volta™
Belting Technology

The Next Step
in **Belting**



Bakery Industry

Conveying Solutions

Baked Products/Baking Lines

Baked goods cover a wide range of products, from bread and buns to biscuits and crackers.It also includes specialty items like pastry and pizza bases. Volta has expanded its unique range of hygienic conveyor belts to address the many challenges encountered in bakery production. Volta's standard belt width is 1524mm (60"), with select belts available in 2032mm (80").

Using Volta belts provides many advantages, including saved running costs and also alignment with increasingly strict legislation.Volta materials comply with EU, FDA and USDA regulations making them suitable for food processing. They are also HACCP compatible.

A Higher Level of Hygiene

Volta belting materials do not contain links, pins, or multiple fabric layers. This solid elastomeric material is not prone to contamination and does not harbor microorganisms. For specific bakery applications, such as knife edge transfers, Volta utilizes webbed reinforcement or sealed tensioning members (ACR) without compromising the hygienic advantages of the belting.

Belt Strength and Lifetime

Volta belts are made from a strong, abrasion-resistant homogeneous material that doesn't contain links and hinges found in modular belting. With up to eight times the amount of elastomer content in one dense layer, providing protection against oils, sticky materials, and mechanical abrasion, Volta belts surpass ply belts in quality and hygiene. Volta's hygienic belts generally outlast plied belts by at least five times. For instance, in conveyors where a dough cutter is used, this extended belt life is particularly noticeable.



Reduced Cost of Ownership

Volta's belting materials significantly reduce cleaning and sanitation procedures. Volta's belts resist the buildup of challenging product residue, such as dried dough. With Volta's superior belting materials, a baking line can expect to reduce running costs, free up production time, and minimize belt changeovers.

Safety First

Unlike modular belts, which tend to be loud and lose products through their modular links, Volta's homogeneous belts significantly reduce noise. This makes the work environment safer, prevents product loss, and keeps floors and machinery cleaner and safer. When conveying frozen products, Volta belts will not abrade or deposit belt fragments into the product flow, significantly improving hygiene and extending belt lifetime.

SuperDrive™

Volta's **SuperDrive™** is the world's leading hygienic Positive Drive conveyor belt, outperforming and outlasting all conventional belts.

SuperDrive™ prevents off-tracking and can be employed in pre-baking applications for processing large batches of dough.

The Low Temperature line (LT) can handle sub-zero applications down to -35°C/-31°F.



After Mixer Conveyors

After Mixer Conveyors, also known as Chunkers, carry heavy and unevenly distributed loads, making them an ideal application for SuperDrive™.



Dough Pump Conveyors

Dough pump conveyors, which process raw dough in large-scale production bakeries, often use plied belts with bottom guides. These belts are prone to off-tracking, resulting in fraying and tearing, and require heavy pre-tensioning. As dough accumulates on the underside, slippage occurs.

A retrofit to SuperDrive™ resolves the problem of off-tracking and prevents fraying.

The ITE textured surface can be used for product release.



Cutting Lines

Volta's tough TPE belts are highly resistant to cuts and abrasion and can be successfully repaired in many cases where accidental mechanical damage occurs.



Non-Stick Surface

Top surface textures developed especially for the bakery industry reduce the overall contact area between the dough and the belt, providing improved product release and keeping the belt cleaner for longer.

Options include **ITD 60** - Impression Top Diamond, **ITO 50** - Impression Top Oval, **ITS70** - Impression Top Square, and **ITE** - Embossed texture. **The ITM** and **ITM2** matt top belts have an excellent non-stick surface.



Narrow Transfers

Bakery lines often incorporate small pulley diameters and static 'knife edge' nose bars. In order to select a belt, the diameter/radius must be measured and the angle of wrapping noted. Wide belts are available for biscuit and pizza base cutting lines.



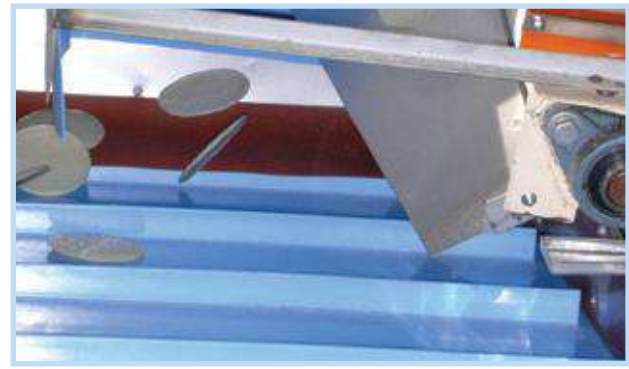
Quick Product Changeover

Producers on a bakery line may change from one product to another during the same shift. Volta belting material is highly compatible for these kinds of changes, as it permits a quick and thorough cleansing of the belt from allergens like nuts, peanut butter, and gluten from wheat.

