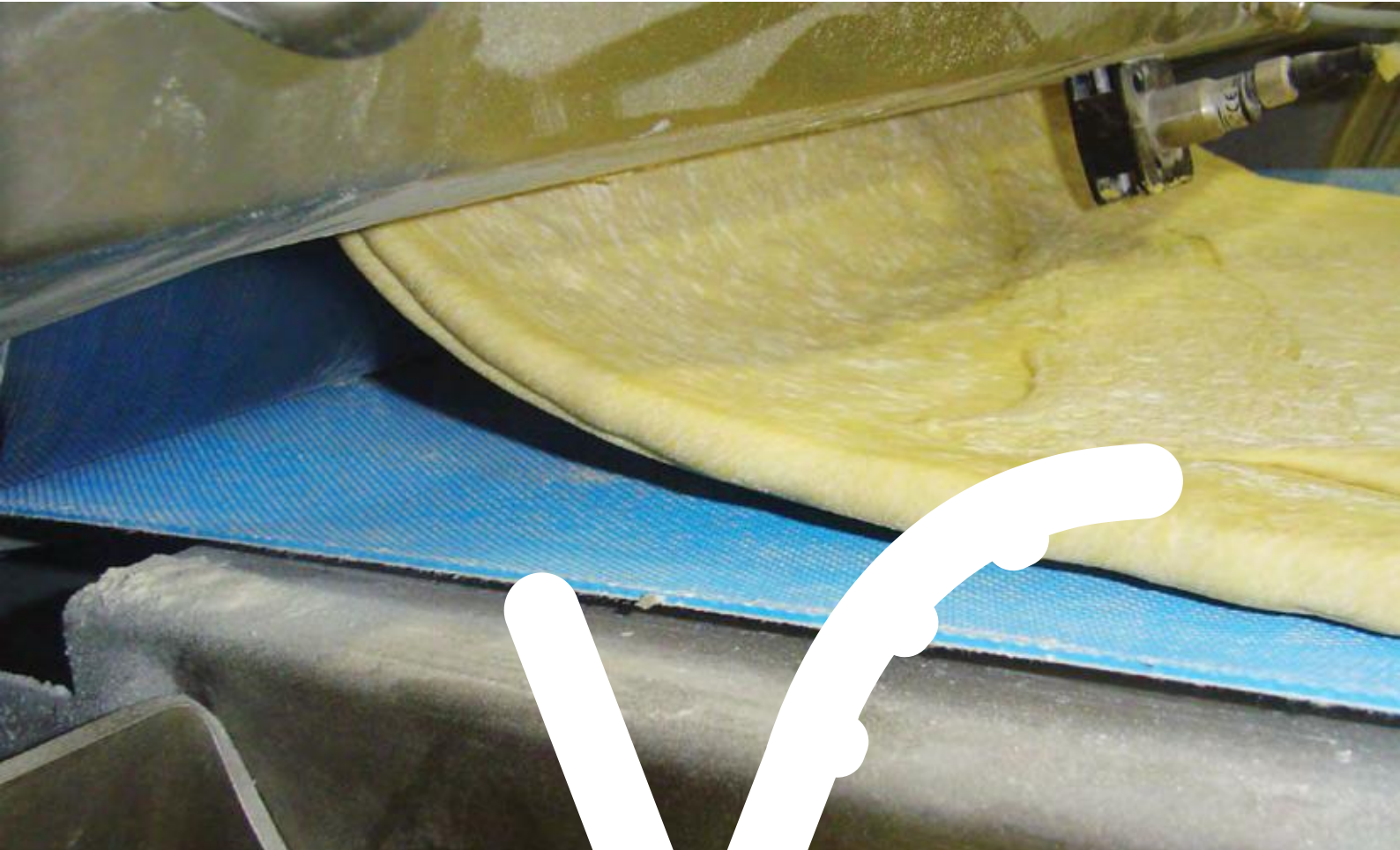




The Next Step in Belting



Bakery Industry
Conveying Solutions

Baked Products/Baking Lines

The category of baked goods ranges from bread and bun lines to biscuit and cracker lines. It also includes special products like pastry and pizza bases. Volta has expanded its unique range of hygienic conveyor belts to address many of the problematic applications in bakery production. Volta's standard belt width is: 1524mm /60" with some 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 European Regulation (EU) No.10/2011 amended by 2017/752 and with Regulation (EU) 2020/1245 on plastic materials and articles of FCM, German Regulation BfR XXI, 1935/2004 and 2023/2006 and U.S. Food and Drug Administration 21 CFR 177.2600 (Rubber Articles). They are also HACCP compatible.



A Higher Level of Hygiene

Unlike modular and ply belts, Volta belting materials do not contain links, pins or multiple layers of fabric. The solid elastomeric material is not prone to contamination and does not harbor microorganisms. For mechanical considerations, in certain bakery applications, (e.g. 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 strong, abrasion resistant homogeneous material that don't contain the links and hinges found in modular belting. Containing up to 8 times the amount of elastomer content in one dense layer for protection against oils, sticky materials and mechanical abrasion, Volta belts are superior to ply belts in quality and hygiene. Volta's hygienic belts generally outlive plied belts by at least 5 times. Conveyors where a dough cutter is used, is a strong example of this extended belt-life.



