | 6.70 | |
| | | | | | 4 | | 60 | 2 ³ / ₈ | 1.6 | 9 | |
| | | | | | 5 | | 80 | 3 ¹ / ₈ | 2 | 11 | |
| | | | | | 6 | | 90 | 3 ⁹ / ₁₆ | 2.4 | 13.4 | |
| FTB | Blue13 | 72A | -40° C to 40° C -40° F to 104° F | 1.25 | 3 | | 19 | ³ / ₄ | 0.57 | 3.2 | FDA/ EU |
| Hydrolysis & Chemical Resistant (DR) Homogenous Belts | | | | | | | | | | | |
| FDR | Blue15 | 53D | -30° C to 70° C -20° F to 158° F | 0.55 | 4 | | 80 | 3 ¹ / ₁₆ | 2.4 | 13.5 | FDA/USD A/ EU |
| Low Temperature (LT) Homogeneous Belts | | | | | | | | | | | |
| FMB-LT | Blue15 | 95A/46D | -35° C to 65° C -31° F to 149° F | 0.36 | 3 | | 40 | 1 ⁵ / ₈ | 1.20 | 6.70 | FDA/ EU |
| | | | | | 4 | | 60 | 2 ³ / ₈ | 1.60 | 9 | |
| | | | | | 5 | | 80 | 3 ¹ / ₈ | 2 | 11.20 | |
| | | | | | 6 | | 90 | 3 ⁹ / ₁₆ | 2.40 | 13.40 | |
| Metal Detectable (MD) Homogeneous Belts | | | | | | | | | | | |
| FMB-MD | Blue 09 | 95A | -20° C to 60° C -5° F to 140° F | 0.50 | 3 | | 75 | 3 | 1.80 | 10.1 | FDA/ EU |

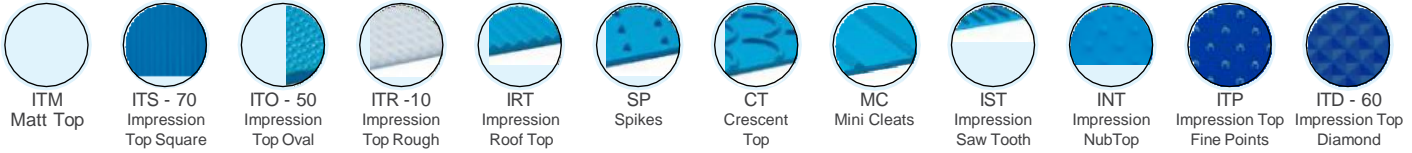
Standard belt width = 1524mm (60"). Some of the belts are also available in 2032mm (80") width. Please contact Volta Belting representative for additional information.

Flat Belt Bottom Surfaces



Smooth Embossed Reinforced

Flat Belt Impression Top Surfaces



ITM Matt Top ITS - 70 Impression Top Square ITO - 50 Impression Top Oval ITR -10 Impression Top Rough IRT Impression Roof Top SP Spikes CT Crescent Top MC Mini Cleats IST Impression Saw Tooth INT Impression NubTop ITP Impression Top Fine Points ITD - 60 Impression Top Diamond

| Homogeneous Embossed Bottom Belts | | | | | | | | | | | |
|-----------------------------------|----------|--|----------------|-------------------------------------|--|-----------|-------------------------|---------------------------------|------------------------------|-------|----------------|
| Product & Color | | | Shore Hardness | Temperature Range | Coefficient of Friction S.Steel (Bottom) | Thickness | Minimum Pulley Diameter | | Pull Force: Pretension of 1% | | Certifications |
| | | | | | | | mm | mm | Inch | kg/cm | |
| FBHB | Blue 16 | | 59D | -20° C to 75° C -5° F to 170° F | 0.20 | 3 | 90 | 3 ⁹ / ₁₆ | 3 | 16.80 | FDA/USDA /EU |
| FEMB | Blue | | 95A/46D | -30° C to 70° C -20° F to 158° F | 0.25 | 1.6 | 24 | 1 ⁵ / ₁₆ | 0.60 | 3.60 | FDA/USDA /EU |
| | | | | | | 2 | 30 | 1 ³ / ₈ | 0.80 | 4.50 | |
| | | | | | | 2.5 | 35 | 1 ³ / ₈ | 1 | 5.60 | |
| | | | | | | 3 | 40 | 1 ⁵ / ₈ | 1.20 | 6.80 | |
| | | | | | | 4 | 60 | 2 ³ / ₈ | 1.60 | 9.20 | |
| FBMW | Beige | | 95A/46D | -30° C to 70° C -20° F to 158° F | 0.25 | 5 | 80 | 3 ¹ / ₈ | 2.10 | 11.70 | FDA/USDA /EU |
| | | | | | | 2 | 30 | 1 ³ / ₁₆ | 0.80 | 4.50 | |
| | | | | | | 2.5 | 35 | 1 ³ / ₈ | 1 | 5.60 | |
| | | | | | | 3 | 40 | 1 ⁵ / ₈ | 1.20 | 6.80 | |
| | | | | | | 4 | 60 | 2 ³ / ₈ | 1.60 | 9.20 | |
| FEMB-MD** | Blue 09 | | 95A | -20° C to 60° C -5° F to 140° F | 0.25 | 2 | 50 | 2 | 0.80 | 4.5 | FDA/EU |
| | | | | | | 3 | 75 | 3 | 1.20 | 6.8 | |
| FELB | Blue | | 80A | -40° C to 50° C -40° F to 120° F | 0.45 | 1.6 | 10 | 3 ⁸ / | 0.32 | 1.79 | FDA/EU |
| | | | | | | 2 | 12 | 1 ² / | 0.40 | 2.24 | |
| | | | | | | 2.5 | 15 | 1 ⁹ / ₃₂ | 0.50 | 2.80 | |
| | | | | | | 3 | 20 | 1 ³ / ₁₆ | 0.60 | 3.36 | |
| FELB | Blue 02 | | 80A | -40° C to 50° C -40° F to 120° F | 0.45 | 1.6 | 10 | 3 ⁸ / | 0.32 | 1.79 | FDA/EU |
| | | | | | | 2 | 12 | 1 ² / | 0.40 | 2.24 | |
| FELW | White 16 | | 80A | -40° C to 50° C -40° F to 120° F | 0.45 | 1.6 | 10 | 3 ⁸ / | 0.32 | 1.79 | FDA/EU |
| | | | | | | 2 | 12 | 1 ² / | 0.40 | 2.24 | |
| | | | | | | 2.5 | 15 | 1 ⁹ / ₃₂ | 0.50 | 2.80 | |
| | | | | | | 3 | 20 | 1 ³ / ₁₆ | 0.60 | 3.36 | |
| | | | | | | 4 | 26 | 1 ¹³ / ₃₂ | 0.80 | 4.48 | |
| FETB | Blue 10 | | 72A | 40° C to 40° C -40° F to 104° F | 1 | 1.6 | 10 | 3 ⁸ / | 0.29 | 1.6 | FDA/EU |
| | | | | | | 2 | 13 | 1 ² / | 0.36 | 2 | |
| | | | | | | 3 | 19 | 3 ⁴ / | 0.55 | 3 | |
| Reinforced Belts | | | | | | | | | | | |
| FRMB | Blue | | 95A/46D | -30° C to 70° C -20° F to 158° F | 0.20 | 2 | 25 | 1 | 6 | 33.50 | FDA/USDA /EU |
| | | | | | | 3 | 35 | 1 ³ / ₈ | 7 | 39 | |
| FRMW | Beige | | 95A/46D | -30° C to 70° C -20° F to 158° F | 0.20 | 2 | 25 | 1 | 6 | 33.50 | FDA/USDA /EU |
| | | | | | | 2.5 | 30 | 1 ³ / ₁₆ | 6.50 | 36.20 | |
| | | | | | | 3 | 35 | 1 ³ / ₈ | 7 | 39 | |
| | | | | | | 4 | 70 | 2 ³ / ₄ | 7.5 | 42 | |
| FRLB | Blue | | 80A | -40° C to 50° C -40° F to 120° F | 0.20 | 1.6 | 8 | 5 ¹ / ₁₆ | 4 | 22 | FDA/ EU |
| | | | | | | 2 | 10 | 3 ⁸ / | 5 | 28 | |
| FRLW | White 16 | | 80A | -40° C to 50° C -40° F to 120° F | 0.20 | 1.6 | 8 | 5 ¹ / ₁₆ | 4 | 22 | FDA/ EU |
| | | | | | | 2 | 10 | 3 ⁸ / | 5 | 28 | |
| | | | | | | 3 | 18 | 1 ¹¹ / ₁₆ | 7.50 | 42 | |
| FRTB* | Blue 10 | | 72A | -40° C to 40° C -40° F to 104° F | 0.20 | 1.6 | 8 | 5 ¹ / ₁₆ | 2.60 | 14.90 | FDA/ EU |

Note: Standard belt width = 1524mm (60"). Some of the belts are also available in 2032mm (80") width. Please contact Volta Belting representative for additional information.

*FRTB-Blue10 - Pull Force (PF) calculated with Finger Splice welding.

**FEMB-MD-Blue09-Metal Detectable belt.

| Impression Top Belts | | | | | | | | | | | | | | |
|----------------------|-----------------|---------|---------|---------------------------------|-------------------------------------|---|-----------|----------------|--------------|-------------------------|-----------------|------------------------------|--|----------------|
| | Product & Color | | | Shore Hardness | Temperature Range | Coefficient of Friction on S.Steel (Bottom) | Thickness | | | Minimum Pulley Diameter | | Pull Force: Pretension of 1% | | Certifications |
| | | | | | | | mm | mm | Inch | kg/cm | lbs/in | | | |
| IT M | FEMB-ITM-LT* | Blue 15 | | 95A/46D | -35°C to 50°C -20°F to 120°F | 0.25 | 1 | 10 | 3/8 | 0.26 | 1.45 | FDA/EU | | |
| | FELB- ITS70 | Blue | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 1.6 2 | 10 12 | 3/8 1/2 | 0.24 0.30 | 1.40 1.74 | FDA/EU | | |
| IST | FELB - IST | Blue | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 4** | 35 | 1 3/8 | 0.40 | 2.20 | FDA/EU | | |
| ITD60 | FLB -ITD60 | Blue 02 | | 80A | -40°C to 50°C -40°F to 120°F | 0.55 | 2 | 12 | 1/2 | 0.46 | 2.58 | FDA/EU | | |
| | FELB - ITD60 | Blue 02 | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 1.8 | 11 | 7/16 | 0.3 | 1.68 | FDA/EU | | |
| ITO50 | FELB - ITO50 | Blue | | 80A | -40° C to 50° C -40° F to 120° F | 0.45 | 2* | 12 | 1/2 | 0.32 | 1.87 | FDA/EU | | |
| | | | | | | | 2.5 | 15 | 9/16 | 0.40 | 2.32 | | | |
| | | | | | | | 3 | 18 | 11/16 | 0.50 | 2.80 | | | |
| | | | | | | | 5 | 35 | 1 3/8 | 0.90 | 5 | | | |
| | FELB - ITO50 | Blue 02 | | 80A | -40° C to 50° C -40° F to 120° F | 0.45 | 3 | 18 | 11/16 | 0.50 | 2.80 | FDA/EU | | |
| | FMB-ITO50 | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.36 | 2.5 | 35 | 1 3/8 | 1.50 | 8.40 | FDA/USDA/ EU | | |
| | FEMB-ITO50 | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 2 | 30 | 1 3/16 | 0.60 | 3.36 | FDA/USDA/ EU | | |
| | | | | | | | 3 | 40 | 1 5/8 | 0.94 | 5.26 | | | |
| FEMW-ITO50 | Beige | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 2.5 3 | 35 40 | 1 3/8 1 5/8 | 0.74 0.94 | 4.20 5.26 | FDA/USDA/ EU | | | |
| FEMB -ITO50-MD** | Blue 09 | | 95A | -20°C to 60°C -5°F to 140°F | 0.25 | 2 3 | 50 75 | 2 3 | 0.60 1 | 3.36 5.6 | FDA/EU | | | |
| ITR10 | FELW - ITR10 | White16 | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 4 | 25 | 1 | 0.70 | 3.92 | FDA/ EU | | |
| IRT | FELB - IRT | Blue | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 4 | 25 | 1 | 0.60 | 3.40 | FDA/USDA/ EU | | |
| | FEMB - IRT | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 3.5 | 40 | 1 5/8 | 1 | 5.60 | FDA/EU | | |
| Spikes SP** | FELB-SP | Blue | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2 | 20 | 1 3/16 | 0.40 | 2.24 | FDA/USDA/ EU | | |
| | | | | | | | 2.5 | 24 | 1 5/16 | 0.50 | 2.80 | | | |
| | | | | | | | 3 | 28 | 1 1/8 | 0.60 | 3.36 | | | |
| | FEMB-SP | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 2 | 40 | 1 5/8 | 0.80 | 4.50 | FDA/USDA/ EU | | |
| | | | | | | | 2.5 | 45 | 1 3/4 | 1 | 5.60 | | | |
| | | | | | | | 3 | 50 | 2 | 1.20 | 6.80 | | | |
| FEMW-SP | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 2 2.5 | 40 45 | 1 5/8 1 3/4 | 0.80 1 | 4.50 5.60 | FDA/USDA/ EU | | | |
| IT P | FELB - ITP | Blue 02 | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2 | 12 | 1/2 | 0.40 | 2.24 | FDA/EU | | |
| INT | FEMB - INT | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 2 | 50 | 2 | 0.80 | 4.50 | FDA/USDA /EU | | |
| CT | FELB - CT | Blue | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 3 | 35 | 1 3/8 | 0.60 | 3.36 | FDA/EU | | |
| Crescent Top - CT | FMB - CT | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.36 | 3 | 60 | 2 3/8 | 1.80 | 10.12 | FDA/USDA /EU | | |
| | FEMB - CT | Blue | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 3 | 60 | 2 3/8 | 1.20 | 6.75 | FDA/USDA /EU | | |
| | FEMW - CT | Beige | | 95A/46D | -30°C to 70°C -20°F to 158°F | 0.25 | 2.5 | 50 | 2 | 1 | 5.60 | FDA/USDA /EU | | |
| | FEMB - CT-MD** | Blue 09 | | 95A | -20°C to 60°C -5°F to 140°F | 0.25 | 3 | 95 | 3 3/16 | 1.2 | 6.75 | FDA/EU | | |
| Mini Cleats | FELB - MC | Blue | | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 40 | 1 5/8 | 0.50 | 2.80 | FDA/EU | | |
| | FEMB - MC | Blue | | 95A/46D | 30°C to 70°C -20° F to 158°F | 0.25 | 3 | 70 | 2 3/4 | 1.20 | 6.80 | FDA/USDA /EU | | |

Standard belt width = 1524mm (60"). Some of the belts are also available in 2032mm (80") width. Please contact Volta Belting representative for additional information.

