ELLEGAARD.

VOLTA

Seafood industry

FOOD

Volta: The Right Choice for the Fish & Seafood Industry

Volta's innovative hygienic belting concept supplies the fish and seafood industry with the highest quality and efficiency, providing a cost effective solution which reduces bacteria counts and maintenance costs.

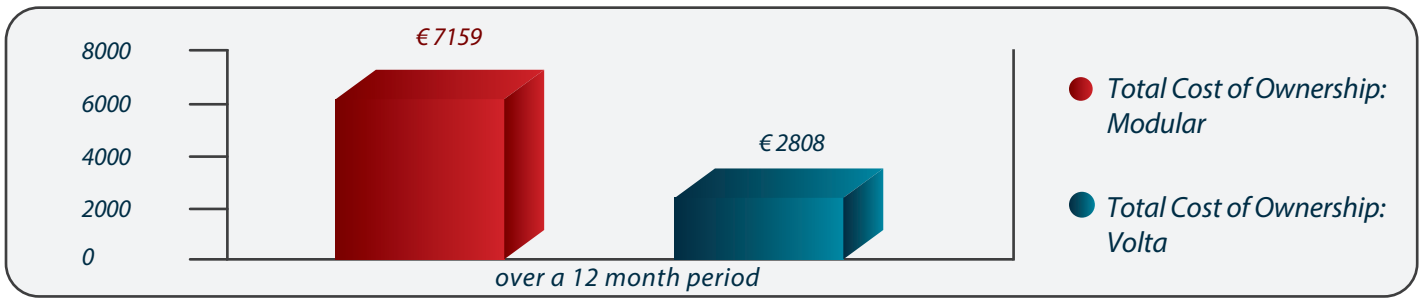
Hygiene, Clean & Simple

Hygiene Inspired
Volta's solid thermo plastic (TPE) materials offer a continuous conveying surface that is non-absorbent to water and resistant to oils or chemicals, thus preventing product residue from penetrating the belt as a contaminant.

Food Safety Awareness
The smooth surface considerably reduces bacteria levels. Critical Control Points (CCP) are eliminated as the belts do not have cracks, crevices or hinged elements which harbor microbes.

Reduce Cost of Ownership
While improving product quality and shelf-life the surface also facilitates the cleaning of the belt thereby reducing labor and water costs. Belt life is also increased.

The following case study conducted by Volta shows the costs incurred for cleaning in a food processing plant before and after the replacement of a modular belt by a Volta SuperDrive™ belt. Significant savings in cleaning costs (water, water disposal, detergents, and labor) were recorded and direct reports from end users in the fish industry confirm savings in the cost of ownership of between 50% and 70% over a 12 month period, as depicted in the graph below.



One of the simplest ways to improve an entire processing line is by selecting the correct belt. The impact is often unexpected and typically originates from a mix of the above-mentioned benefits.

"I think Volta belts are the best because they are easily installed and cleaned. There are no spaces in the belt for bacteria to harbor, leaving no bad odor caused by bacteria."
Mt. Hung, Director of Hinh Puh, Fish Processing Plant, Vietnam.

Meets international hygiene standards for quality, reliability and food contact.
FDA/USDA Approved. Declaration of Conformity verifying compliance with general requirements (article 3) in EU Regulations No.:1935/2004 and Directive 2002/72/EC. Supports HACCP Food Safety Management Principles.

Tuna Processing

Tuna Squeezing and Can Filling

- Smooth surfaces are extremely hygienic and easy to clean.
- Belts do not absorb liquids, oils or chemicals - No bad odors .
- Material resists abrasion, decay and rotting which arises from a combination of water and bacterial action.
- Can be designed to suit the different tuna processing lines.

Shellfish Processing

The elastic properties of the material resist the harsh impact of sharp shellfish. The belt will not crack or fracture. Clever thermo-welded features can assist in transporting slippery products along horizontal lines and prevent damage caused by avoiding the piling up of delicate high-value product.

Salmon Processing

The dorsal fins and snouts of some fish (salmon for example) are sharp and stiff and are known to delaminate or even puncture traditional plastic-coated ply belting. Aside from drastically reducing belt life, this type of damage quickly provides a breeding ground for bacteria. Volta belting material has no ply and is highly cut-resistant. It is even repairable in the event of an accident such as a knife piercing the surface.

All the other advantages associated with Volta belts will be apparent in these processes; reduced bacteria growth; increased belt life; less downtime for cleaning; savings in maintenance (which includes the advantages of Volta's quick on-site installation tools).

Volta Special Surfaces for particular processing requirements

ITO 50 - Impression Top Oval
Quick release, non-stick surface.

SP - Spikes are designed for applications requiring grip of amorphous materials such as fresh fish. The spikes are extruded as one with the belt.

IRT - Impression Roof Top
Gives high grip of oily or wet food products.

ITE Embossed texture
Non - stick top surface.

