

Metal and X-ray Detectable Portfolio

Advancing Food Safety



Foreign Material Contamination

Food safety is non-negotiable. In modern food production, even very small foreign bodies can lead to product recalls, regulatory action, and serious brand damage.

Metal detection and X-ray inspection are therefore widely used as critical control steps to identify contaminants before products reach consumers.

Detectable conveyor belts and accessories provide added assurance by helping ensure that belt fragments can be identified if damage occurs.

Why Detectable Materials Matter

Contamination in food processing is a critical concern. Regulatory bodies and global brands demand stringent measures to prevent foreign particles from entering the supply chain. If a belt is damaged, small fragments may enter the product stream. Standard plastics are often difficult to detect, increasing the risk that contamination goes unnoticed.

Metal- and X-ray detectable materials provide an essential layer of protection. By ensuring that belt fragments are visible to detection systems, manufacturers reduce the risk of recalls and maintain compliance with international food safety requirements.

Do not leave food safety to chance and protect your operation from the risks and consequences of poor food safety:



Product Recalls



Brand damages



Public health issues



Claim and lawsuits

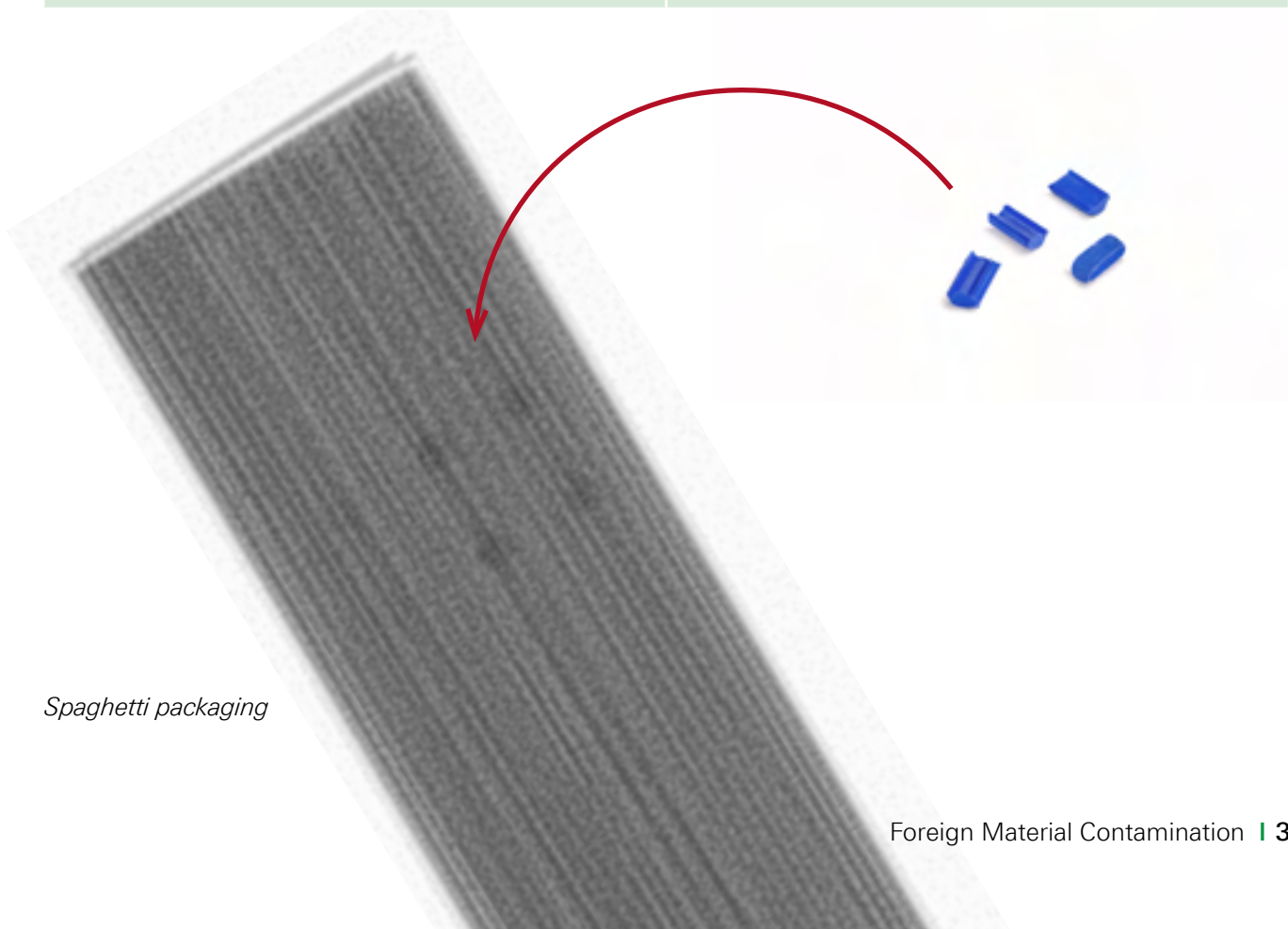
IMPORTANT: Detectable belts complement proper belt tracking, cleaning, and maintenance practices for maximum safety. Belts used in metal detector conveyors must meet strict hygiene requirements and avoid interference with detection systems.