Note: *FEMB-ITM-LT - Min. Pulley diameter for temperature ≥5°C / 41°F. *FELB-2-ITO50 - not standard.

** FELB-IST - Base - 2mm; total belt height 4mm. **Spikes -Height of Spikes above base belt is 2.8mm.

**FEMB-ITO50-MD & FEMB-CT-MD-Blue09-Metal Detectable belts.

Reinforced Impression Top Belts

| Product & Color | | | Shore Hardness | Temperature Range | Coefficient of Friction on S.Steel (Bottom) | Thickness | Minimum Pulley Diameter | | Pull Force: Pretension of 1% | | Certifications |
|-----------------|----------|--|----------------|-------------------------------------|---|-----------|-------------------------|--------|------------------------------|--------|----------------|
| | | | | | | | mm | Inch | kg/cm | lbs/in | |
| FRMB - ITO50 | Blue | | 95A/46D | 30° C to 70° C -20° F to 158° | 0.20 | 2.5 | 32 | 1 ¼ | 4.10 | 24 | FDA/USDA /EU |
| FRMW - ITO50 | Beige | | 95A/46D | 30° C to 70° C | 0.20 | 2.5 | 32 | 1 ¼ | 4.10 | 24 | FDA/USDA /EU |
| | | | | | | 3 | 36 | 1 7/16 | 4.30 | 25.20 | |
| FRLB - ITO50 | Blue | | 80A | -40° C to 50° C -40° F to 120° F | 0.20 | 2.5 | 15 | 9/16 | 3.20 | 18 | FDA/EU |
| FRLW - ITO50 | White 16 | | 80A | -40° C to 50° C -40° F to 120° F | 0.20 | 2.5 | 15 | 9/16 | 3.20 | 18 | FDA/EU |
| | | | | | | 3 | 18 | 11/16 | 3.48 | 21.60 | |
| FRLW - ITR10 | White 16 | | 80A | -40° C to 50° C -40° F to 120° F | 0.20 | 4 | 30 | 1 3/16 | 3.40 | 19 | FDA/EU |
| FRLB - ITS70 | Blue 02 | | 80A | -40° C to 50° C | 0.20 | 2 | 10 | 3/8 | 5 | 28 | FDA/EU |

Covered Bottom Flat Belts

Ideal for special applications, for example in bakeries and confectioneries where reinforcement is necessary and hygiene cannot be compromised. The fabric reinforcement is thermally-coated with a thin layer of Volta TPE to provide a seal, preventing both contamination and delamination. As an extra precaution, belt edges can be thermo-sealed or recessed to prevent fraying and the ingress of contaminants.



Fabric Reinforcement coated with homogeneous Volta material.

Covered Bottom/ Covered Bottom Impression Top Belts

| Product & Color | | | Shore Hardness | Temperature Range | Coefficient of Friction on S.Steel (Bottom) | Thickness | Minimum Pulley Diameter | | Pull Force: Pretension of 1% | | Certifications |
|-----------------|----------|--|----------------|-------------------------------------|---|-----------|-------------------------|-------|------------------------------|---------|----------------|
| | | | | | | | mm | Inch | kg/cm | lbs/in | |
| FRLB - CEB - B | Blue | | 80A | -40° C to 50° C -40° F to 120° F | 0.30 | 2 | 19 | 3/4 | 2.20 | 12.40 | FDA/EU |
| FRLW - CEB - C | White 16 | | | | 0.30 | 3 | 30 | 1 ¼ | 2.80 | 15.60 | FDA/EU |
| FRLW - CB | White 16 | | | | 0.40 | 2 | 19 | 3/4 | 3.10 | 17.40 | FDA/EU |
| FRMB - CEB - B | Blue | | 95A/46D | -30° C to 60° C -20° F to 120° F | 0.30 | 0.80 | 12 | 1 5/3 | 3.50 | 19.6060 | FDA/USDA /EU |
| | | | | | 0.30 | 3 | 40 | 1 5/8 | 4.80 | 38 | |
| FRMW - CEB - C | Beige | | 95A/46D | -30° C to 60° C -20° F to 120° F | 0.30 | 3 | 40 | 1 5/8 | 4.80 | 38 | |

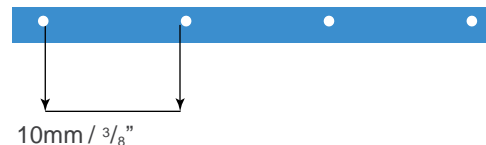
Belt Coating Materials for the Food Industry

| Products | GIB*-Blue17 | MIB*-Blue17 | WIB*-Blue17 | FEIB-Blue-17 | FEMB-SP-Blue FEMW-SP-Beige | FELB-SP-Blue | FELB-IST-Blue |
|-----------------------|-----------------|-------------|-------------|--------------|-------------------------------|--------------|-----------------|
| Illustration | | | | | | | |
| Description | Super Grip | Multi Grip | Wood Grip | High Grip | Spikes** | Spikes** | Saw Tooth |
| Hardness | 62A | 62A | 62A | 62A | 95A | 80A | 80A |
| Size (mm) | Width* | 50 | 50 | 70 | 1524 | 1524 | 1524 |
| | Thickness | 4 | 6 | 4 | 2/2.5/3 | 2/2.5/3 | 4*** |
| CoF (Stainless Steel) | 0.98 | 1.08 | 1.05 | 0.95 | 0.25 | 0.45 | 0.45 |
| Temperature Range | -20° C to 40° C | | | | -30° C to 70° C | | -40° C to 50° C |
| Certifications | FDA/EU | | | | FDA/USDA/EU | | FDA/ EU |

Note: *Width - Maximum available width | * For dry use only | ** Height of Spikes above the base belt is 2.8mm | *** FELB-IST - Total belt thickness.

Aramid Cord Reinforced Belts

A food grade flat belt with special tensioning members, hermetically encased in non-porous homogeneous material which has been tested for durability. Used mainly in applications with significant loads on long narrow belts with small diameter pulleys.



Aramid Cord Reinforced (ACR) Embossed Bottom Belts

| Product & Color | | Shore Hardness | Temperature Range | Coefficient of Friction on S.Steel (Bottom) | Thickness | Minimum Pulley Diameter | | Pull Force: Pretension of 0.2% | | Certifications |
|-----------------|------|----------------|---------------------------------|---|-----------|-------------------------|------|--------------------------------|--------|----------------|
| | | | | | | mm | Inch | kg/cm | lbs/in | |
| FELB-ACR | Blue | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 20 | 0.79 | 4 | 22.40 | FDA/EU |

Aramid Cord Reinforced (ACR) Impression Top & Embossed Bottom Belts

| | | | | | | | | | | |
|----------------|---------|-----|---------------------------------|------|-----|----|------|-----|-------|--------|
| FELB-ACR-ITO50 | Blue | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 20 | 0.79 | 4 | 22.40 | FDA/EU |
| FELB-ACR-ITO50 | Blue 02 | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 20 | 0.79 | 4 | 22.40 | FDA/EU |
| FELB-ACR-IST | Blue 02 | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 4* | 35 | 1.38 | 4.2 | 23.40 | FDA/EU |

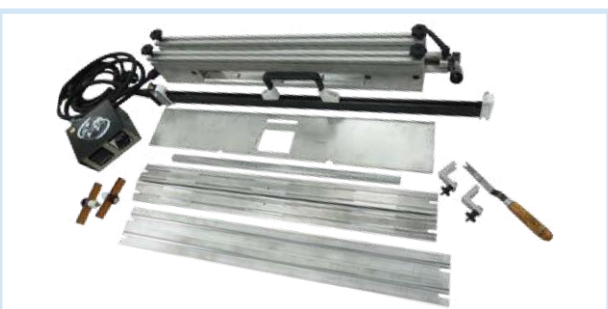
Low Temperature (LT) Aramid Cord Reinforced (ACR) Impression Top & Embossed Bottom Belts

| | | | | | | | | | | |
|-------------------|---------|---------|---------------------------------|------|-----|----|------|---|-------|--------|
| FELB-ACR-ITO50-LT | Blue 15 | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 18 | 0.70 | 4 | 22.40 | FDA/EU |
| FEMB-LT ITO50-ACR | Blue 15 | 95A/46D | -35°C to 50°C -30°F to 120°F | 0.25 | 2.5 | 40 | 1.57 | 4 | 22.40 | FDA/EU |

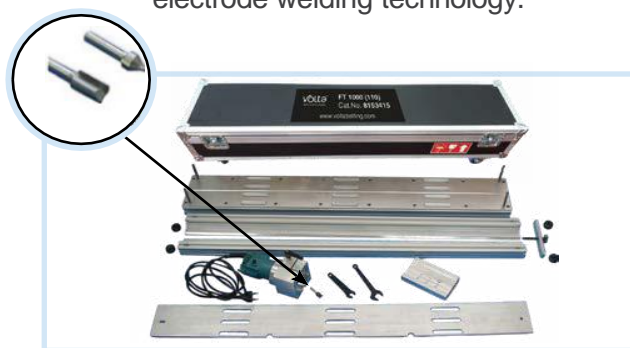
Note: Standard belt width = 1524mm (60"). Some of the belts are also available in 2032mm (80") width. Please contact Volta Belting representative for additional information.
 *FELB-ACR-IST – Base belt thickness = 2mm // Total belt thickness including Saw tooth impression top = 4mm.
 Pull force in table relates to a finger splice weld 20x50 mm. The calculation takes into account the weld splice which has strength of 28kg/cm. Note that various finger splice methods and different tools can result in differing belt strengths.

Endless Splicing Techniques

FBW - Flat Butt Welding System The FBW System performs a butt-weld, fusing belts edge to edge.



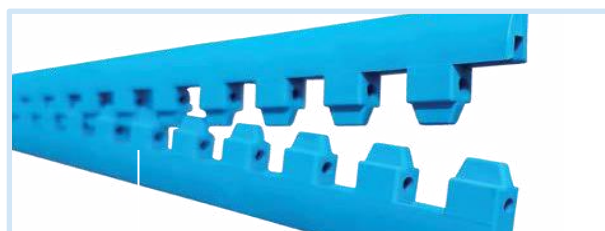
FT - Electrode Welding System The FT Welding System provides electrode welding technology.



