

# Conveying Solutions Fish & Seafood Industry



The Next Step in Belting

# **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

The Volta Solid Thermo Plastic (TPE) materials offer a continuous conveying surface that is non-absorbent to water, oils or chemicals which prevents product residue from penetrating the belt.



#### **Food Safety Awareness**

Smooth surface reduces bacteria levels considerably. Critical Control Points (CCP) are eliminated as belts do not have cracks, crevices or hinges for microbes to harbor in.



#### **Reduce Cost of Ownership**

Improve product quality and shelf life while allowing simple cleaning of belt and conveyor, reducing labor and water costs in the cleaning process. Increased belt longevity.



The following case study conducted by Volta shows the costs incurred for cleaning before and after the replacement of a modular belt by a Volta SuperDrive<sup>™</sup> belt in a food production plant. Great savings in cleaning costs (water, water disposal, detergents, and labor) were recorded and direct reports from end users in the fish industry show cost of ownership savings of between 50% and 70% over a 6 to 12 months period, as seen in the graph below.



It is clear that one of the simplest ways to improve an entire processing line is by selecting the correct belt. The impact can be unexpected and come from any or all 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 Systems.



## **G** Trimming and Filleting Fish:

Volta belts' strong surface resists cuts, abrasion and bacterial build up or decay. The fish and any trimmed waste are conveyed on ultra-hygienic surfaces which will retain a minimum of processed material on the return avoiding cross contamination. These belts are quick to clean with a simple hose down which makes a huge difference to the cost of ownership.

### **Output** Under Water Conveying:

Volta's homogeneous belt material will not absorb water and oils and has no ply. Ply is prone to soak up liquids thereby developing high concentrations of bacteria and causing cracks to form in the laminated surface. Perforations for drainage are made according to requirement by a clean punching system which does not compromise the hygiene of the belt and further fabrications such as flights and sidewalls for containment make this system adaptable to any conveyor and safe for processing in water and on inclined conveyors.





### **G** 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 some instances, in freezing tunnels. The material does not harden up and its pliable structure makes it ideal for glazing lines where more brittle belts (modular for example) are worn away by attrition from frozen products or even broken by impacting.

## Check Weighers and Sorting Lines:

Volta's homogeneous 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 coated fabric 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, Kevlar or Volta cord 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.

## 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 as well as decay or rotting arising from a combination of water and bacterial action.
- Can be designed to suit the different tuna processing lines.





### **G** Shellfish Processing:

The solid material resists the harsh impact of sharp shellfish and 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 and savings in maintenance including those entailed in using the 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 good 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. The special crescent pattern prevents slipping of conveyed products both backwards and sideways. Cresent top is ideal on slicers and inclined conveyors.

# **Volta in Fish & Seafood Applications**

Process Stage	POSITIVE DRIVE														e							
	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-IT050	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.

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



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



**Corporate Headquarters** Sales and Manufacturing sales@voltabelting.com **USA** Tel: +1 973 276 7905 Fax: +1 973 276 7908 Toll Free: 1-877-VOLTAUS **EUROPE** Tel: +31-546-580166 Fax: +31-546-579508

Volta Belting makes no warranty with respect to any of its products for a particular purpose. See **Volta** General Terms and Conditions.

Copyright©2010 Volta Belting Technology Ltd. CAT506EN00 - Ver. A - December 2012

www.voltabelting.com

Ocreate