X-ray vs. Metal Detectable

Metal detection identifies ferrous and non ferrous metals by detecting disturbances in an electromagnetic field. When combined with metal detectable TPU belts, potential belt fragments can also be detected if damage occurs, supporting fast rejection and reducing food safety risk. Detection applies to the TPU layers; very fine abrasion dust or textile fibers are not detectable.

X-ray inspection goes a step further by detecting contaminants based on density differences. In addition to metals, X-ray systems can identify glass, stones, and certain plastics. X-ray detectable belts are engineered to create sufficient contrast to support the detection of belt fragments within inspected products, depending on product characteristics and system settings.

Metal Detection	X-ray Inspection
Detects electromagnetic disturbance	Detects density differences
Optimized for metal contaminants	Detects metals and selected non-metallic foreign bodies
Typically lower investment	Broader detection capability
Limited for plastics	Effective for detectable plastics
<ul style="list-style-type: none"> ○ Ferrous metals (iron, steel) ○ Non-ferrous metals (aluminum, copper) ○ Stainless steel (depending on grade and system sensitivity) 	<ul style="list-style-type: none"> ○ Metals ○ Glass ○ Stones ○ Bone fragments ○ Certain dense plastics and rubber compounds
Factors Limiting Sensitivity	
<ul style="list-style-type: none"> ○ Type of metal ○ Shape/orientation of the contaminant ○ Aperture size & contaminant position ○ Calibration / detector set-up ○ Environmental conditions 	<ul style="list-style-type: none"> ○ Density contrast (contaminant vs product) ○ Contaminant size/shape/thickness ○ Product thickness & homogeneity / product type ○ System settings, power & resolution



Spaghetti packaging

Automatic Detection and Product Rejection

The detection system monitors every product and automatically reacts when contamination (or a detectable belt fragment) is identified. When a trigger threshold is met, the system activates an alarm and/or an automatic reject mechanism to remove the affected product from the line.

Typical system outcomes include:

- Metal detection: the system detects a signal event and triggers alarm/automatic rejection.
- X-ray inspection: the system flags a dense foreign body (or detectable fragment) and automatically rejects the affected product.

This automated response enables immediate removal of non-conforming items and supports fast corrective action to minimize food safety risk.



Engineered for Detection and Durability

Metal- and X-ray detectable belts are a proactive food safety measure. Our detectable portfolio combines advanced polymers to achieve reliable detectability without compromising performance. By helping ensure that belt fragments are visible during inspection, they support recall-risk reduction, consumer protection, and brand reputation, while integrating into established inspection systems.



Detectable Range

HabasitLINK Modular Belts

HabasitLINK modular plastic belts guarantee maximum performance in a wide range of process applications in terms of lifetime and food safety thanks to their robustness, ease of installation and maintenance, and easy-to-clean module design developed for the food industry. Suitable for a wide range of applications in a variety of environmental conditions in the meat, poultry, fish, fruit and vegetable, and bakery industries, they offer consistent performance and reliability. The range includes numerous accessories such as sprockets, sidewalls, cleats, profiles and other add-on components, providing complete and reliable conveying solutions.