Volta RoundFlex™ Lace

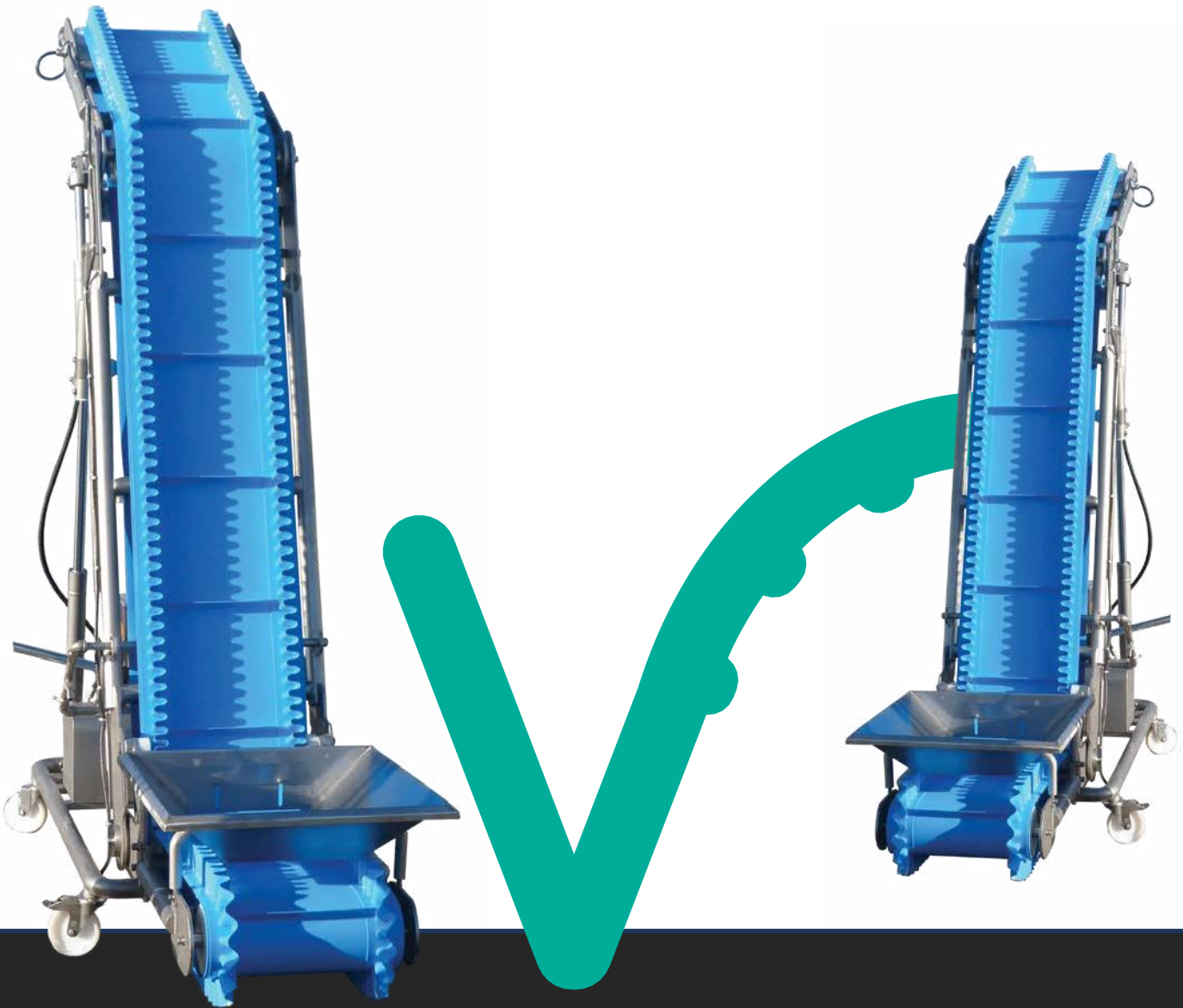
New, improved geometry for a better grip on pulleys. Compatible with Volta MB, MW, MB-MD and DR material belts from 2.5 to 5mm thickness. All Volta flat belt materials are easy to clean without removing from conveyor and therefore lace is used only where absolutely necessary. The strength of the belt will be affected at the joint where lace is used.

RoundFlex™ Lace





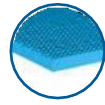
The Next Step in Belting



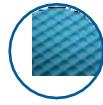
Food Grade Positive Drive Line
Conveying Solutions



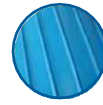
SuperDrive™



ITE
Impression
Top Embossed



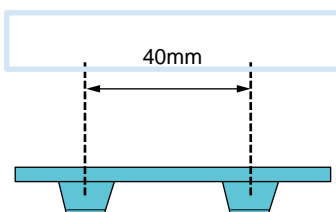
ITO-50
Impression
Top Oval



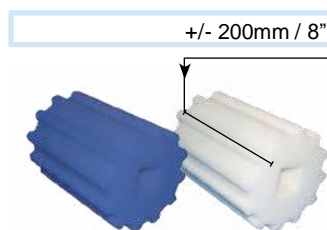
MC
Mini
Cleats

The homogeneous Positive Drive, recognized worldwide as the best choice where hygiene and conveying efficiency are essential.

| Smooth Top SuperDrive™ Belts | | | | | | | | | | | |
|---|-----------|----------------|---------------------------------|---------------------------------|-----------|-------------------------|----------------------------------|--------------------|--------|----------------|--|
| Product & Color | | Shore Hardness | Temperature Range | Coefficient of Friction on UHMW | Thickness | Minimum Pulley Diameter | | Maximum Pull Force | | Certifications | |
| | | | | | | mm | Inch | kg/cm | lbs/in | | |
| FHB-SD | Blue 16 | 55D | -20°C to 90°C -5°F to 194°F | 0.20 | 3 | 126 | 4 ³¹ / ₃₂ | 7 | 39.2 | FDA/USDA/EU | |
| | | | | | 4 | 176 | 6 ¹⁵ / ₁₆ | 9 | 50.40 | | |
| | | | | | 6 | 300 | 11 ¹³ / ₁₆ | 14 | 78.40 | | |
| FHW-SD | Off White | 55D | -20°C to 90°C -5°F to 194°F | 0.20 | 3 | 126 | 4 ³¹ / ₃₂ | 7 | 39.2 | FDA/USDA/EU | |
| | | | | | 4 | 176 | 6 ¹⁵ / ₁₆ | 9 | 50.40 | | |
| FHB-SD | Blue 13 | 55D | -20°C to 90°C -5°F to 194°F | 0.20 | 3 | 126 | 4 ³¹ / ₃₂ | 7 | 39.2 | FDA/USDA/EU | |
| | | | | | 4 | 176 | 6 ¹⁵ / ₁₆ | 9 | 50.40 | | |
| FEHB-SD-ITM2 | Blue 16 | 55D | -20°C to 90°C -5°F to 194°F | 0.18 | 3 | 126 | 4 ³¹ / ₃₂ | 7 | 39.2 | FDA/USDA/EU | |
| | | | | | 4 | 176 | 6 ¹⁵ / ₁₆ | 9 | 50.40 | | |
| FMB-SD | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ¹ / ₄ | 6.25 | 35 | FDA/USDA/EU | |
| | | | | | 4 | 120 | 4 ³ / ₄ | 8 | 44.80 | | |
| | | | | | 6 | 240 | 9 ³ / ₄ | 12.50 | 70 | | |
| FMW-SD | Beige | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ¹ / ₄ | 6.25 | 35 | FDA/USDA/EU | |
| | | | | | 4 | 120 | 4 ³ / ₄ | 8 | 44.80 | | |
| FMB-SD | Blue 02 | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ¹ / ₄ | 6.25 | 35 | FDA/USDA/EU | |
| FEMB-SD-ITM2 | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.22 | 3 | 80 | 3 ¹ / ₄ | 6.25 | 35 | FDA/USDA/EU | |
| | | | | | 4 | 120 | 4 ³ / ₄ | 8 | 44.80 | | |
| Impression Top SuperDrive™ Belts | | | | | | | | | | | |
| FHB-SD-ITO50 | Blue 16 | 55D | -20°C to 90°C -5°F to 194°F | 0.20 | 3 | 126 | 4 ³¹ / ₃₂ | 7 | 39.2 | FDA/USDA/EU | |
| | | | | | 4 | 176 | 6 ¹⁵ / ₁₆ | 9 | 50.40 | | |
| FHB-SD-ITE | Blue 16 | 55D | -20°C to 90°C -5°F to 194°F | 0.20 | 3 | 126 | 4 ³¹ / ₃₂ | 7 | 39.2 | FDA/USDA/EU | |
| FMB-SD-ITO50 | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ¹ / ₄ | 6.25 | 35 | FDA/USDA/EU | |
| FMB-SD-ITE | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ¹ / ₄ | 6.25 | 35 | FDA/USDA/EU | |
| FMW-SD-ITE | Beige | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ¹ / ₄ | 6.25 | 35 | FDA/USDA/EU | |
| FMB-SD-MC | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 100 | 4 | 6.25 | 35 | FDA/USDA/EU | |
| Hydrolysis & Chemical Resistant SuperDrive™ Belts | | | | | | | | | | | |
| FDR-SD | Blue 15 | 53D | -20°C to 70°C -5°F to 158°F | 0.30 | 3 | 80 | 3 ¹ / ₄ | 4.7 | 26.3 | FDA/USDA/EU | |
| | | | | | 4 | 120 | 4 ³ / ₄ | 6.25 | 35 | | |
| FDR-SD-ITO50 | Blue 15 | 53D | -20°C to 70°C -5°F to 158°F | 0.30 | 3 | 80 | 3 ¹ / ₄ | 4.7 | 26.3 | FDA/USDA/EU | |
| FEDR-SD-ITM2 | Blue 15 | 53D | -20°C to 70°C -5°F to 158°F | 0.22 | 3 | 80 | 3 ¹ / ₄ | 4.7 | 26.3 | FDA/USDA/EU | |
| FEDR-SD-ITO50 | Blue 15 | 53D | -20°C to 70°C -5°F to 158°F | 0.22 | 3 | 80 | 3 ¹ / ₄ | 4.7 | 26.3 | FDA/USDA/EU | |
| Low Temperature (LT) SuperDrive™ Belts | | | | | | | | | | | |
| FMB-SD-LT | Blue 15 | 95A/46D | -35°C to 65°C -31°F to 149°F | 0.30 | 3 | 80 | 3 ¹ / ₄ | 3 | 16.80 | FDA/EU | |
| Metal Detectable (MD) SuperDrive™ Belt | | | | | | | | | | | |
| FMB-SD-MD | Blue 09 | 53D | -20°C to 60°C -5°F to 140°F | 0.28 | 3 | 100 | 4 | 6 | 33.6 | FDA/EU | |
| FMB-SD-ITO50-MD | Blue 09 | 53D | -20°C to 60°C -5°F to 140°F | 0.28 | 3 | 100 | 4 | 6 | 33.6 | FDA/EU | |

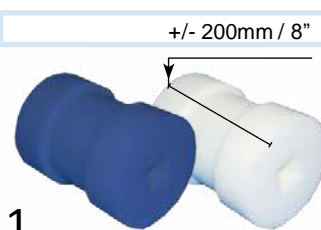


Pitch size for reference only

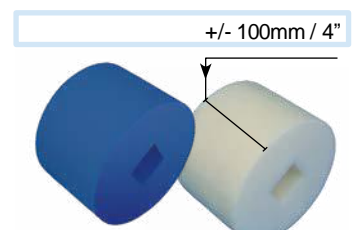


SuperDrive™ Drive Pulley

11



SuperDrive™ Tail Pulley



SuperDrive™ Support Pulley

Mini SuperDrive™

Food Grade - Positive Drive Line

The only trackable Mini Positive Drive product.

The MiniSD™ design is similar to the world leader, Volta SuperDrive™; scaled down for a smaller minimum pulley. Standard belt width: 1524mm/60" or 2032mm/80". Please contact Volta Belting representative for additional information.

| Smooth Top Mini SuperDrive™ Belts | | | | | | | | | | | |
|-----------------------------------|---------|----------------|--------------------------------|---------------------------------|-----------|--------------------------|------|----------------------|-------|----------------|--------|
| Product & Color | | Shore Hardness | Temperature Range*** | Coefficient of Friction on UHMW | Thickness | Minimum Pulley Diameter* | | Maximum Pull Force** | | Certifications | |
| | | | | | | mm | mm | Inch | kg/cm | | lbs/in |
| FHB-MSD | Blue 16 | 55D | -20°C to 90°C -5°F to 194°F | 0.20 | 2 | 80 | 3.15 | 4.5 | 25.2 | FDAUSDA/EU | |
| | | | | | 2.5 | 100 | 4 | 5.6 | 31.36 | | |
| FMB-MSD | Blue | 95A/46D | -20°C to 70°C -5°F to 158°F | 0.28 | 2.5 | 48 | 1.89 | 4 | 22.4 | FDAUSDA/EU | |

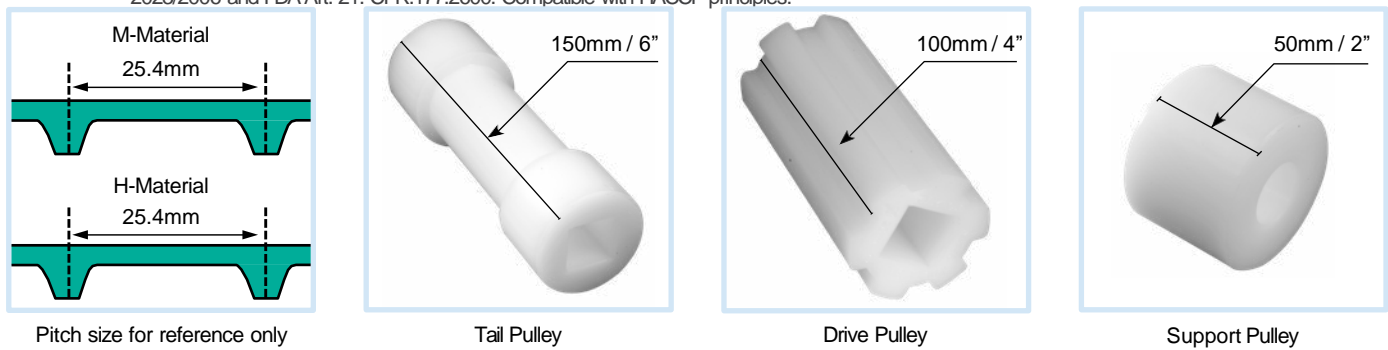
| Impression Top Mini SuperDrive™ Belts | | | | | | | | | | | |
|---------------------------------------|------|----------------|--------------------------------|---------------------------------|-----------|--------------------------|------|----------------------|--------|----------------|--|
| Product & Color | | Shore Hardness | Temperature Range*** | Coefficient of Friction on UHMW | Thickness | Minimum Pulley Diameter* | | Maximum Pull Force** | | Certifications | |
| | | | | | mm | mm | Inch | kg/cm | lbs/in | | |
| FMB-MSD-ITO50 | Blue | 95A/46D | -20°C to 70°C -5°F to 158°F | 0.28 | 2.5 | 48 | 1.89 | 4 | 22.4 | FDAUSDA/EU | |
| FMB-MSD-MC | Blue | 95A/46D | -20°C to 70°C -5°F to 158°F | 0.28 | 2.5 | 80 | 3.15 | 4 | 22.4 | FDAUSDA/EU | |

Note: * Minimum Pulley Diameter – Normal Flex. Dimensions are relevant for an ambient temperature above 0°C / 32°F.