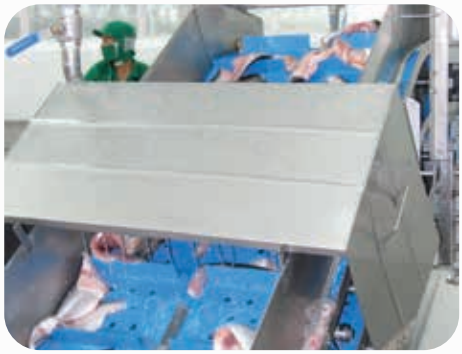
CT - Crescent Top belt for the high grip of bulky soft products such as fish and seafood. Crescent top is ideal on slicers and inclined conveyors.

Trimming and Filleting Fish

Volta belts' strong surface resist cuts, abrasion and bacterial build up and decay. Fish and trimmed waste are conveyed on ultra-hygienic surfaces which retain a minimum of processed material on the return, thereby avoiding cross contamination. Savings accrue by the belts being quick to clean without being removed from the conveyor.

Under Water Conveying

Volta's homogeneous belt material will not absorb water and oils and has no ply. Ply in belts will soak up liquids which develop high concentrations of bacteria and cause cracks to form in the laminated surface.
Perforations for drainage are made according to requirement by a smooth punching tool which does not compromise the hygiene of the belt. Further fabrications such as flights and side (containment) walls make this system adaptable to any conveyor and suited to processing in water and on inclined conveyors.



Deep Freeze Applications

The Volta Low Temperature (LT) belt material is unique in its ability to work well in temperatures well below zero either for transporting frozen products or in freezing tunnels. The material does not become rigid and its pliable structure makes it ideal for glazing lines where more brittle belts (modular for example) are worn away by attrition or even broken by the impact of the frozen products.

Weight Checking and Sorting Lines

Volta's homogenneous material does not absorb odors and will reduce contamination in general in the processing room. The solid but flexible construction means that no fibers (typical of frayed plastic-coated ply belts) or broken plastic fragments (typical of modular belts) will be sent down line to weighing and packing.

Canning Industry

A number of products can assist in the canning area from steel- or Kevlar-reinforced round profiles to flat belts for magnetic elevators. Special low friction material enables smooth constant conveying even where there is product accumulation on the line.

Volta in Fish & Seafood - Matrix

Process Stage	POSITIVE DRIVE																					
	FHW/FHB-SD	FMW/FMB-SD	FMB-SD LT	FMB-DD LT	FMW/FMB-DD	FMB-DDSP	FHW/FHB	FMW/FMB	FMB-LT	FMW/FMB	FEMW/FEMB	FRMW-CEBB/C	FEMB-ITO50	FRLW-ITO50	FEMB/FELB Spike	FRG	FZ	FEZ	FK	FELB	FETB	RCW PROFILE
Fish Intake	●	●			●		●	●		●		●										
Wash Down - perforated belt	●	●	●		●	●	●	●		●												
Cleated incline - light to medium load	●	●			●		●	●		●	●	●										
Cleated incline - extra heavy load	●	●			●		●	●		●	●	●										
Gutting Lines		●			●			●														
Skinner Lines						●		●														
Filleting Lines	●	●			●	●	●	●		●	●	●	●	●	●							
Filleting Deboning/ Trimming/Portion Cutting	●	●			●	●	●	●		●	●	●	●	●								
Pin Boner Lines															●							
Tuna Squeezing								●			●	●										
Checkweighing								●												●	●	
Grading & Batching	●	●	●		●	●	●	●		●	●	●	●	●								
Freezing : IQF			●	●					●													
Sorting & cleaning after cooking	●	●			●		●	●		●	●	●										
Fried Fish conveyor								●						●								
Can Cleaning							●															
Metal Detector	●	●	●		●	●	●	●		●	●	●	●	●	●							
Magnetic Elevator							●									●	●	●	●			●

This information is based on our experience in the field over time and should be considered as a general recommendation only.

Hygiene & Product Quality is first priority for leading food producers using Volta.

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Fish & seafood applications

Special Belt for Surimi

Surimi Conveying

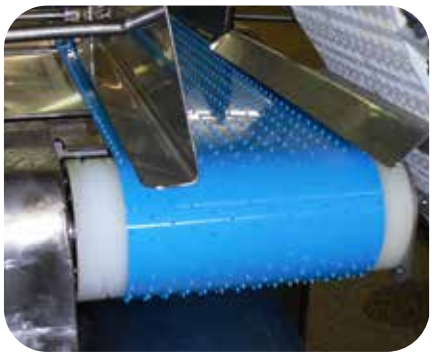
Fish Intake

Fried Fish Sorting

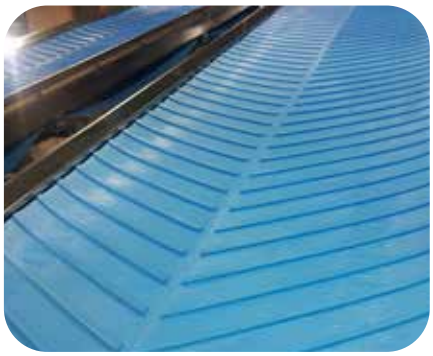
Tuna Squeezing

Portioning Line

On-site Washing



Belt with Spikes



Belt with Special Cleats

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