Easy maintenance



High durability & long service life



Find out more

Product	Material	Pitch	Design	Type
M0870	POM	8 mm / 0.315 inch	Flat Top	Straight
M1185	POM	12.7 mm / 0.5 inch	Flush Grid	Straight
M1220	PP	12.7 mm / 0.5 inch	Flat Top	Straight
M2510	POM	25.6 mm / 1.01 inch	Flat Top	Straight
M2510	PE	25.6 mm / 1.01 inch	Flat Top	Straight
M2516	POM	25.6 mm / 1.01 inch	Diamond Top	Straight
M2520	POM	25.4 mm / 1 inch	Flat Top	Straight
M2520	PP	25.4 mm / 1 inch	Flat Top	Straight
M2533	POM	25.4 mm / 1 inch	Flush Grid	Straight
M2540	POM	25.6 mm / 1.01 inch	Flush Grid	Radius
M3840	POM	38.2 mm / 1.5 inch	Flush Grid	Radius
M5010	POM	50.8 mm / 2 inch	Flat Top	Straight
M5060	PP	50.8 mm / 2 inch	Flat Top	Straight
M5060	PE	50.8 mm / 2 inch	Flat Top	Straight

Habasit Cleandrive

Habasit Cleandrive monolithic TPU belts reinforced with aramid cords are renowned for their safe and hygienic performance in food processing. Their main advantages include a uniform surface and total impermeability to oils, fat, and liquids of all kinds. The absence of fabrics, replaced by reinforced cords embedded in the belt, ensures maximum dimensional stability and limits elongation, which for the positive drive version means no engagement problems with the sprockets. The high-quality materials used and the design of the belts meet the most stringent hygiene requirements, while offering high reliability and efficiency.



Superior hygienic performance



Embedded aramid cords enhance dimensional stability



Find out more

Product	Material	Drive bar pitch	Thickness of belt	Structure	Belt surface	Color
CD.P50-A-MC	Food grade 85 Sh A ester TPU	50.4 mm / 1.984 inch	3.0 mm / 0.12 inch	Drive bars	Glossy	Cobalt Blue
CD.F30-A-MC	Food grade 95 Sh A ester TPU	None	3.0 mm / 0.12 inch	Flat	Glossy	Cobalt Blue
CD.P25-A-MC	Food grade 95 Sh A ester TPU	26.8 mm / 1.055 inch	2.0 mm / 0.079 inch	Drive bars	Glossy	Cobalt Blue
CD.P40-A-MC	Food grade 95 Sh A ester TPU	39.9 mm / 1.571 inch	3.0 mm / 0.12 inch	Lugs	Glossy	Cobalt Blue

Flat Belts

Habasit flat belts are designed to provide reliable, hygienic performance and protect products in food processing. Made from high-quality TPU, these elastic and semi-elastic belts resist oils, fats, and cleaning chemicals. Their monolithic, fabric-free design ensures stable tracking, low stretch, and long service life across many applications, such as baking, pastry, fruit and vegetable processing, proteins, and packaged foods. Easy to clean and low-maintenance, these belts support safe and efficient operation, making them a great choice for specialized uses.



Highly hygienic



Free of fabrics



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Product	Material	Thickness	Max width	Color
E-FB20-FC-C100+M	Food grade 85 Sh A ester TPU	2.0 mm / 0.079 inch	270 mm / 10.630 inch	Cobalt Blue
E-FB15-FC-C100+M	Food grade 85 Sh A ester TPU	1.5 mm / 0.060 inch	270 mm / 10.630 inch	Cobalt Blue
E-FB30-FC-C50+M	Food grade 85 Sh A ester TPU	3.0 mm / 0.120 inch	270 mm / 10.630 inch	Cobalt Blue
E-FB50-FC-C25+M	Food grade 85 Sh A ester TPU	5.0 mm / 0.200 inch	270 mm / 10.630 inch	Cobalt Blue
E-FB15-HC-C100+M	Food grade 87 Sh A ether TPU	1.5 mm / 0.060 inch	270 mm / 10.630 inch	Cobalt Blue
E-FB13-HC-C100+M	Food grade 87 Sh A ether TPU	1.35 mm / 0.053 inch	270 mm / 10.630 inch	Cobalt Blue