** Maximum Pull Force – in kg/cm width & lb/in width.

***To determine the allowable Pull force, check the "Temperature Correction Factor" table.

Declaration of Conformity in compliance with Food Contact Regulations: EU No.-10/2011 amended by 2017/752, 1935/2004 and 2023/2006 and FDA Art. 21. CFR.177.2600. Compatible with HACCP principles.



Mini DualDrive™

A scaled-down version of the original DualDrive™ tooth geometry. Standard belt width: 2032mm/80".

| Smooth Top Mini DualDrive™ Belts | | | | | | | | | | | |
|----------------------------------|------|----------------|--------------------------------|---------------------------------|-----------|--------------------------|------|----------------------|-------|----------------|--------|
| Product & Color | | Shore Hardness | Temperature Range*** | Coefficient of Friction on UHMW | Thickness | Minimum Pulley Diameter* | | Maximum Pull Force** | | Certifications | |
| | | | | | | mm | mm | Inch | kg/cm | | lbs/in |
| FMB-MDD | Blue | 95A/46D | -20°C to 70°C -5°F to 158°F | 0.28 | 2.5 | 48 | 1.89 | 4 | 22.4 | FDAUSDA/EU | |

| Impression Top Mini DualDrive™ Belts | | | | | | | | | | | |
|--------------------------------------|------|----------------|--------------------------------|---------------------------------|-----------|--------------------------|------|----------------------|--------|----------------|--|
| Product & Color | | Shore Hardness | Temperature Range*** | Coefficient of Friction on UHMW | Thickness | Minimum Pulley Diameter* | | Maximum Pull Force** | | Certifications | |
| | | | | | mm | mm | Inch | kg/cm | lbs/in | | |
| FMB-MDD-ITO50 | Blue | 95A/46D | -20°C to 70°C -5°F to 158°F | 0.28 | 2.5 | 48 | 1.89 | 4 | 22.4 | FDAUSDA/EU | |

Note: * Minimum Pulley Diameter – Normal Flex. Dimensions are relevant for an ambient temperature above 0°C / 32°F.

** Maximum Pull Force – in kg/cm width & lb/in width.

***To determine the allowable Pull force, check the "Temperature Correction Factor" table. Declaration of Conformity in compliance with Food Contact Regulations: EU No.-10/2011 amended by 2017/752, 1935/2004 and 2023/2006 and FDA Art. 21. CFR.177.2600. Compatible with HACCP principles.



DualDrive™

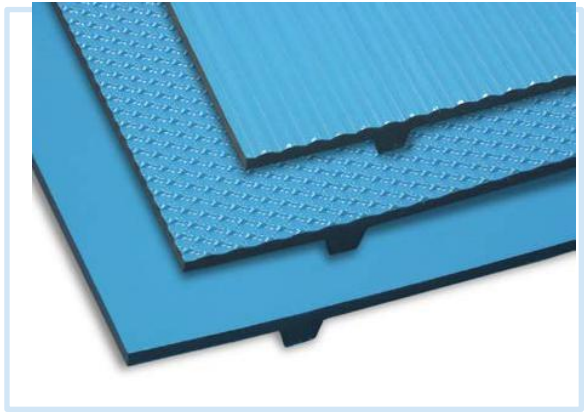
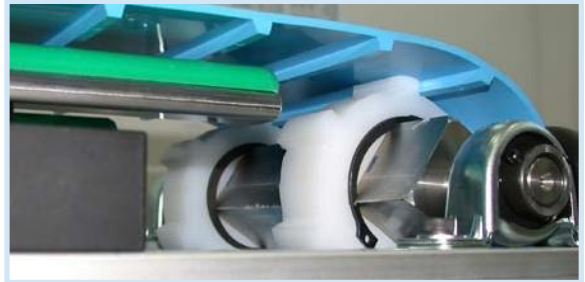
- Minimal retrofitting required. DualDrive™ is suited to some 2" pitch modular belt sprockets but for both reliability and hygiene these should be replaced.
- DualDrive™ is a fully extruded Positive Drive belt with drive teeth running the full width of the belt at a 2" pitch.

Mechanical Benefits:

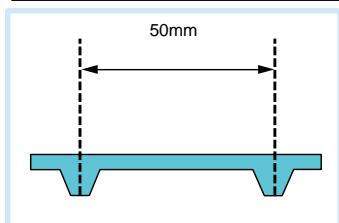
- Replaces modular systems that require extensive cleaning and lengthy soaking and wear quickly at the joints.
- Greatly reduced noise levels in comparison with to modular belts.
- Integrated teeth for a Positive Drive with no slippage.
- No pretension of the belt is needed.
- Extruded in 30 or 60m (100 or 200ft) length and 1524mm (60") width.

Material Features:

- Smooth or textured homogeneous surface.
- Special texture available for non-stick applications.
- No ply/fraying of fibers.
- Easy and effective cleaning.
- No cracks or crevices that can potentially harbor bacteria.



| Smooth Top DualDrive™ Belts | | | | | | | | | | | |
|--|---------|----------------|---------------------------------|---------------------------------|-----------|-------------------------|--------------------|--------------------|-------|----------------|--------|
| Product & Color | | Shore Hardness | Temperature Range | Coefficient of Friction on UHMW | Thickness | Minimum Pulley Diameter | | Maximum Pull Force | | Certifications | |
| | | | | | | mm | mm | Inch | kg/cm | | lbs/in |
| FHB-DD | Blue 16 | 55D | -20°C to 90°C -5°F to 194°F | 0.20 | 3 | 126 | 4 ^{31/32} | 7 | 39.2 | FDA/USDA/EU | |
| FHB-DD | Blue 02 | 53D | -20°C to 90°C -5°F to 194°F | 0.28 | 3 | 80 | 3 ^{1/4} | 6 | 33.6 | FDA/USDA/EU | |
| FMB-DD | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ^{1/4} | 6 | 33.6 | FDA/USDA/EU | |
| | | | | | 4 | 120 | 4 ^{3/4} | 7.7 | 43 | | |
| FMB-DD-ITM2 | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ^{1/4} | 6 | 33.6 | FDA/USDA/EU | |
| FMW-DD | Beige | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ^{1/4} | 6 | 33.6 | FDA/USDA/EU | |
| FMW-DD-ITM2 | Beige | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ^{1/4} | 6 | 33.6 | FDA/USDA/EU | |
| Impression Top DualDrive™ Belts | | | | | | | | | | | |
| FMB-DD-ITO50 | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 3 | 80 | 3 ^{1/4} | 6 | 33.6 | FDA/USDA/EU | |
| FMB-DD-IRT | Blue | 53D | -20°C to 70°C -5°F to 158°F | 0.28 | 4 | 100 | 4 | 6 | 33.6 | FDA/USDA/EU | |
| Hydrolysis & Chemical Resistant DualDrive™ Belts | | | | | | | | | | | |
| FDR-DD | Blue 15 | 53D | -20°C to 70°C -5°F to 158°F | 0.30 | 3 | 80 | 3 ^{1/4} | 4.7 | 26.3 | FDA/USDA/EU | |
| FDR-DD-ITM2 | Blue 15 | 53D | -20°C to 70°C -5°F to 158°F | 0.30 | 3 | 80 | 3 ^{1/4} | 4.7 | 26.3 | FDA/USDA/EU | |
| Low Temperature (LT) DualDrive™ Bel | | | | | | | | | | | |
| FMB-DD-LT | Blue 15 | 95A/46D | -35°C to 65°C -31°F to 149°F | 0.30 | 3 | 80 | 3 ^{1/4} | 3 | 16.80 | FDA/EU | |
| Metal Detectable (MD) DualDrive™ Belt | | | | | | | | | | | |
| FMB-DD-MD | Blue 09 | 53D | -20°C to 60°C -5°F to 140°F | 0.28 | 3 | 100 | 4 | 6 | 33.6 | FDA/EU | |



Pitch size for reference only



Machined Drive Sprockets



Machined Drive Sprockets



Molded Drive Sprocket

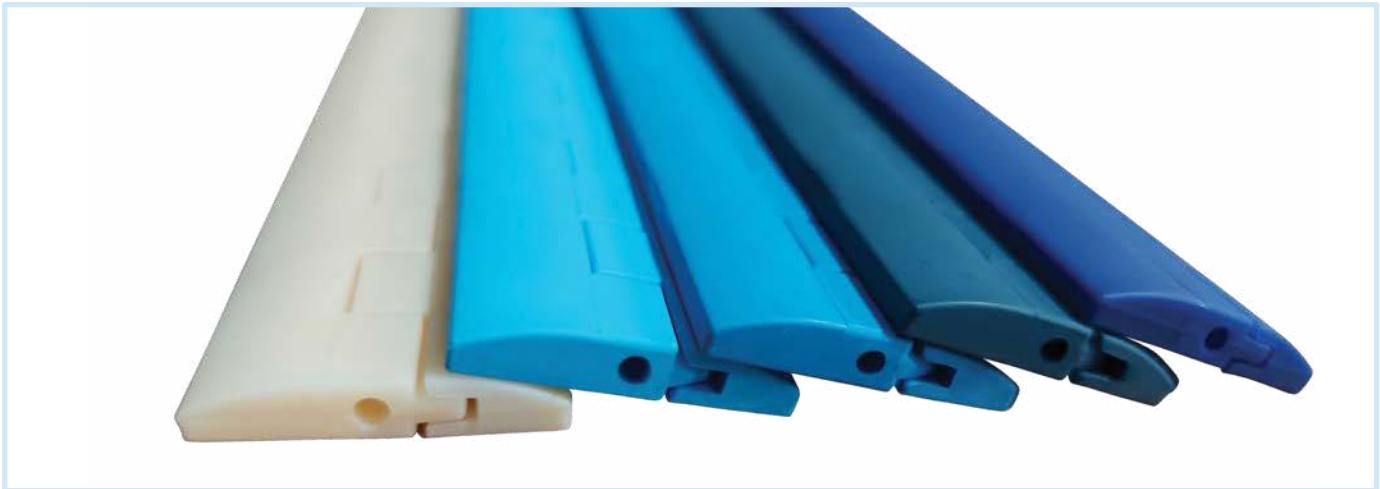


Molded Tail Roller

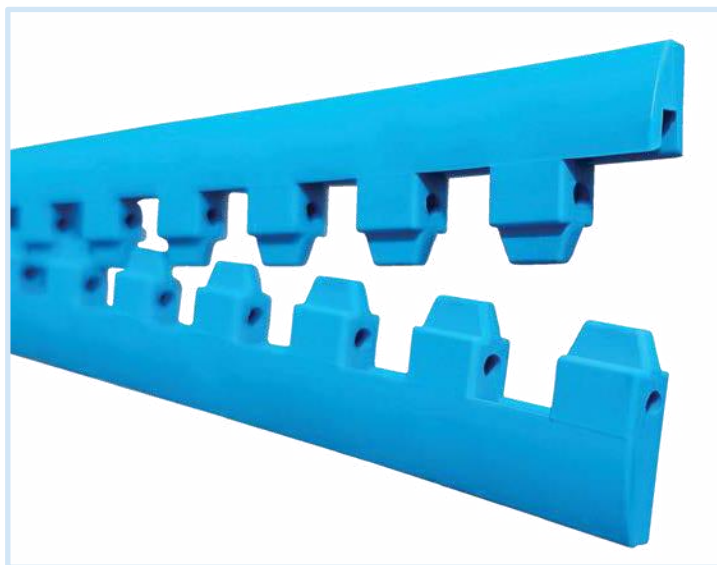
Volta RoundFlex™ Lace

New, improved geometry for a better grip on pulleys. Compatible with Volta MB, MW, MB-MD and DR material Flat and Positive Drive belts including MSD & MDD belts from 2.5 to 5mm thickness.

All Volta belt materials are easy to clean without removing from conveyor and therefore we only recommend lace when absolutely necessary. The strength of the belt will be affected at the joint where lace is used.