Reduced Cost of Ownership

Volta's belting materials provide significant savings by keeping cleaning and sanitation procedures to a minimum. Volta's belts resist the build-up of difficult 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

Modular belts are very loud and tend to lose products through their modular links. Volta homogeneous belts significantly reduce noise. This makes the work environment safer, prevents loss of product, 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. This significantly improves hygiene and extends belt lifetime.



✓ SuperDrive™

Volta's **SuperDrive™** is the world's leading hygienic Positive Drive conveyor belt. It outperforms and outlasts 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 $-35^{\circ}\text{C}/-31^{\circ}\text{F}$.



✓ After Mixer Conveyors

After Mixer Conveyors, (Chunkers) carry heavy and unevenly distributed loads.

This is an ideal application for Super Drive™.



✓ Dough Pump Conveyors

Dough pump conveyors process raw dough in large-scale production bakeries. These conveyors elevate dough at a sharp incline and commonly use plied belts with bottom guides. As the loads on the belts are not even, they suffer from off-tracking which results in fraying and tearing. They also require heavy pre-tensioning, and as dough accumulates on the underside, slippage ensues. Operators then must increase belt tension, which in time, causes the belt to fail.

A retrofit to SuperDrive™ will resolve the problem of off-tracking and prevent fraying.

The ITE surface texture can be used for product release.



✓ Cutting Lines

Volta's tough TPE belts are highly resistant to cuts and abrasion. They can also be repaired successfully 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.

ITD 60 - Impression Top Diamond

ITO 50 - Impression Top Oval

Quick release, diamond impression non-stick surface.

ITS70 - Impression Top Square

Quick release, fine non-stick surface.

ITE - Embossed texture

Very fine non - stick surface available on Volta

SuperDrive™ belt only

ITM and ITM2 - Matt Top



✓ 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.

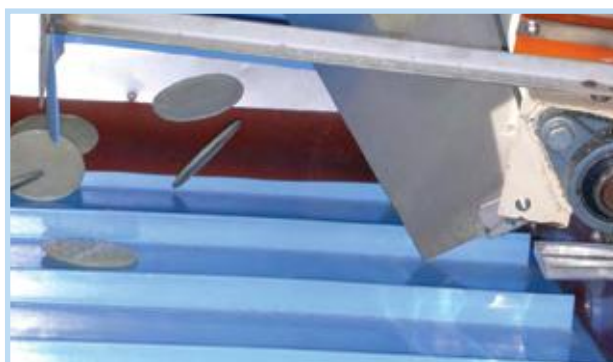


✓ Quick Product Changeover

During the same shift, producers on a bakery line may change from one product to another. Volta belting material is highly compatible for these kind 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 MD manufacturers. Volta's superior belt longevity means fewer refits over time and less re-calibration of the instrumentation. MD detectable versions of some belt types are available.

✓ Visual Contrast

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

✓ Before & After

The benefits of changing to Volta are more far-reaching than cost savings and superior hygiene. Processors who are scrutinized by outside auditors will see a marked difference in attitude when Volta belting is installed.

Before & After



PU Plied belt

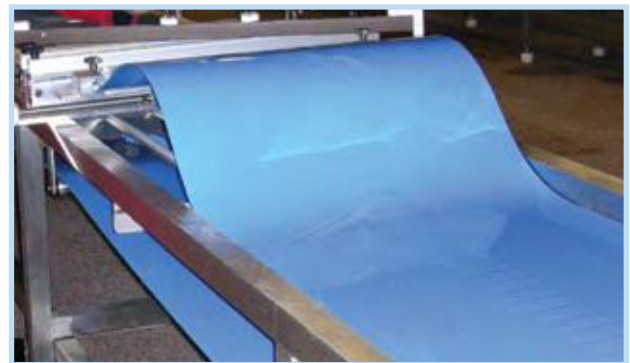


Volta TPE belt

✓ Onsite Installation and Repair

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

The FBW (Flat Butt Welding) welding system do not utilize compressed air or water and are powered from a single phase electrical source. It can be operated by one person.



FBW welding system

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



Welding narrow flat belts with Pliers P-200

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

✓ Problems with Plied Belts:

Plied belts are prone to fray at the edges and delaminate especially on the finger splice where the plastic coating is thinnest. This is due to the use of oils and fats during processing. Elevators with flights are prone to contamination through the exposed fibres that are embedded within. They also become easily detached, rendering belts unusable.



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

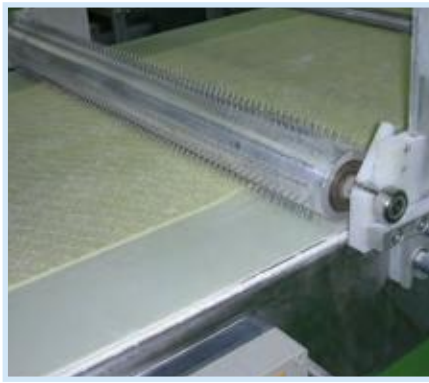


Narrow lines conveying

✓ Biscuits/Crackers



Web take-away



Punching (docking) lines



Telescopic scrap conveyor

✓ Pastry Lines



Pizza topping



Dividing line



Roll molder