Food Fabric Belt



Fabric belts are widely used in the food industry. The various cover materials, such as polyurethane, polyethylene, PVC, silicone, and highly resistant fabrics including polyester, cotton, and Kevlar, create a very broad product range capable of meeting most specific requirements of industrial food processing.

Accessories such as guide profiles, cleats, sidewalls, sealed edges, and custom fabrications like perforations and milling further enhance the belts, enabling tailored solutions that meet every specific need while complying with the most stringent food regulations and food-safety standards.



Stable clean conveying



Extremely versatile



Find out more

Product	Material	Knife edge diameter	Thickness	Frayless	Belt surface	Color
FMM-4EZC-M2	Thermoplastic polyurethane (TPU)	8 mm / 0.157 inch	1.30 mm / 0.051 inch	Yes	Matt	Dark Blue
FMM-10ERC-M2	Thermoplastic polyurethane (TPU)	14 mm / 0.276 inch	1.40 mm / 0.055 inch	-	Matt	Dark Blue

Edge Sealings



Edge sealing is an additional hygiene measure mostly found in food applications to protect the inner layer of coated fabric belts from soiling by liquids or contamination by microorganisms. Edge sealing can also be applied to avoid fiber contamination of products, machines or bearings. For even greater reliability, frayless belt constructions with span yarns deliver superior polyurethane anchorage and stronger interlayer adhesion, boosting performance in oily, fatty, and hygiene critical applications while ensuring long lasting, contamination resistant operation.



Additional protection against fluid ingress



Fray-free durability

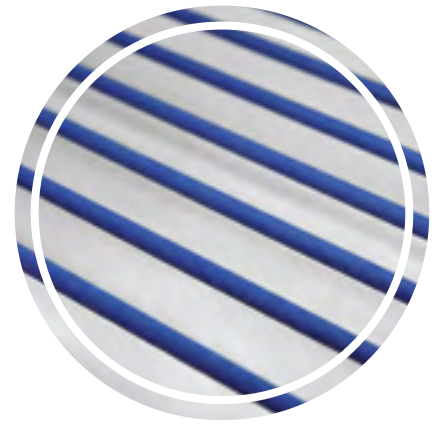


Find out more

Product	Material	Color
E-PE14-FC-C100+M	Food grade 85 Sh A ester TPU	Cobalt Blue
E-PE14-GC-C100+M	Food grade 83 Sh A ether TPU	Cobalt Blue

Elastic Round Belts

Elastic round belts deliver premium performance where reliability matters most. Engineered from hydrolysis-resistant TPU, they keep production lines running smoothly even in humid or demanding conditions. Their robust construction ensures consistent conveying, long service life, and minimal maintenance, making an ideal choice for manufacturers who want efficiency, durability, and peace of mind built into every belt.



