Fish & Seafood Applications

Volta in Fish & Seafood - Matrix

<table>
<thead>
<tr>
<th>Process Stage</th>
<th>Positive Drive</th>
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<tbody>
<tr>
<td>Fish Intake</td>
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<tr>
<td>Wash Down</td>
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<td>Cleanedbelts</td>
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<td>Skinning</td>
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<td>Tuna Squeezing</td>
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<td>Grading &amp; Batching</td>
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<td>Freezing : IQF</td>
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<tr>
<td>Fried Fish Conveyor</td>
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<td>Can Cleaning</td>
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<tr>
<td>Metal Detector</td>
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<td>Magnetic Elevator</td>
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Special Belt for Surimi
Fried Fish Sorting
On-site Washing Belt with Spikes
Tuna Squeezing Portioning Line
Surimi Conveying

Fish & Seafood Industry

Hygiene & Product Quality is first priority for leading food producers using Volta.
Volta’s innovative hygiene belts are designed for the fish and seafood industry, offering a cost-effective solution that reduces bacteria counts and maintenance costs.

**Hygiene, Clean & Simple**

- **Volta’s solid thermo plastic (TPE) materials offer a continuous conveying surface that is non-absorptive to water and oils, preventing bacteria from penetrating the belt in contamination.
- **Reduct Cost of Ownership:**
  - Significant savings in cleaning costs (water, labor and water costs. Belt life is also increased.
  - While improving product quality and shelf-life the surface also facilitates the cleaning of the belt friendly 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, labor, and water costs) were recorded and direct reports from end users in the fish industry confirm the expected results.

**Under Water Conveying**

- Volta’s homogeneous bell material will not absorb water and oils and has no ply. Pigs in belts will soak up liquids which develops high concentrations of bacteria and causes crabs to form in the laminated surface.
- Portioning 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 axis (containment) walls make this system adaptable to any conveyor and suited to processing in water and on inclined conveyors.

**Trimming and Filleting Fish**

- Volta’s 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 existing cross contamination. Savings accrue by the belts being quiet to clean without being removed from the conveyor.

**Weight Checking 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 plastic-coated ply belts) are worn away by attrition or even broken by the impact of the frozen products.

**Deep Freeze Applications**

- The Volta Low Temperature (LT) belt material’s unique in its ability to work well in temperatures well below zero either for transporting frozen products or in frozen storage 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.

**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. Clower thermo-welded features can assist in transporting shellfish products along horizontal lines and prevent damage caused by the piling up of delicate high-value products.

**Salmon Processing**

- **Volta’s solid thermo plastic (TPE) materials offer a continuous conveying surface that is non-absorptive to water and oils, preventing bacteria from penetrating the belt in contamination.
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- Volta’s homogeneous bell material will not absorb water and oils and has no ply. Pigs in belts will soak up liquids which develops high concentrations of bacteria and causes crabs to form in the laminated surface.
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- The Volta Low Temperature (LT) belt material’s unique in its ability to work well in temperatures well below zero either for transporting frozen products or in frozen storage 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.

**Volta Special Surfaces for particular processing requirements**

- **ITD 50 - Impression Top Oval**
  - Quick release, non-stick surface.
  - Designed for applications requiring grip of amorphous materials such as fresh fish. The spikes are extruded as one with the belt.

- **ITT - Impression Roof Top**
  - Dives high grip of oily or wet food products.
  - Non-stick top surface.

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

**Meet’s international hygiene standards for quality, reliability and food contact.**

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

Volta’s® Homogeneous belt material will not absorb water and oils and has no ply. Fly in belts will soak up liquids which develop high concentrations of bacteria and cause cratches to form in the laminated surface. Poroforations for damage are made according to a smooth punching tool which does not compromise the hygienic of the belt. Further fabrications such as flights and aisle (containment) walls makes this system adaptable in any conveyor and suited to processing in water and in inclined conveyors.

Food Safety Awareness

Volta’s® homogeneous 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.

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, detergents, labor, and energy) were recorded and direct reports from end users in the fish industry confirm that these savings can be realized through the implementation of Belting Technology Ltd. WWW.VOLTABELTING.COM

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.

Tuna Special Surfaces for particular processing requirements

ITD 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.