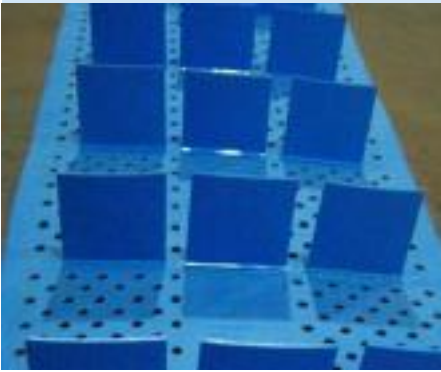
RoundFlex™ Lace



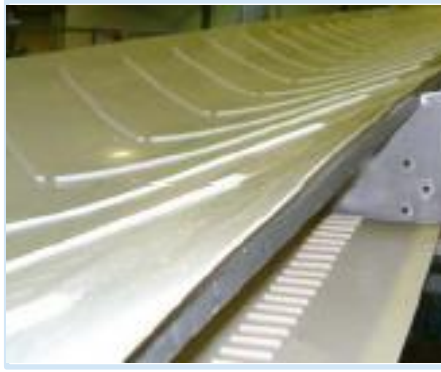
RoundFlex™ Lace

We are committed to providing a complete package focusing on servicing our customers all the way, up until the belts are safely installed and the conveyor is running smoothly.

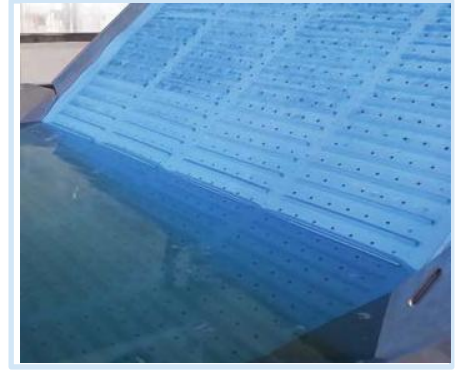
Fabrications on Positive Drive Belts



Perforated SuperDrive™
with Spaced Flights



SuperDrive™ Trough Conveyor with
Chevron Flights



Perforated Mini DualDrive™ Belt



Mini SuperDrive™ Belt



Perforated DD-IRT Belt



SuperDrive™ Z-elevator with Flights,
Guides and Sidewalls



DualDrive™ with Impression Top IRT
Flights & Guides



SuperDrive™ with Flights Working
under Water

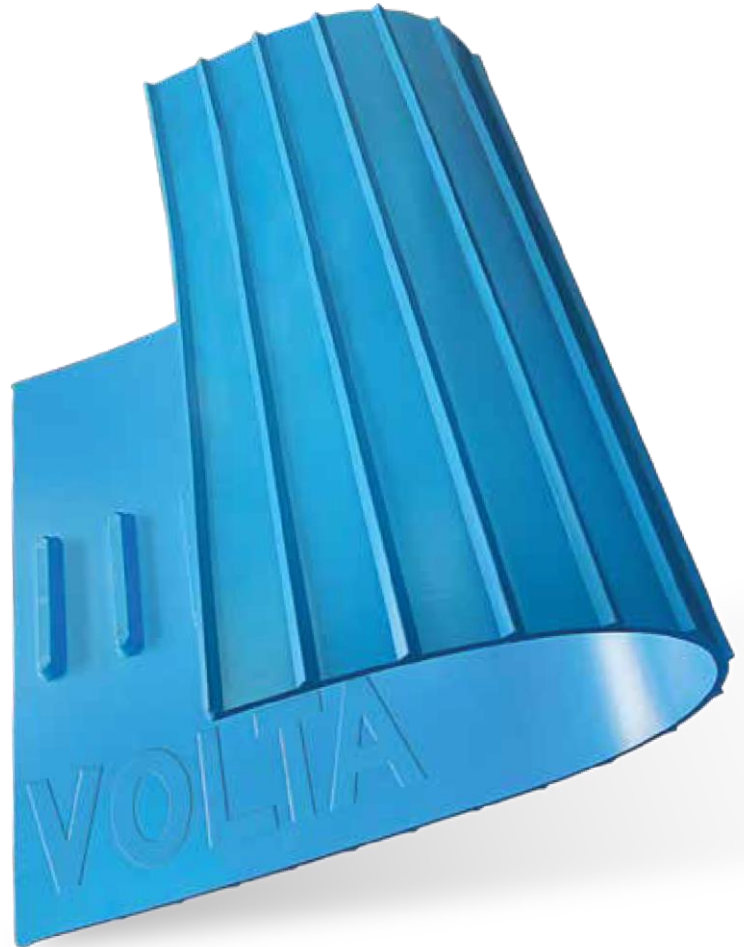


SuperDrive™ with Sidewalls
and Special Flights

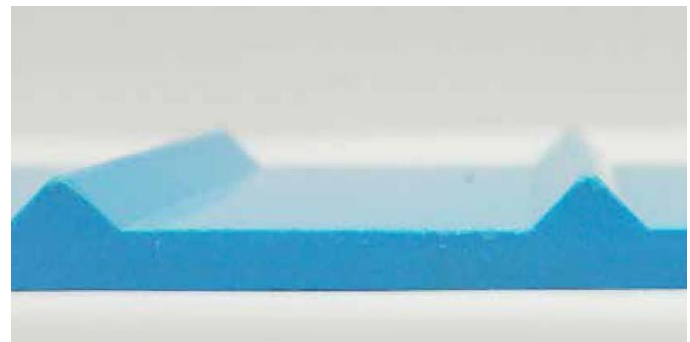
The built-in guide mechanism and the new textured top keep your product safe and steady.

**We are excited to present our new
Positive Drive Belt: FMB-SD-MC**

- ✓ The fully extruded Mini Cleat (MC) top on our SuperDriveTM homogeneous material enhances the incline conveyance capability of carrying bulk product by up to 25 degrees.
- ✓ The MC profile prevents product rollback on the incline without requiring flights.
- ✓ Mini Cleat (MC) top eliminates the need for fabricated cleats.
- ✓ The fully extruded, integrated teeth of the Super DriveTM function as a positive drive system and serve as a built-in guide mechanism to reduce tension and off-tracking.
- ✓ The result is eco-friendly SuperDriveTM belts that allow for a drastic reduction in water usage as well as the conversion of precious lost time spent on cleaning to increased production time.
- ✓ SuperDriveTM belt with Mini Cleat (MC) top are a cutting-edge solution for the potato, meat, fruit, and cheese industries. Suitable applications include, but are not limited to, French fries, chicken cutlets, cold cuts, bacon, sliced peaches and pears, shredded cheese, and nuts.



**Use this belt to keep your products
safe and steady and earn more
money than before.**



Molded BLUE Sprockets for DualDriveTM



Molded
 Drive Sprocket

Molded
 Tail Roller

Volta offers molded sprockets in blue Acetal for the DualDriveTM belts. These are offered in addition to the standard white and blue machined sprockets.

DualDriveTM Molded Sprockets

| Number of Teeth | Drive Sprocket | Tail Roller |
|-----------------|-----------------------------|----------------------------------|
| 6T | DD-I-Sprocket-93.4mm/3.67" | DD-I-Tail Sprocket-84.3mm/3.32" |
| 8T | DD-I-Sprocket-125.6mm/4.94" | DD-I-Tail Sprocket-116.5mm/4.59" |
| 10T | DD-I-Sprocket-157.7mm/6.20" | DD-I-Tail Sprocket-148.5mm/5.85" |

- Compatible with 40mm and 1.5" square bore shafts
- Light weight
- Have excellent chemical and abrasion resistance
- Easy to clean



The Next Step in Belting



Metal Detectable Flat Belts

Conveying Solutions



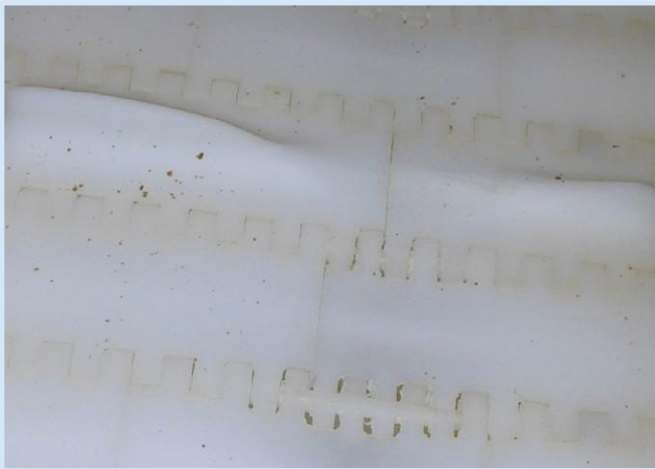
Metal Detectable (MD) Volta belts for the food industry

As you are aware, consumer safety has become a prominent issue in recent years due to heightened public awareness, increasingly stringent legal regulations, and the challenging responsibility of managing an automated food processing line. The ever-changing demands and pressures for superior food safety are driven internally by managers along with external pressures from consumers, industry regulators, and global associations.

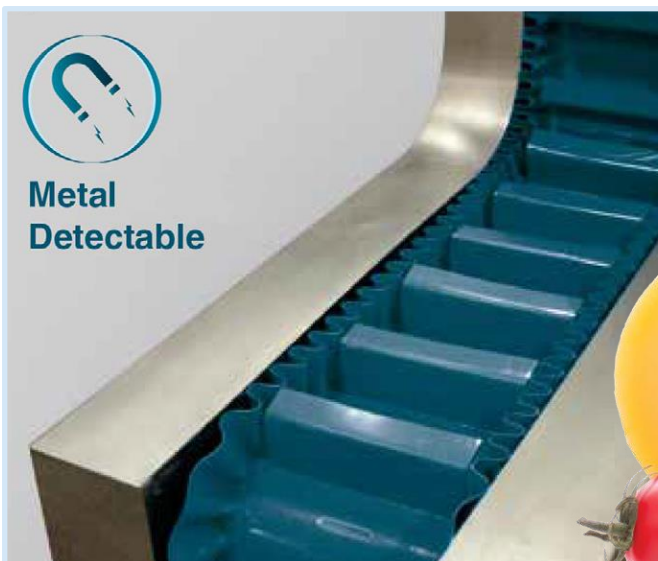
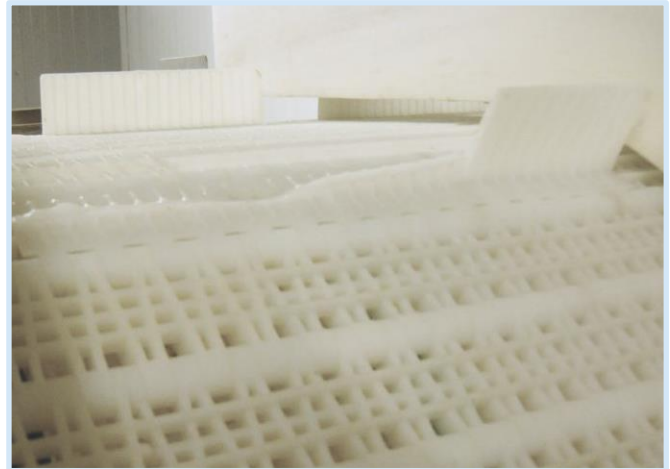
Often called “farm to fork”, the path from raw food to a finished and packaged product is one that has hazardous contact points. Before consumers have their food on their tables, that food has come into contact with harvesting equipment, slaughterhouses, freezers, cold storages, a wide array of transportation means, and various processing machinery. Although most contaminants (much of which is ferrous) are removed in early processing stages, trace contaminants can still remain in foods. Thus, metal detection is often used as a last line of defense in most processing facilities.

Food routinely makes contact with conveyor belting and with the widespread use of fragile modular belting, concerns arise over plastic contaminants being deposited into the flow of food due to wear and tear. Volta firmly stands behind the safety and stability of all Volta food grade belts as a solution for alternative inferior belting types. Our ultimate goal is to eliminate any concerns and fears held by processors and consumers regarding food safety.

Abraded by Frozen Food



Broken cleats/flights



Metal detectable plastic is an important necessity to all types of food processors. Many would never consider allowing pens, electric ties, and plasters within the hygienic zone if they were not detectable.

While Volta Belting’s materials are resistant to cuts and breakage, food grade metal detectable belts have been developed to meet high demands and to give quality assurance and production teams the confidence in knowing that their products will meet the strictest food safety requirements.