Gentle food handling



Quick, easy installation

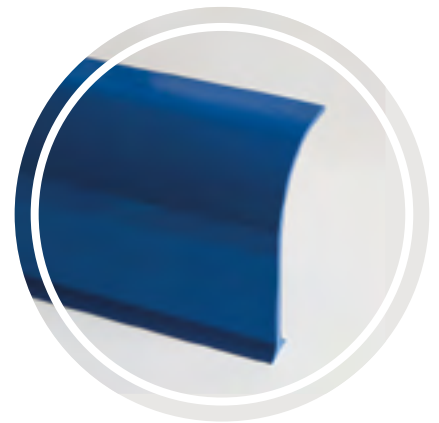


Find out more

Product	Material	Minimum Pulley Diameter	Diameter	Color
E-RB05-FC-C250+M	Food grade 85 Sh A ester TPU	50 mm / 1.97 inch	5 mm / 0.197 inch	Cobalt Blue
E-RB10-JC-C100+M	Food grade 95 Sh A ether TPU	100 mm / 3.94 inch	10 mm / 0.394 inch	Cobalt Blue
E-RB08-JC-C200+M	Food grade 95 Sh A ether TPU	80 mm / 3.16 inch	8 mm / 0.315 inch	Cobalt Blue
E-RB04-JC-C250+M	Food grade 95 Sh A ether TPU	40 mm / 1.58 inch	4 mm / 0.157 inch	Cobalt Blue
E-RB05-JC-C250+M	Food grade 95 Sh A ether TPU	50 mm / 1.97 inch	5 mm / 0.197 inch	Cobalt Blue
E-RB06-JC-C250+M	Food grade 95 Sh A ether TPU	60 mm / 2.37 inch	6 mm / 0.236 inch	Cobalt Blue
E-RB04-FC-C250+M	Food grade 85 Sh A ester TPU	40 mm / 1.58 inch	4 mm / 0.157 inch	Cobalt Blue
E-RB06-FC-C250+M	Food grade 85 Sh A ester TPU	60 mm / 2.37 inch	6 mm / 0.236 inch	Cobalt Blue
E-RB08-FC-C200+M	Food grade 85 Sh A ester TPU	80 mm / 3.16 inch	8 mm / 0.315 inch	Cobalt Blue
E-RB10-FC-C100+M	Food grade 85 Sh A ester TPU	100 mm / 3.94 inch	10 mm / 0.394 inch	Cobalt Blue
E-RB05-FC-C250+M+S	Food grade 85 Sh A ester TPU	50 mm / 1.97 inch	5 mm / 0.197 inch	Cobalt Blue
E-RB08-JC-C200+M+S	Food grade 95 Sh A ether TPU	80 mm / 3.16 inch	8 mm / 0.315 inch	Cobalt Blue

Scoop Cleats

Scoop Cleats are engineered to deliver reliable product lifting, controlled feeding, and smooth transfer in demanding food processing environments. Designed from robust, food grade materials, these cleats maintain their shape and stability even under continuous load, frequent washdowns, or exposure to oils, fats, and cleaning agents. Scoop Cleats help maintain consistent spacing, prevent rollback on inclines, and support steady flow through mixing, dosing, forming, and packaging lines.



Secure product control



Hygienic and safe design

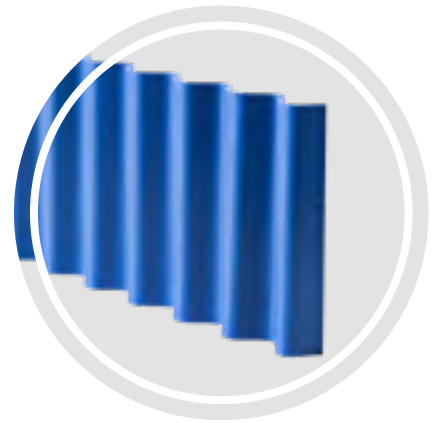


Find out more

Product	Material	Height	Minimum Pulley Diameter	Color
E-PS04-JC-B14.4+M	Food grade 95 Sh A ether TPU	102 mm / 4.015 inch	150 mm / 5.905 inch	Cobalt Blue
E-PS06-JC-B12+M	Food grade 95 Sh A ether TPU	152 mm / 5.984 inch	150 mm / 5.905 inch	Cobalt Blue
E-PS03-JC-B24+M	Food grade 95 Sh A ether TPU	77 mm / 3.031 inch	150 mm / 5.905 inch	Cobalt Blue

Corrugated Sidewalls

Corrugated Sidewalls provide secure product containment while strengthening food safety across demanding conveyor applications. Their corrugated geometry offers excellent flexibility and vertical stability, allowing smooth transport of bulk, loose, or fragile products even on steep inclines. Designed for reliable adhesion to the belt surface, these sidewalls maintain strong structural integrity under heavy loads and frequent cleaning cycles. Ideal for meat, poultry, fish, bakery, produce, and packaged food environments, they deliver robust product control with an added layer of detectability for maximum protection of both product and brand.



