PKX BELT MATERIAL

Movex PKX material

ENHANCES FOOD SAFETY



For primary red meat processing applications, durability and easy cleaning are key requirements for conveyor belts. For this reason, choosing **Movex Blueline** modular belts in **PKX**, our material designed specifically for this type of use, is the best choice because the design of our belts offers performance beyond imagination.

PKX reduces non-mechanical belt breakage and the risk of foreign material contamination. Specifically designed for direct food contact applications, **PKX** is a robust, high-performance material that outperforms POM in resistance to impacts, chemicals, and abrasion.

PKX excels in the harsh conditions of food processing, including belt removal/reinstallation, conveyor design challenges, and chemical exposure during processing and sanitation. This superior material significantly reduces the risk of non mechanical foreign material contamination from the belt in your facility.

Available stock series 7010 FT & 7510 FT white; other series on request.

Key Features and Benefits of PKX

(compared to POM material)

- Greater resistance to acidic and basic substance
- No food contamination, no plastic parts from scratch
- Three times higher impact resistance at 4°C
- Improved product release and wear resistance
- 12% lighter
- Same belt pull & working load capacity
- Compliant with FDA and EU regulations

Impact resistance

PKX is a robust, high-performance material that is more resistant to impacts, chemicals, and abrasion compared to POM.



Excellent wear resistance

Movex's PKX material is more resistant to wear and abrasion from processed goods and conveyor elements. It shows 40% less wear and 70% less scratch depth than POM in both wet and dry controlled tests.



Excellent chemical resistance

PKX also demonstrates good resistance to most commonly used cleaning agents. The inherent hydrolysis resistance of PKX helps maintain the mechanical properties of the belt over extended periods.



Non-toxicity

Like all other Movex food contact materials, the PKX modular belt material complies with FDA and EU food contact requirements.



Exceptional barrier properties

Humidity and temperature fluctuations in wet food industries challenge many plastic modular belt materials. High temperatures and cleaning chemicals accelerate cracking or breaking, especially in POM, leading to premature replacement.

PKX, with its superior hydrolysis resistance, operates in temperatures from -50° C to $+80^{\circ}$ C in wet conditions and up to $+110^{\circ}$ C in dry conditions.

MOVEX DESIGN FEATURES



Self-Locking pins

The main advantage of self-locking pins is their ability to provide a safe, quick and easy-to-use solution for fixing modular belts that can significantly speed up assembly and maintenance processes while ensuring a high level of hygiene.



Self-Cleaning hinge system

Unique design cleans the space between modules during rotation.



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MATERIALS COMPARISON TABLE

LEGEND: • Excellent performance | • Standard performance | • Low performance

Material	РОМ	РР	PE	PA	РКХ
Wear resistance	•	•	•	•	•
Hydrolysis resistance	•	٠	•	Not recommended	•
Impact resistance	•	•	•	•	•
Scratch resistance	•	•	٠	•	•
Fatigue lifetime	•	•	•	•	•
Low temp application	٠	•	٠	•	•
High temp dry application	•	•	•	•	•
High temp wet application	٠	٠	٠	•	•
Resistance against acids (dilute/weak)	•	•	٠	•	•
Resistance against alcohols	٠	٠	٠	•	•
Resistance against alkaline cleaners	•	•	•	•	•
Resistance against detergents	•	•	•	•	•
Resistance against oxidants	•	•	•	•	•
Resistance against strong oxidants	•	•	•	•	•