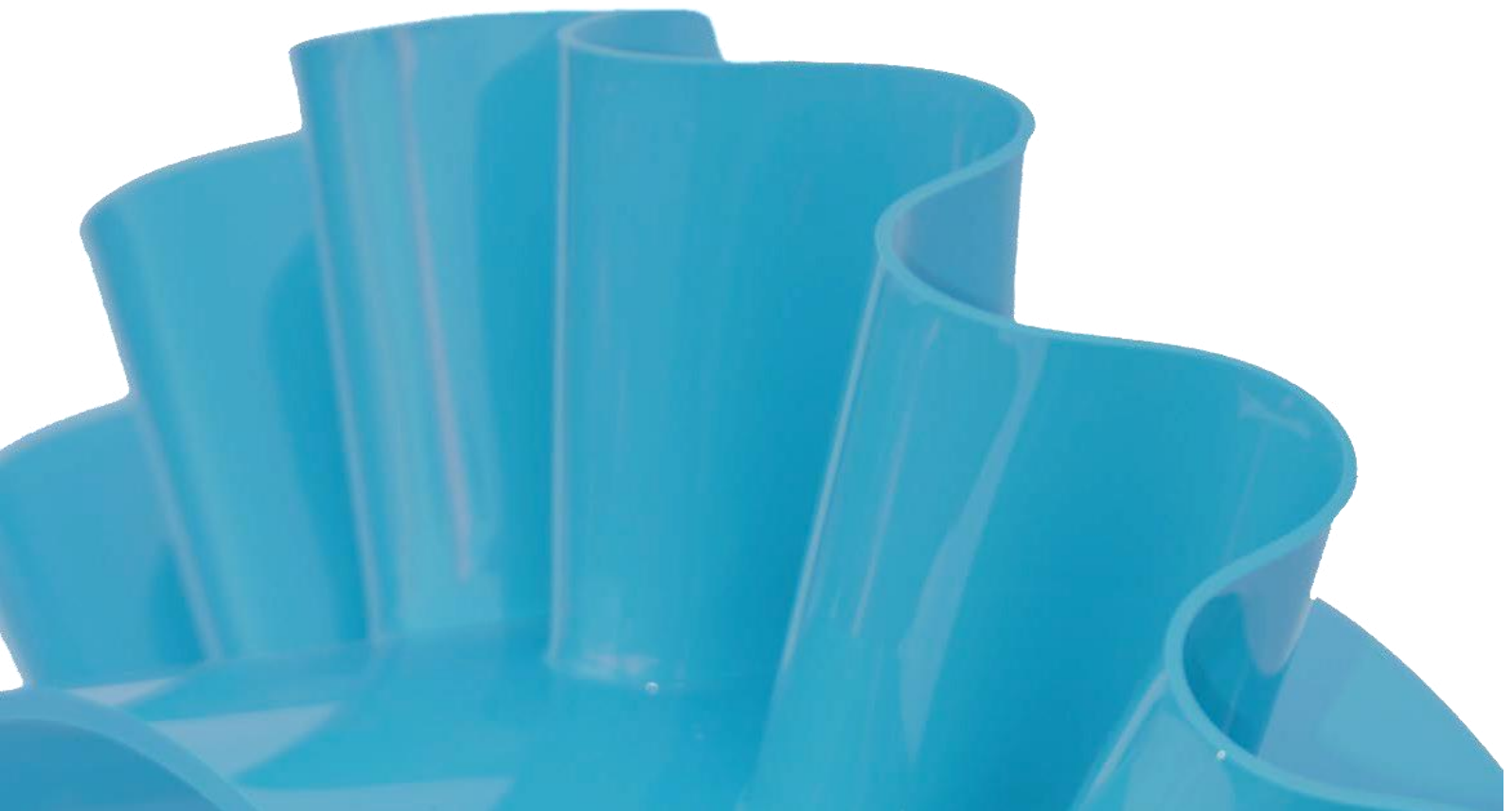
Detectability is determined by contaminant type, size, the size of the detector’s aperture, the orientation of the detectable material, and the frequency at which the detector is calibrated. Small particles may pass undetected if the food product has a similar phase angle to the contaminant (dry and moist products produce different signals), or if the particle passes through the center of a sufficiently large detector.

| Metal Detectable (MD) Positive Drive Belts | | | | | | | | | | | | |
|--|---------|----------------|-------------------|--------------------------------|-----------|---|-------------------------|------|--------------------|--------|----------------|--------|
| Product & Color | | Shore Hardness | Temperature Range | CoF UHMW (bottom) | Thickness | | Minimum Pulley Diameter | | Maximum Pull Force | | Certifications | |
| | | | | | mm | | mm | Inch | kg/cm | lbs/in | | |
| SuperDrive™ Metal & Detectable Belt | | | | | | | | | | | | |
| FMB-SD-MD | Blue 09 | | 53D | -20°C to 60°C -5°F to 140°F | 0.28 | 3 | | 100 | 4 | 6 | 33.6 | FDA/EU |
| FMB-SD-ITO50-MD | Blue 09 | | 53D | -20°C to 60°C -5°F to 140°F | 0.28 | 3 | | 100 | 4 | 6 | 33.6 | FDA/EU |
| DualDrive™ Metal Detectable Belt | | | | | | | | | | | | |
| FMB-DD-MD | Blue 09 | | 53D | -20°C to 60°C -5°F to 140°F | 0.28 | 3 | | 100 | 4 | 6 | 33.6 | FDA/EU |

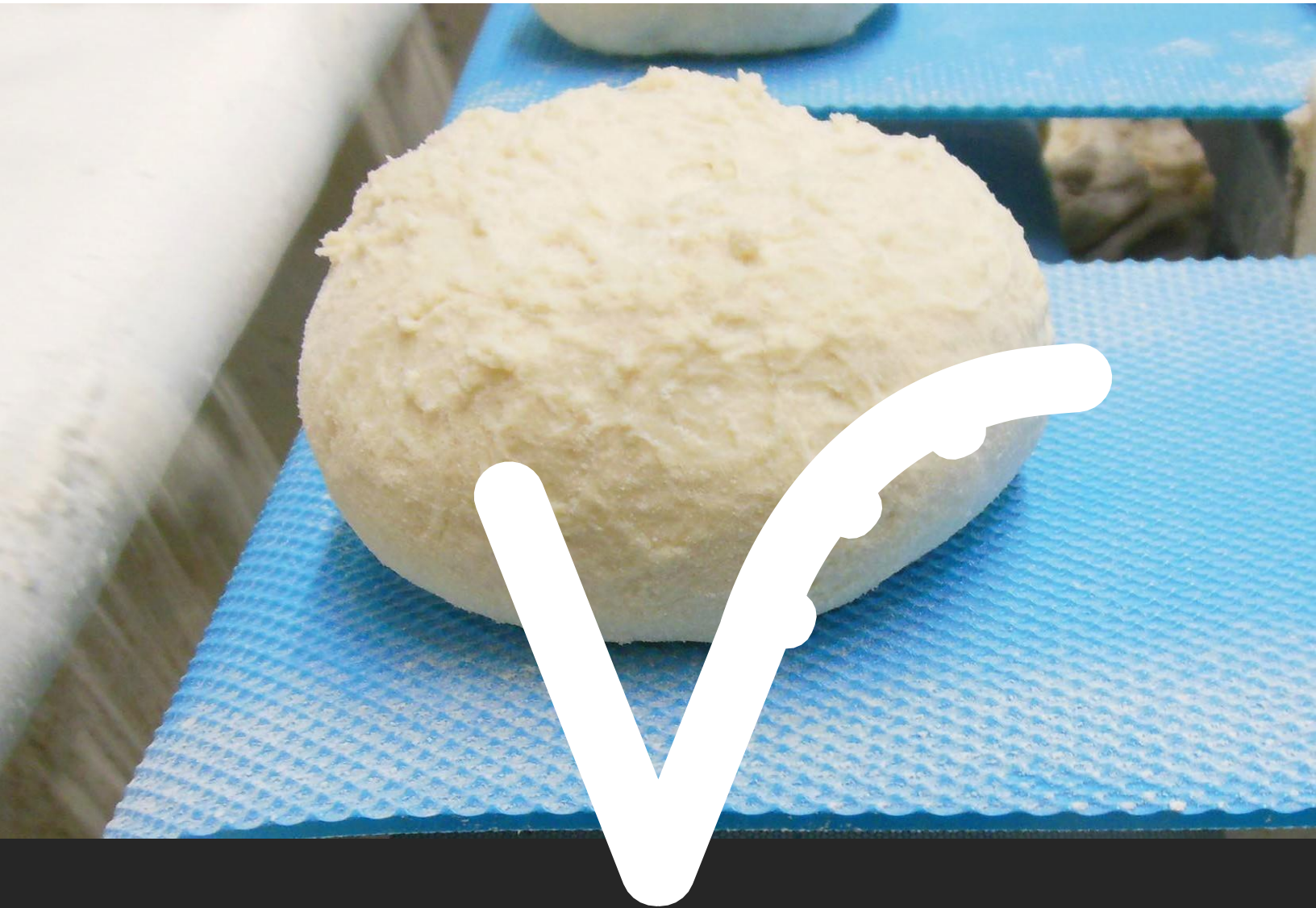
| Metal Detectable (MD) Food Conveying Belts | | | | | | | | | | | | |
|---|---------|----------------|-------------------|--------------------------------|-----------|---|-------------------------|------|---------------------------|--------|----------------|--------|
| Product & Color | | Shore Hardness | Temperature Range | CoF UHMW (bottom) | Thickness | | Minimum Pulley Diameter | | Pull Force: Pretension 1% | | Certifications | |
| | | | | | mm | | mm | Inch | kg/cm | lbs/in | | |
| Flat, Homogeneous Metal Detectable Belts | | | | | | | | | | | | |
| FMB-MD | Blue 09 | | 95A | -20°C to 60°C -5°F to 140°F | 0.28 | 3 | | 75 | 3 | 1.80 | 10.1 | FDA/EU |
| Flat, Homogeneous Embossed Bottom Metal Detectable Belts | | | | | | | | | | | | |
| FEMB-MD | Blue 09 | | 95A | -20°C to 60°C -5°F to 140°F | 0.20 | 2 | | 50 | 2 | 0.80 | 4.5 | FDA/EU |
| | | | | | | 3 | | 75 | 3 | 1.20 | 6.8 | |
| Flat, Homogeneous Impression Top Metal Detectable Belts | | | | | | | | | | | | |
| FEMB-ITO50-MD | Blue 09 | | 95A | -20°C to 60°C -5°F to 140°F | 0.20 | 2 | | 50 | 2 | 0.60 | 3.36 | FDA/EU |
| | | | | | | 3 | | 75 | 3 | 1 | 5.6 | |
| FEMB-CT-MD | Blue 09 | | 95A | -20°C to 60°C -5°F to 140°F | 0.20 | 3 | | 95 | 3 3/16 | 1.2 | 6.75 | |

Guidelines and Suggested Materials for the Fabrication of Metal Detectable (MD) belts:

- ✓ The Metal Detectable material (MD) should be treated as a separate family of materials in terms of fabrications.
 - ✓ Sidewalls: It is possible to weld Sidewalls from MD material (FMB-MD) with a thickness of 2mm only.
 - ✓ Flights: It is recommended to use MD material for flights – FMB-MD.
 - ✓ Guides: Use the VLB-MD guide for the Metal Detectable belts.
 - ✓ Electrodes: Use EVMB-MD electrode.
 - ✓ RoundFlex™ Lace: Item code LMD-R
- Endless Closure of Belts: Volta recommends joining the Metal Detectable (MD) Positive Drive belts with a butt weld using an FBW Tool.



The Next Step in Belting



Aramid Cord Reinforced Flat Belts
Conveying Solutions

Motech

Aramid Cord Reinforced Flat Belts

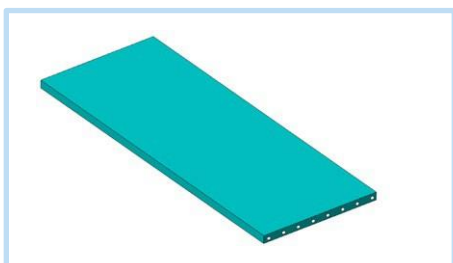


A food grade flat belt with special tensioning members fully sealed in a dense homogeneous material which has been tested for durability. Used, for example, where heavy or unevenly loaded products are carried. The Volta code for this Aramid cord reinforcement is ACR and the splicing method advised is a finger splice.

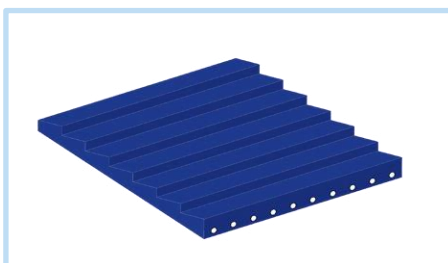


Aramid Cord Reinforced Flat Belt Range

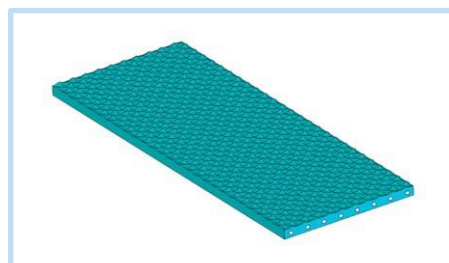
Embossed Bottom Belt



IST - Impression Saw Tooth



ITO50-Impression Top Oval



| Aramid Cord Reinforced (ACR) Embossed Bottom Belts | | | | | | | | | | | |
|--|---------|----------------|---------------------------------|---|-----------|-------------------------|------|--------------------------------|--------|----------------|--|
| Product & Color | | Shore Hardness | Temperature Range | Coefficient of Friction on S.Steel (Bottom) | Thickness | Minimum Pulley Diameter | | Pull Force: Pretension of 0.2% | | Certifications | |
| | | | | | mm | mm | Inch | kg/cm | lbs/in | | |
| FELB-ACR | Blue | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 20 | 0.79 | 4 | 22.40 | FDA/EU | |
| Aramid Cord Reinforced (ACR) Impression Top & Embossed Bottom Belts | | | | | | | | | | | |
| FELB-ACR-ITO50 | Blue | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 20 | 0.79 | 4 | 22.40 | FDA/EU | |
| FELB-ACR-ITO50 | Blue 02 | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 20 | 0.79 | 4 | 22.40 | FDA/EU | |
| FELB-ACR-IST | Blue 02 | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 4* | 35 | 1.38 | 4.2 | 23.40 | FDA/EU | |
| Low Temperature (LT) Aramid Cord Reinforced (ACR) Impression Top & Embossed Bottom Belts | | | | | | | | | | | |
| FELB-ACR-ITO50-LT | Blue 15 | 80A | -40°C to 50°C -40°F to 120°F | 0.45 | 2.5 | 18 | 0.70 | 4 | 22.40 | FDA/EU | |
| FEMB-LT-ITO50-ACR | Blue 15 | 95A/46D | -35°C to 50°C -30°F to 120°F | 0.25 | 2.5 | 40 | 1.57 | 4 | 22.40 | FDA/EU | |

Note: * FELB-IST-ACR – Base belt thickness = 2mm // Total belt thickness including Saw tooth impression top = 4mm.