Reliable product containment



Flexible with small diameters

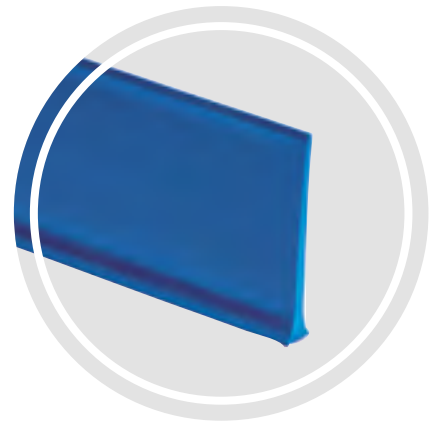


Find out more

Product	Material	Size	Color
E-HB270-FC-B40+M	Food grade 85 Sh A ester TPU	1.3 mm / 0.051 inch	Cobalt Blue
E-HB270-HC-B40+M	Food grade 87 Sh A ether TPU	1.3 mm / 0.051 inch	Cobalt Blue

Narrow Cleats

Designed for precise product guidance on conveyors, these cleats help prevent slippage, improve elevation, and maintain consistent spacing on the line. Their durable construction ensures reliable performance in applications such as meat, poultry, bakery, produce, and packaged food processing. By integrating detectable additives, the cleats provide an additional safety layer, ensuring that fragments can be quickly identified by detection systems to minimize contamination risks.



Secure product control



Hygienic and safe design

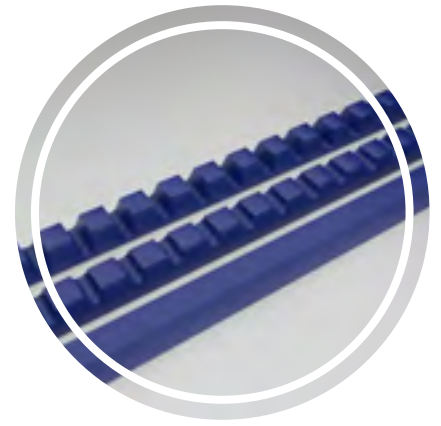


Find out more

Product	Material	Height	Minimum Pulley Diameter	Color
E-PN60-FC-B43+M	Food grade 85 Sh A ester TPU	60 mm / 2.362 inch	50 mm / 1.968 inch	Cobalt Blue
E-PN60-GC-B43+M	Food grade 83 Sh A ether TPU	60 mm / 2.362 inch	50 mm / 1.968 inch	Cobalt Blue
E-PN20-FC-B144+M	Food grade 85 Sh A ester TPU	20 mm / 0.787 inch	50 mm / 1.968 inch	Cobalt Blue
E-PN60-FC-B43+M	Food grade 85 Sh A ester TPU	60 mm / 2.362 inch	50 mm / 1.968 inch	Cobalt Blue
E-PN60-GC-B43+M	Food grade 83 Sh A ether TPU	60 mm / 2.362 inch	50 mm / 1.968 inch	Cobalt Blue
E-PN20-FC-B144+M	Food grade 85 Sh A ester TPU	20 mm / 0.787 inch	50 mm / 1.968 inch	Cobalt Blue

Tracking Guides

Tracking Guides are designed to deliver stable, reliable belt alignment in demanding food processing environments. Their geometry provides enhanced flexibility and a more secure engagement with the belt, ensuring accurate tracking even on systems with frequent directional changes, tight transfers, or fluctuating loads. This improved mechanical interaction helps minimize lateral belt movement, reducing edge wear, extending belt life, and supporting consistent, smooth operation.