MR - Impression Root Top
Doves 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.
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

Volta’s solid thermoplastic (TPE) materials offer a continuous conveying surface that is non-abrasive to delicate food products and retains its shape after deformation, ensuring product residue from penetrating the belt as a contaminant.

Food Safety Awareness

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. Portions for damage 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 axle (containment) walls make this system adaptable to any conveyor and suited to processing in water and on inclined conveyors.

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, detergents, and labor) were recorded and direct reports from end users in the fish industry confirm

The cost of ownership of between 50% and 70% over a 12 month period, as depicted in the graph below.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of Ownership</th>
<th>€/Year</th>
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<tbody>
<tr>
<td>2020</td>
<td>€1599</td>
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<tr>
<td>2021</td>
<td>€200</td>
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</table>

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, so no bad odor caused by bacteria.” Mr. Hung, Director of Honh Phu, Fish Processing Plant, Vietnam.

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.
- **INT - Impression Root Top**: Does high grip of oily or wet food products.
- **ITE Embossed texture**: Non - stick top surface.
- **CT - Crescent Top**: best for the high grip of bulky soft products such as fish and seafood. Crescent top is ideal on slicers and inclined conveyors.

Conveying Solutions - Fish & Seafood Industry

- **Under Water Conveying**: Volta's homogeneous bell 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. Portions for damage 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 axle (containment) walls make this system adaptable to any conveyor and suited to processing in water and on inclined conveyors.

The Volta Low Temperature (LT) bell material's 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 being removed from the conveyor.

Deep Freeze Applications

The dorsal fins and snouts of some fish (salmon for example) are sharp and stiff and are known to deteriorate at each puncture traditional plastic-coated ply belts. 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.

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.

Salmon Processing

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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).

- **Weight Checking and Sorting Lines**: Volta's homogeneous material does not adsorb odors and will reduce contamination in general in the processing room. The solid but flexible construction means that no flares (typical of frayed plastic-coated ply belts) or broken plastic fragments (typical of modular bells) will be sent down line to weighing and packing.

- **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 existing cross contamination. Savings accrue as the belts being used to clean without being removed from the conveyor.

- **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 colors.
  - Material resists abrasion, decay and rotting which arises from a combination of water and bacterial action.
  - Can be designed to suit the different types of processing lines.

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


Meets international hygiene standards for quality, reliability and food contact.

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Volta in Fish & Seafood - Matrix

<table>
<thead>
<tr>
<th>Process Stage</th>
<th>FHW/FHB-SD</th>
<th>FMB-SD LT</th>
<th>FMB-DD LT</th>
<th>FMW/FMB-DD</th>
<th>FMB-DSP</th>
<th>FHW/FHB</th>
<th>FMW/FMB</th>
<th>FMB-LT</th>
<th>FMW/FMB</th>
<th>FEMW/FEMB</th>
<th>FRMW-CC/B</th>
<th>FEMB/ITO50</th>
<th>FRLW/ITO50</th>
<th>FEMB/FELB Spikes</th>
<th>FETB</th>
<th>FZ</th>
<th>FK</th>
<th>FELB</th>
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<td>Freezing · IQF packing or casing after cooking</td>
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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.**

Fish & Seafood Applications

- Special Belt for Sorting
- Sorting Conveying
- Fish Intake
- Fried Fish Sorting
- Tuna Squeezing
- Portioning Line
- On-site Washing
- Belt with Spikes
- Belt with Special Cleats

Volta in Fish & Seafood - Matrix

- Positive Drive
- RCW Profile

The Next Step in Belting

Volta in Fish & Seafood - Matrix

- Positive Drive
- RCW Profile

The Next Step in Belting

Volta in Fish & Seafood - Matrix

- Positive Drive
- RCW Profile

The Next Step in Belting

Volta in Fish & Seafood - Matrix

- Positive Drive
- RCW Profile

The Next Step in Belting

Volta in Fish & Seafood - Matrix

- Positive Drive
- RCW Profile

The Next Step in Belting
Volta in Fish & Seafood - Matrix

Process Stage

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

Fish & Seafood Applications

- Special Belt for Sushi
- Sushi Conveying
- Fish Intake
- Fried Fish Sorting
- Tuna Squeezing
- Portioning Line
- On-site Washing
- Belt with Spikes
- Belt with Special Cleats

Fish & Seafood Industry

Conveying Solutions