** Available belt width: 1524mm/60inch-standard or 2032mm/80inch. Please contact Volta Belting representative for additional informations. Pull force in table relates to a finger splice weld 20x50 mm. The calculation takes into account the weld splice which has strength of 28kg/cm. Note that various finger splice methods and different tools can result in differing belt strengths

Guidelines for Finger Splice Welding of the Volta Aramid Cord Reinforced (ACR) Belts

The Finger splice, with its increased contact area overlapping reinforcement cords, ensures the best weld in terms of belt strength.



Important Note: All information in the finger splice instructions is to be used as general guidelines only, based on experience from service centers using a variety of equipment. It has been noted that the exact temperature of a specific welding bar and the pressure required will vary from press to press or even on the same press when used in a workshop and then on site. Prior to first use, it is recommended to run a small set of trials to calibrate a given press. Prior to repeated use in a different environment and/or with a different thickness or texture, a test should be made to confirm the quality of weld is consistent and that every splice is hermetically closed and free from bubbles and cracks.

For Splicing "L" Material Belts:

- | After switching on the press, wait for both the top and bottom platens to heat to 180°C.
- | When cutting the belt to the finger pattern, cut away any protruding Aramid fibers. Do not attempt to drill out the ends of these fibers into the belt surface.
- | Place belt in position on heated area. Do not leave for any length of time without continuing the operation.
- | Place an appropriate silicone pad across the top side of the belt in order to preserve the original belt surface (smooth or textured) as far as is possible.
- | Apply 2 Bar of pressure for 4 minutes.
- | Wait for the belt to cool down in the press (approx. 15 minutes) and then release.

For Splicing "M-LT" Material Belts

- | After switching on the press, wait for both platens to heat to 180°C.
- | When cutting the belt to the finger pattern, cut away any protruding Aramid fibers. Do not attempt to drill out the ends of these fibers into the belt surface.
- | Place belt in position on heated area. Do not leave for any length of time without continuing the operation.
- | Place an appropriate silicone pad across the top side of the belt in order to preserve the original belt surface (smooth or textured) as far as is possible.
- | Apply 2.5 Bar of pressure for 6 or 7 minutes.
- | Wait for the belt to cool down in the press (approx. 20 minutes) and then release.

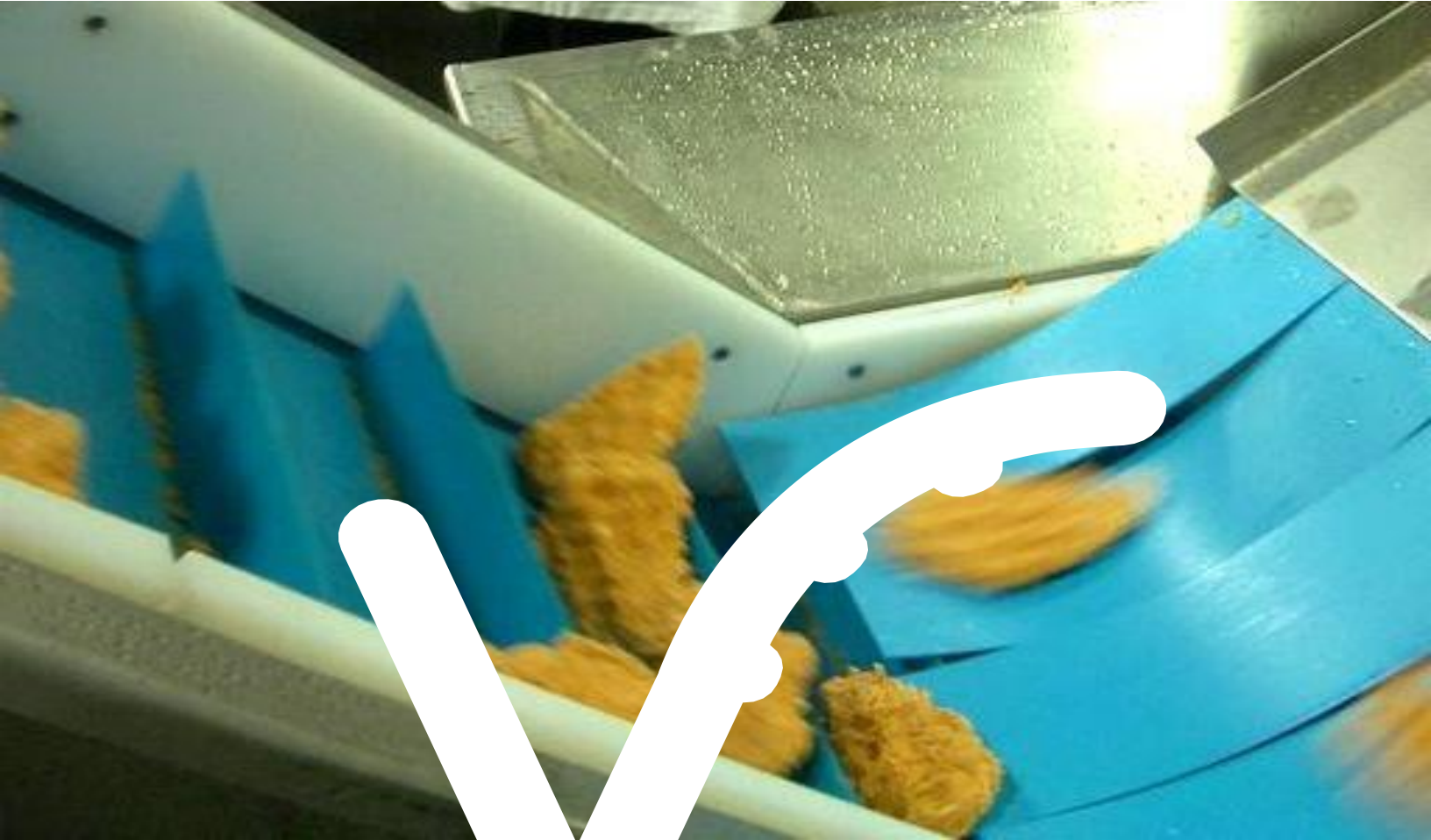
Benefits:

- ✓ Reinforced belts with no fabric exposed
- ✓ No fraying, no delamination
- ✓ Eliminate contaminated reinforced fabric which is difficult to clean
- ✓ Fully extruded
- ✓ Food approved
- ✓ Compatible with HACCP principles
- ✓ Permits versatile applications such as soft base belts on small pulley diameters
- ✓ Can replace reinforced belts in wet applications where the sealed reinforcement hinders contamination and in bakery applications using flour
- ✓ High resistance to oils, fats and hydrolysis





The Next Step in Belting



Food Grade Accessories
Conveying Solutions

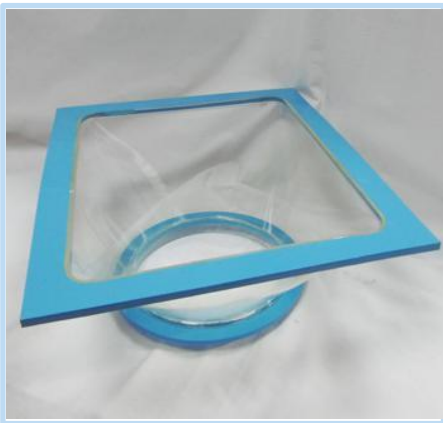


Volta food grade materials possess mechanical characteristics which make them ideally suited to static elements such as funnels or chutes. These elements are common in free fall of food products and chemicals and, when fabricated from conventional, inflexible materials such as polycarbonate or steel, can be hazard points or elements of concern in production for a number of reasons;

- | Hard elements causing damage to product in free fall
- | Elements from inflexible materials can jam when (irregular and bulky) product flow is at maximum
- | Polycarbonate elements are often cracked when removed for cleaning and refastened with bolts by maintenance staff
- | With solids, noise levels can be high
- | Bolts and fasteners can be difficult to open
- | Steel elements do not offer visibility into the product flow
- | Low cleanability



✓ Volta uses homogeneous food grade materials, including transparent and translucent conform to designs for funnels, chutes, pipes and similar elements to eliminate all the above problems. Flanges can be welded on to facilitate the fixing of the Volta funnels in the flow line.



Square to round flanged funnel



Double funnel

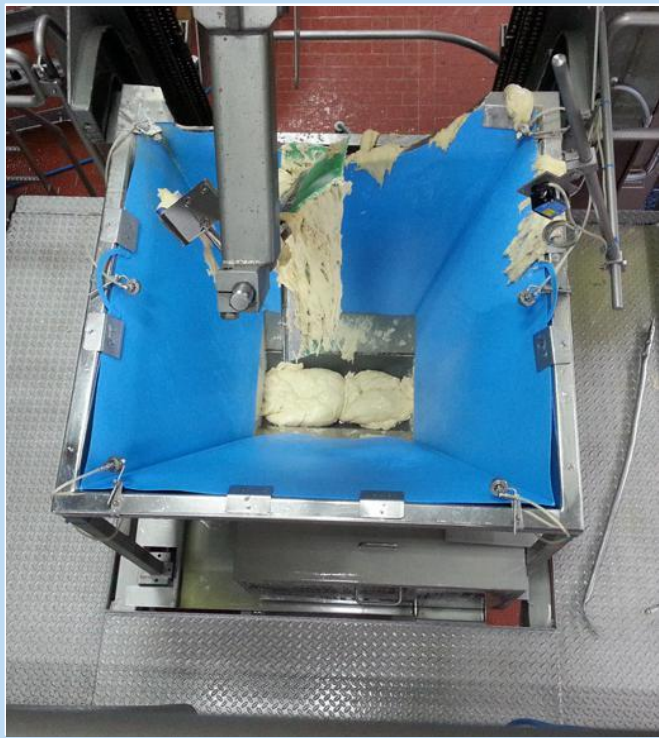


Double-flanged funnels

Base Materials used for funnels

| Product & Color | | | Shore Hardness | Temperature Range | Thickness | Certifications |
|-----------------|-------|--|----------------|------------------------------------|-----------|----------------|
| FMB | Blue | | 95A / 46D | -30° C to 70° C / -20° F to 158° F | 2 | FDA/USDA/EU |
| FMW | Beige | | | | 2.5 | |
| FMWC | Clear | | | | 3 | |

✓ All elements are custom-made and can even be fitted and welded on site where measurements are difficult or inaccurate such as for hopper linings.



Hopper

✓ Hammocks are used to reduce noise and damage to sensitive products in freefall - examples range from vegetables to hard boiled sweets.



Hammock

✓ Simple flat pieces are available for use on tables, intake chutes and as skirting and scrapers. Skirting can be used as a simple means of containment and is an effective means of protecting conveyor features such as bearings and supports. Product is not lost and will not fall into the conveyor bed and support structure.



Chute Installed



Skirting



Sorting Table



Scraper

The use of correctly selected Volta material will not groove or damage the moving Volta conveyor belt.

Volta - Food Grade Accessories



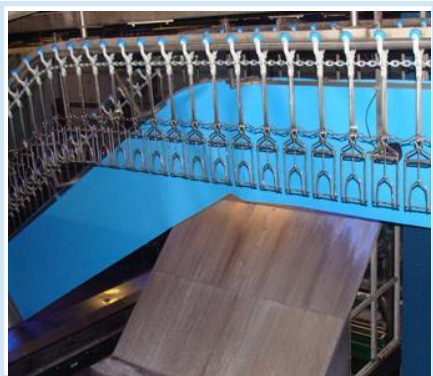
Custom made funnels



Pipes



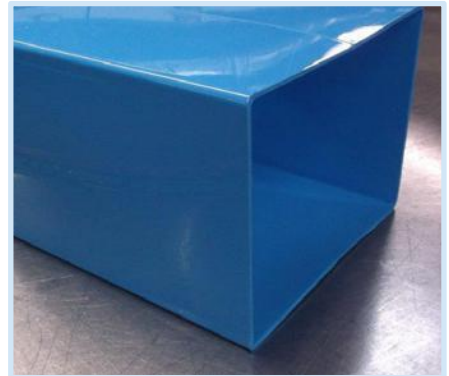
Special funnel



Skirting



Chute lining



Squared-off tube



Funnels from Volta material



Double funnel



Silo funnel



Simply Safe & Hygienic
Conveying Solutions

/// Motech

Governments & Consumers Demand More Stringent Safety Procedures from Farm-to-Fork

The issue of food hygiene has become an issue of paramount importance in food processing. Pressure has come from a number of different directions; a change in eating habits in industrialized and developing nations away from fresh, market-sourced foodstuffs; the conglomeration of the food industry around the world; the tenuous supply chain that exists for many products and a general increase in awareness, health culture and the resulting proliferation of legislation and regulations.