Fabricated Elements on Belts

On conventional plied belting, flights (cleats) are a liability that cause frequent belt failure and contamination.

Volta welds all such parts with heat, integrating them into the belt and rendering them unbreakable.



Metal Detectors

The food industry increasingly utilizes metal detectors. Volta belts are easy to install on metal detectors and are the belt of choice for leading metal detector manufacturers. Volta's superior belt longevity means fewer refits over time and less re-calibration of the instrumentation. MD detectable versions available on some belt types.

Visual Contrast

Volta offers food grade flat belts and positive drive belts in blue as well as beige/off-white.

Before & After

Switching to Volta brings more than just cost savings and better hygiene. It also positively impacts how outside auditors perceive your operations.

Onsite Installation and Repair

Volta's solid extruded belts can be welded and repaired easily and efficiently onsite with Volta's thermo-welding tools.

To operate the FBW (Flat Butt Welding) system, you don't require compressed air or water; it runs on a standard single-phase electrical source. It can be operated by one person.

The P-200 plier is used for splicing narrow belts in tight spaces.

Homogeneous Belting versus Conventional Belting - a summary of Volta's advantages

Plied Belts:

Problems with plied belts, including fraying at the edges, delamination, and contamination, are eliminated by Volta materials, offering long-lasting mechanical support and superior hygienic properties.

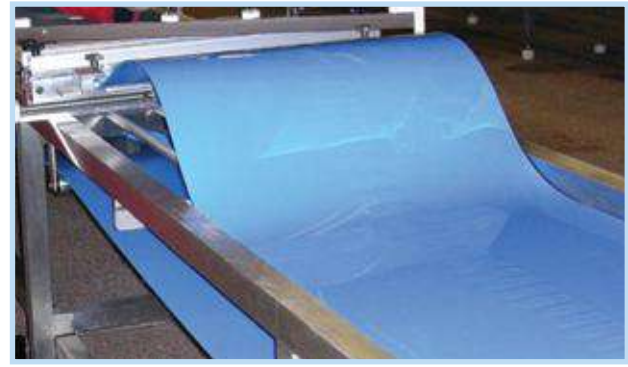
Before & After



PU Plied belt



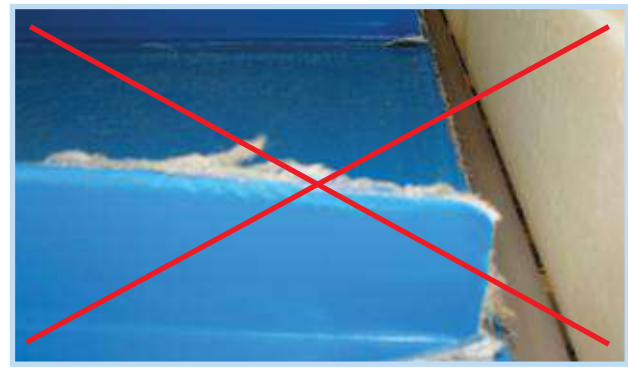
Volta TPE belt



FBW welding system



Welding narrow flat belts with Pliers P-200



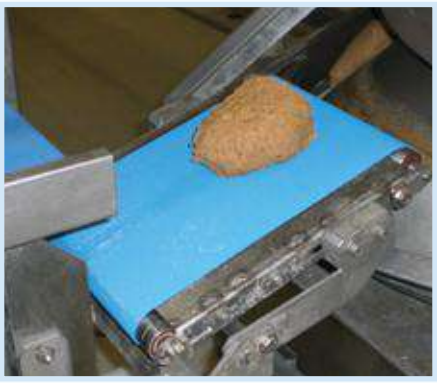
Volta material eliminates all of the above problems by providing long-lasting mechanical support together with superior hygienic properties.

Typical Baking Line Applications

Bread/Bun Lines



Dough handling



In-feed / Forming



Narrow lines conveying

Biscuits/Crackers



Web take-away



Punching (docking) lines



Telescopic scrap conveyor

Pastry Lines



Pizza topping



Dividing line



Roll molder

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