



Conveying Solutions
Bakery Industry



The Next Step in Belting

Baked Products/Baking Lines

Volta has extended its unique range of hygienic conveyor belts to cover many of the problematic applications in bakery lines. The range of baked products goes from bread and bun lines to biscuit and cracker lines and also covers special products such as pastry and pizza bases. Standard belt width :1524mm /60" and some belts are available in 2032mm/80" too.

Using Volta belts gives advantages in saved running costs and also in conformity with increasingly strict legislation. Volta materials comply with European Regulation (EU) No.1935/2004-10/2011/ EC,FDA and USDA certification and are also HACCP compatible.

Hygiene



Volta belting materials have no links or pins (found in modular belts) and no multiple layers of fabric (found in ply belts). The solid elastomeric section is not prone to contamination and will not harbor micro-organisms.

In certain bakery applications (e.g. knife edge transfers), Volta utilizes webbed reinforcement or sealed tensioning members (ACR) due to mechanical considerations without compromising the hygienic advantages of the belting.

Belt Strength and Lifetime



Belts are made from strong abrasion resistant homogeneous material without the links and hinges found in modular belting. The belts are also superior to plied belts, having up to 8 times the elastomer content in one dense layer for protection against oils, sticky materials and mechanical abrasion. Volta belts generally give at least 5 times the hygienic lifetime of plied belts, for example of conveyors where a dough cutter is used.

Reduced Cost of Ownership



Volta's belting materials provide significant savings; reducing cleaning and sanitation procedures to a minimum and resisting the build-up of difficult product residue such as dried dough. A baking line can expect to reduce running costs, free-up production time and reduce belt changeovers radically.

Safety

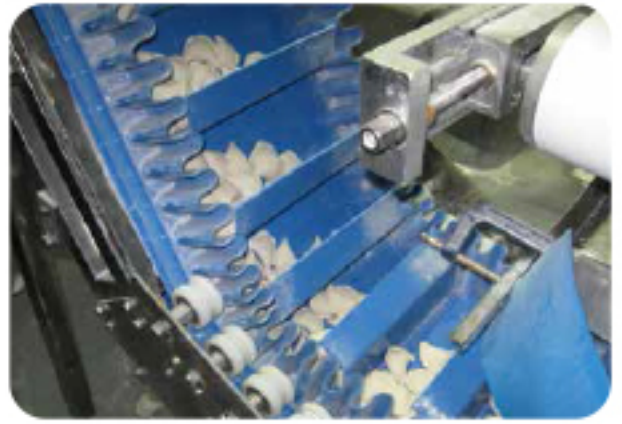


In place of modular belts, Volta belts will reduce noise making the working environment safer and will prevent the typical loss of product through the modular links keeping floors and machinery cleaner and safer. Where frozen products are conveyed, Volta belts will not abrade and deposit belt fragments into the product flow and belt lifetime is significantly longer.



SuperDrive™

The world's leading hygienic Positive Drive conveyor belt prevents off-tracking and outperforms and outlasts all conventional belts. It can be employed in pre-baking applications for handling large batches of dough and a Low Temperature version (LT) can handle sub-zero applications down to -35°C/-31°F.



After mixer conveyors

The first conveyor after the mixer (a.k.a. Chunker) carries heavy and unevenly distributed loads. This is an ideal application for Super Drive™.



Dough Pump Conveyors

These conveyors elevate dough in a sharp incline. They commonly use plied belts with bottom guides. As the loads on the belts are not even, they suffer from off-tracking, resulting in fraying and tearing. They also require heavy pre-tensioning and, as dough accumulates on the underside, slippage ensues causing operators to increase belt tension. This cycle continues until the belts fail. A retrofit to SuperDrive™ will resolve the off-tracking issues 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 and can be repaired in many cases where accidental mechanical damage has occurred.





Non-stick surface

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

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.



Narrow transfers

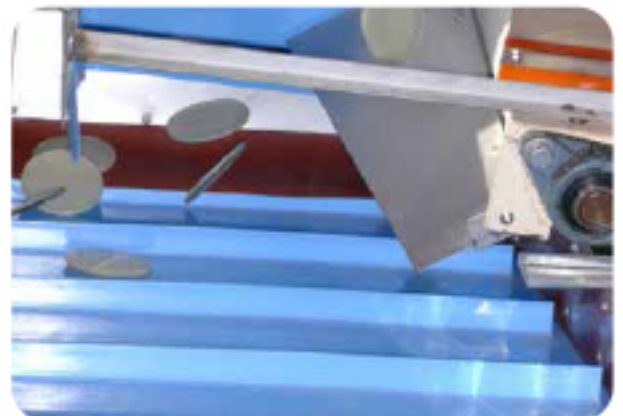
Bakery lines often incorporate small pulley diameters and static 'knife edge' nose bars. In order to select a belt, the diameter/radius must be measured and the angle of wrapping noted. Wide belts are available for cutting lines for biscuits and pizza bases.

Quick product changeover

On many bakery lines a producer will change over to a different product during one shift. Volta belting material is highly compatible to this type of schedule and permits a quick and thorough cleansing of the belt from allergens such as nuts, peanut butter and gluten from wheat.

Fabricated elements on belts

On conventional plied belting, flights are weak points and frequently cause belt failure and contamination. Volta welds all such features with heat making them an integral and unbreakable part of the belt.



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.



PU Plied belt



Volta conveyor belt

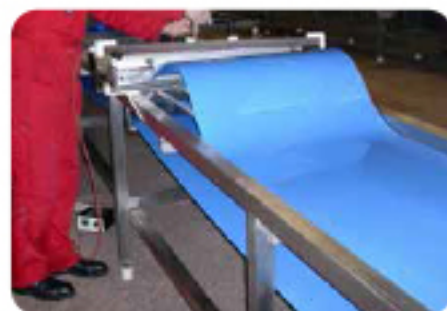
Before & After

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

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) tool do not utilize compressed air or water and are powered from a single phase electrical source. They can be operated by one person.



FBW welding system



Welding narrow flat belts with Pliers P-200

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

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 and due to the use of oils and fats in processing. Elevators with flights are prone to contamination through the exposed fibres embedded in the flights which also detach with ease and render belts unusable.



Volta material eliminates all of the above problems giving a long-lasting mechanical support coupled with superior hygienic characteristics.

↓ Typical Baking Line Applications

➔ Bread/Bun Lines



Dough handling



In-feed Forming



Narrow lines conveying

➔ Biscuits/Crackers



Web take-away



Punching lines



Scrap takeaway

➔ Pastry Lines



Pizza topping



Dividing Line



Return mass



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