

ISO 9001:2015

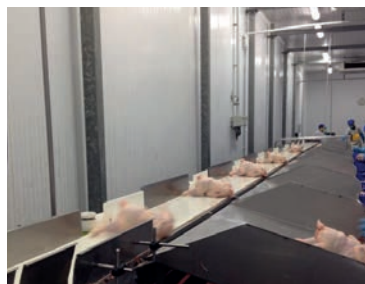
esbelt **AM Belts** **Anti-Microbial & Anti-Biofilm**

Reduce microbial growth by over 99% in a wide spectrum of bacteria* (LISTERIA, SALMONELLA, ESCHERICHIA COLI, ...).

Fully effective throughout the working life of the belt.

Contribute to better **HACCP** system management.

esbelt.com



* Tests based on ISO 22196 (measurement of antibacterial activity on plastic and other non-porous surfaces). Equivalent to ASTM E 2149 and JIS Z 2801.



esbelt AM Belts

The **esbelt AM antimicrobial belt range** represents a very important aid for food companies in guaranteeing the safety of processed foods, especially when shelf life is a strategic property of the food item.

In order not to alter the conveyed food, its main active antimicrobial agent is not a bactericide but a bacteriostatic component. Its function is to prevent the belt from adding microbial load to the conveyed product. Reduces the risk of claims and returns.



ADVANTAGES

Inhibit biofilm formation.

Reduce microbial growth by over 99%. Highly effective against a wide spectrum of bacteria and other microbes, (such as *Staphylococcus aureus*, *Escherichia coli*, *Listeria monocytogenes* and *Salmonella enteritidis*).

Offer additional security in food audits and control.

Waterproof impregnated fabrics that pass Wicking Test G11 (wick resistant).

Spare the use of UV disinfection light system in conveyors.

Fully effective throughout the working life of the belt. Our innovative AM component is added to the belt formula itself so it continues to work even when the cover is worn, cracked or cut.

Contrary to the silver ions used by other manufacturers, our AM component is not water soluble.

Our AM component meets current legislation on chemical migration of materials.

Our antimicrobial agent is not incorporated like a nanoparticle.

BENEFITS

More effective disinfection.
(While maintaining the cleaning and sanitizing protocol).

Prevent the belt from becoming a source of contamination and jeopardizing the validity issued for the food product.

Strengthens preventive measures associated with HACCP.

Prevent the absorption of water and oils, improving hygiene in food applications.

Savings in investment, maintenance and energy which come with the installation of these UV lights.

Avoids premature replacement. Saves time and money.

Maintains its efficacy, meeting the strictest cleaning procedures.

The conveyed food maintains its organoleptic characteristic. **Does not affect the food product and its composition.**

Cannot be inhaled. Null environmental risk.



Main characteristics

- Conveyor and process belts with antimicrobial properties.
- Declaration of conformity – FDA, EU regulation 1935/2004 and EU regulation 10/2011 food quality.
- Excellent resistance to oils and fats.
- Very competitive price.
- Excellent longitudinal flexibility (knife-edges).

Report: Poultry processing plant

Belt Type	Application	Test time*	Bacterial growth results
CLINA PREMIUM AM	Chicken breast conveyance	13 h/day, 5 days/week 7 months	Staphylococcus aureus: 99,79 % reduction Escherichia coli: 99,69 % reduction **Listeria monocytogenes: 99,97% reduction

* Each day a strict detergent and disinfection protocol is applied to the belt. Regular microbiological checks on the belt bacterial load by an external lab.

** Results obtained after five months' of testing.

Test method

Specific conditions in each company make onsite-checks on belts' antibacterial effectiveness advisable.

RODAC plates, surface swabs or similar methods are very practical for use in factories but a degree of randomness cannot be avoided in the results. In addition, biofilms cannot be detected by techniques that are unable to remove them. For this reason, esbelt recommends occasional tests on samples of used belt by an external lab with experience in applying the ISO 22196 (international), ASTM E 2149 (American) and JIS Z 2801 (Japanese) standards. To ensure antimicrobial (and not cleaning) efficacy, esbelt recommends that the test belt include an AM and a non-AM section, comparing samples from both sections previously sanitized.

Sampling Method

100% of free microbes cannot be detected by tests using swabs, strips or sponges. The measurements carried out in plants tend to be undervalued. Also, immediately after a sanitation protocol, the resistant microbes are still in the viable but nonculturable (VBNC) state due to the chemical aggressiveness of the disinfectant. The best sampling time, to assess the microbial load of a belt, is after the night or weekend shutdown. Even so, biofilms still go undetected by sampling methods that cannot remove biofilms from the belt.





Reports from the World Health Organisation indicate that 420 000 people die annually as a result of foodborne diseases.

Largest Canadian meat recall: \$4-million settlement in tainted meat lawsuit

JULY 17, 2015



A deal has been worked out in a class-action lawsuit filed over an Escherichia Coli O157:H7 outbreak and the largest meat recall in Canadian history. The lawsuit is against a large Canadian meat company which operated a meat-packing plant during a tainted beef recall in 2012.

The compensation has been set at \$4 million.

More than 1.8 million kilograms of beef were recalled by the company in Canada and the United States in 2012.

28 years for salmonella: Peanut exec gets groundbreaking sentence.

SEPTEMBER 22, 2015



A former company executive of an American peanut company was sentenced to life behind bars for knowingly shipping out deadly food.

This food poisoning outbreak was one of the most serious in the history of the United States of America. Other company executives found responsible received a 20-year sentence.



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