Stable belt tracking



Low-maintenance operation



Find out more

Product	Material	Size	Minimum Pulley Diameter	Type	Color
E-PV08-FC-C200+M	Food grade 85 Sh A ester TPU	8x5.5x5.2 mm	50 mm / 1.968 inch	Standard	Cobalt Blue
E-PV08-GC-C200+M	Food grade 83 Sh A ether TPU	8x5.5x5.2 mm	50 mm / 1.968 inch	Standard	Cobalt Blue
E-PV10-FC-C200+M	Food grade 85 Sh A ester TPU	10x6x6.4 mm	60 mm / 2.362 inch	Standard	Cobalt Blue
E-PV10-GC-C200+M	Food grade 83 Sh A ether TPU	10x6x6.4 mm	60 mm / 2.362 inch	Standard	Cobalt Blue
E-PV13-FC-C100+M	Food grade 85 Sh A ester TPU	13x7.5x8.4 mm	80 mm / 3.149 inch	Standard	Cobalt Blue
E-PV13-GC-C100+M	Food grade 83 Sh A ether TPU	13x7.5x8.4 mm	80 mm / 3.149 inch	Standard	Cobalt Blue
E-PV08-FC-C200+M+N	Food grade 85 Sh A ester TPU	8x5.5x5.2 mm	40 mm / 1.574 Inch	Notched	Cobalt Blue
E-PV08-GC-C200+M+N	Food grade 83 Sh A ether TPU	8x5.5x5.2 mm	40 mm / 1.574 Inch	Notched	Cobalt Blue
E-PV10-FC-C200+M+N	Food grade 85 Sh A ester TPU	10x6x6.4 mm	60 mm / 2.362 inch	Notched	Cobalt Blue
E-PV10-GC-C200+M+N	Food grade 83 Sh A ether TPU	10x6x6.4 mm	60 mm / 2.362 inch	Notched	Cobalt Blue
E-PV13-FC-C100+M+N	Food grade 85 Sh A ester TPU	13x7.5x8.4 mm	70 mm / 2.755 inch	Notched	Cobalt Blue
E-PV13-GC-C100+M+N	Food grade 83 Sh A ether TPU	13x7.5x8.4 mm	70 mm / 2.755 inch	Notched	Cobalt Blue
E-PV13-GC-C100+M+NN	Food grade 83 Sh A ether TPU	13x7.5x8.4 mm	50 mm / 1.968 inch	Deep Notched	Cobalt Blue
E-PV08-FC-C200+M+NN	Food grade 85 Sh A ester TPU	8x5.5x5.2 mm	30 mm / 1.181 inch	Deep Notched	Cobalt Blue
E-PV08-GC-C200+M+NN	Food grade 83 Sh A ether TPU	8x5.5x5.2 mm	30 mm / 1.181 inch	Deep Notched	Cobalt Blue
E-PV10-FC-C200+M+NN	Food grade 85 Sh A ester TPU	10x6x6.4 mm	40 mm / 1.574 Inch	Deep Notched	Cobalt Blue
E-PV10-GC-C200+M+NN	Food grade 83 Sh A ether TPU	10x6x6.4 mm	41 mm / 1.574 Inch	Deep Notched	Cobalt Blue
E-PV13-FC-C100+M+NN	Food grade 85 Sh A ester TPU	13x7.5x8.4 mm	50 mm / 1.968 inch	Deep Notched	Cobalt Blue

Belt Scraper

Belt scrapers are an essential hygiene component on production lines in many sectors of the food processing industry. Their primary function is to remove waste and debris from the belt surface during production, to maintain good hygiene, and avoid build-up of soiling in roller drums. The soft tip has a much better contact with belt material across the width and does not damage the surface, making it the belt-friendly solution.



Effective residue removal



No risk of damaging the belt surface



Find out more


Product	Material	Dimension Height	Dimension Width	Color
E-BS38-JC+M	Food grade 95 Sh A ester TPU	60.0 mm / 2.362 inch	16.0 mm / 0.630 inch	Cobalt Blue
E-BS38-YC+M	Food grade 92 Sh A ester TPU	60.0 mm / 2.362 inch	16.0 mm / 0.630 inch	Cobalt Blue
E-BS38-HC+M	Food grade 87 Sh A ether TPU	60.0 mm / 2.362 inch	16.0 mm / 0.630 inch	Cobalt Blue
E-BS38-FC+M	Food grade 85 Sh A ester TPU	60.0 mm / 2.362 inch	16.0 mm / 0.630 inch	Cobalt Blue





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