Consumer awareness has resulted in governments being lobbied to introduce more stringent controls on food safety and incidents of recalls and even food poisoning due to contaminated product have risen.

Independent organizations are beginning to examine the concept of 'food grade' which does not in most cases cover the belt production technology but merely the plastic from which it is made. The most recent is the EHEDG organization which has, for the first time, brought some 'food grade' belt types into question.

Food manufacturers are keenly aware of the need to reduce their liability to product claims and food suppliers such as supermarkets go to great lengths to audit the products they stock their shelves with and will visit processors at all levels to ensure compliance with safety standards and good practice.

Of all the machinery parts and processing devices that come into direct contact with food at all stages of processing, from raw treatments, through washed and frozen to cooked, conveyors are routinely employed to enable factories to increase throughput. The surface of the conveyors is one of the only non-processing elements to touch food prior to packaging and, as such, is in need of extra care and attention when it comes to improving and maintaining hygiene levels and reducing the risk of contamination.

Using Conveyor Belts as part of a Food Safety Strategy

Conveyor belts should exhibit the following characteristics:

- | **Strong and consistent (abrasion resistant):** to handle products of various sizes, weights, shapes and consistencies (including sharp elements) without displaying wear and tear that turns the belt into a hazard point.
- | **Non-porous material:** impermeable to fats, liquids, and chemicals and not prone to harbor bacteria or other micro organisms.
- | **Non-Stick surface:** preventing product from sticking to the conveyor belt and thereby reducing the repeated contact of dirt with material subsequently conveyed.
- | **Homogeneous:** made from dense (extruded) material with no fabrics to fray or soak up fluids and cleaning agents. No links, joints and pins which harbor bacteria and involve long and frequent chemical soaks to bring back to working condition.
- | **Easy to operate and maintain:** a positive drive belt with an off-tracking system such as Volta's SuperDrive™ can reduce the amount of working parts in a conveyor and allow for an open and hygienic conveyor design. Upgrading conveyors will actually reduce the cost of ownership as well as provide a safer processing environment.
- | **Easy to sanitize:** Homogeneous belts offer the fastest wash down regimes with no removal of belts from conveyors. Water consumption and labor is saved; the environmental cost is low and production time is freed up.

As a manufacturer of food grade conveyor belts with over 50 years of industry experience, Volta has designed belts that conform to all these considerations and do not just meet the expectations and demands of food processors, but exceed them. Volta offers tested and certified food grade belts for all food processing needs and allow for true compliance with HACCP principles.

For more information on HACCP visit the official site at www.haccpalliance.org

For download of EHEDG Guideline 43 visit www.ehedg.org

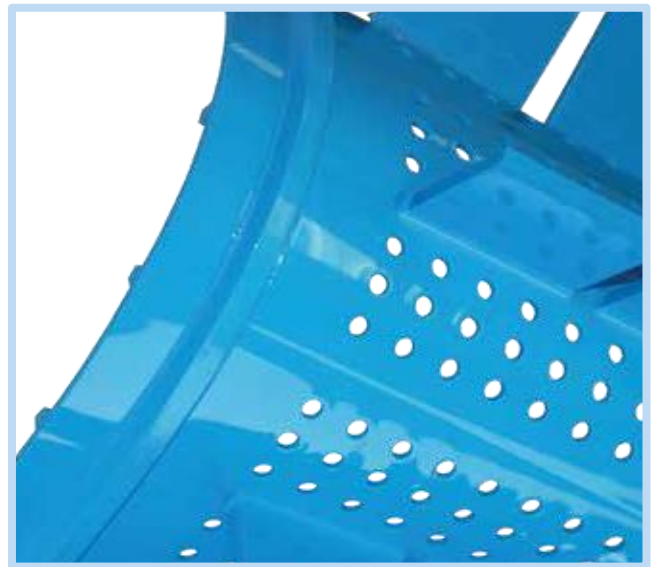
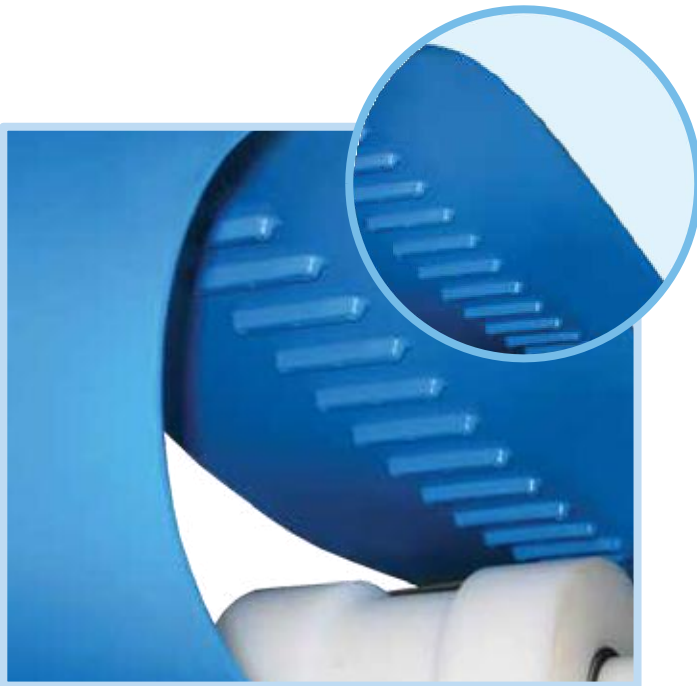
Simply Safe & Hygienic

Simply Hygienic

Volta Belting has been developing and designing conveyor belting products since 1964. Volta's thermoplastic elastomeric (TPE) food grade belts fully comply with the strictest hygiene requirements of the food industry and are used in thousands of installations worldwide.

Volta's hygienic belting technology is known for its versatility, durability and, above all, its hygienic safety. It offers the largest range of materials and surface textures and supports state of the art fabrications which are designed with preventing product residue and bacteria traps.

The materials are all extruded and can be welded piece to piece by heat or HF welding, eliminating the use of adhesives and giving a solid unbreakable bond. The features which are welded on, such as flights, guides and side walling, will not detach or fragment which this renders the need for metal detectable material obsolete. The positive drive systems, especially the SuperDrive™, are designed to make permit the flushing out of the bottom side when cleaning and the teeth are formed as part of the extrusion and not welded-on or machined (inferior production techniques that can make the teeth a hygienic hazard point by trapping dirt and fluids).



Material Quality

Volta belts outperform conventional belt types for hygienic stability:

- | Produced from dense TPE with resistant properties suited to difficult conditions: water, oils, fat, cold and freezing temperatures. The belts will not crack, delaminate or deteriorate over time.
- | Smooth non-porous surfaces which repel bacteria.
- | Especially strong and thick belts which can convey heavy loads, handle accumulation and take impact from problematic material and food waste.
- | Suited to Volta's in-house hygienic fabrications.
- | Easy to clean (wash down only; no soaking), keeping water consumption and handling time to a minimum.
- | Complies with EU, FDA and USDA regulations. Consistent with EHEDG Guideline 43.

SuperDrive™ - the World's Best Hygienic Conveyor Belt

SuperDrive™ is the most hygienic positive drive belt on the market. It uses all of the advantages of the TPE materials and the fabrication system common to Volta's other belts and goes further.

The belt is designed with integrally extruded teeth on the underside of the belt which have the safest and most reliable design for positive drive which can work in or under water and with humid and greasy foodstuffs. The teeth are sued to prevent off-tracking. Asides from the impressive mechanical capabilities, the SuperDrive™ teeth are the only positive drive teeth designed to facilitate washing and even allow trapped product to flush out during production to minimize the accumulation of fallout.

The belts are ultra-hygienic and also allows new standards of hygiene to be adopted in conveyor construction by allowing streamlined and minimalistic conveyor designs, that, when coupled with superior materials and finishing by a competent OEM, give the most advanced hygiene system available in the world.

Contrasting Volta's Hygienic System with Older Technologies

The belting industry still offers two main alternative systems: fabric coated belts ("ply" belts) and modular belts. The use of both these types has been called into question by EHEDG Guideline 43. Ply belts require sealing on the edges and underneath as well as frequent inspection; modular belts are not considered hygienic under any circumstances.

Fabric coated belts fray easily and are the fabric layers, overlaid with thin deposits of TPU, PVC or rubber coating crack on impact, from changes in humidity and temperature and from exposure to water, oils and fats. They are prone to delaminate at the joints from even moderate wear and in general across the surface from contact with abrasive materials such as salts, seasonings, frozen goods, bone fragments and the like. Not only exposed fabric layers but even light scratching can expose cavities inside the plastic which form breeding grounds for bacteria and micro-organisms and severely reduce belt cleanability.

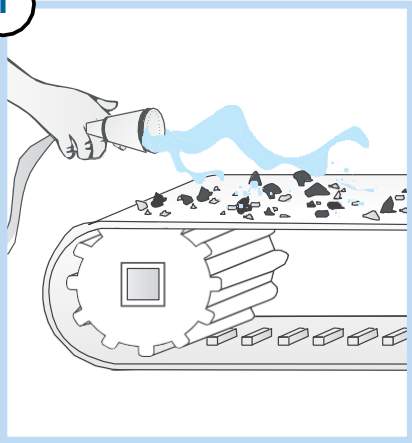


Modular Belts have been widely sold to the food industry for over a decade; their overall hygienic condition and cleanability is not suited to food processing. From day one, modular belts cannot be cleaned effectively. Modular belts are composed of moving parts which are brittle and easily damaged and can enter the product flow unnoticed and untraced. The joints and pins and shaped link plates offer over 30% extra surface area, much of which is inaccessible to normal sanitation practices. Cleaning regimes are understandably stricter with such belts and the hidden cost of maintaining them in good condition makes them expensive. Coupled with their propensity to break or wear, the frequent replacement of parts makes them the most expensive and least cost-effective alternative available as well as being hygienically questionable at best.

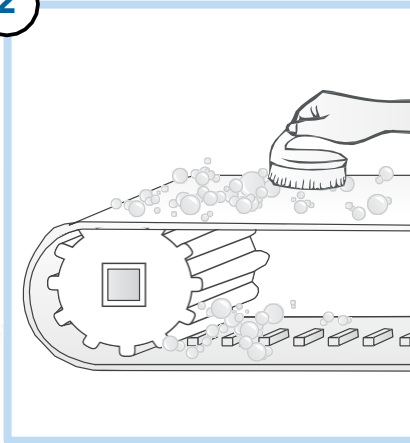
Simply Safe & Hygienic

Three steps to clean your belt:

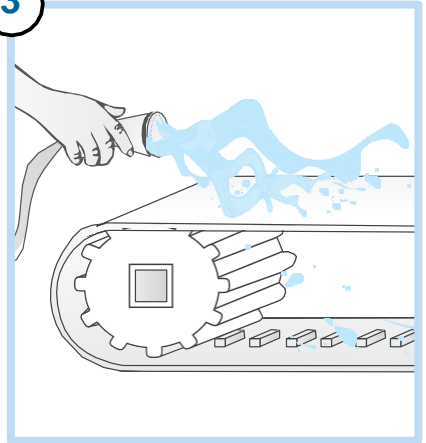
1 Clean the belt on the conveyor



2 Brush the belt on the conveyor



3 Wash the belt with water



This is what they are saying about us

End Users' Reports on Volta's Hygienic Advantages

"We changed over our last non-Volta modular belt in 2011 to SuperDrive™. That was the last weak point in the factory."

QA Manager, Australian Dry Fruit Company

"We managed to increase shelf life by 25% on a Volta Z conveyor. As we do the logistic shipping across Europe, this is a major saving in fuel, manpower and lost product."

Salad Processor Plant in the South of Italy

"In 2010 we installed Volta's three-feed conveyor. We couldn't believe the quick change over time from batch to batch –it came down to under 10 minutes!"

Multinational Food Processing Plant in France

"We installed SuperDrive™ belts in place of modular and this gave us a saving in electricity, lower decibel counts, and fewer maintenance issues with motors, less waste and a cleaner product. I can bring my customers into the factory now with a clear conscience."

Indian Seafood Processor, Mumbai

Quality & Food Safety

Standards

Volta Belting has implemented and maintains a Quality Management System (QMS) that is in compliance with ISO 9001:2008 requirements for the production of conveyor belts and conveyor belting products.

Volta Belting's positive drive and food-grade belting comply with the following international standards:

- ✓ **USDA** Dairy Equipment Review Guidelines
- ✓ **USDA - NSF/ANSI/3-A 14159-3-2014** Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing
- ✓ Requirements of Code of Federal Regulations (**CFR21**) **USDA FDA** article 21 CFR 177.2600
- ✓ **European Regulation (EU)** No.-10/2011 amended by 2017/752, 1935/2004 and 2023/2006
- ✓ German Regulation BfR XXI

Associations

Volta Belting is a member of these prestigious professional industry organizations.



EHEDG (European Hygienic Engineering and Design Group)



NIBA (National Industrial Belting Association)

Volta manufactures its food grade conveyor belts at its production facility, which supports a sizeable R&D unit. The company has distribution centers in Europe, the USA, India and the Far East to serve its global markets, locally. Find out more about us or contact us for sales & service support center nearest you.

Volta Impression Top Collection

