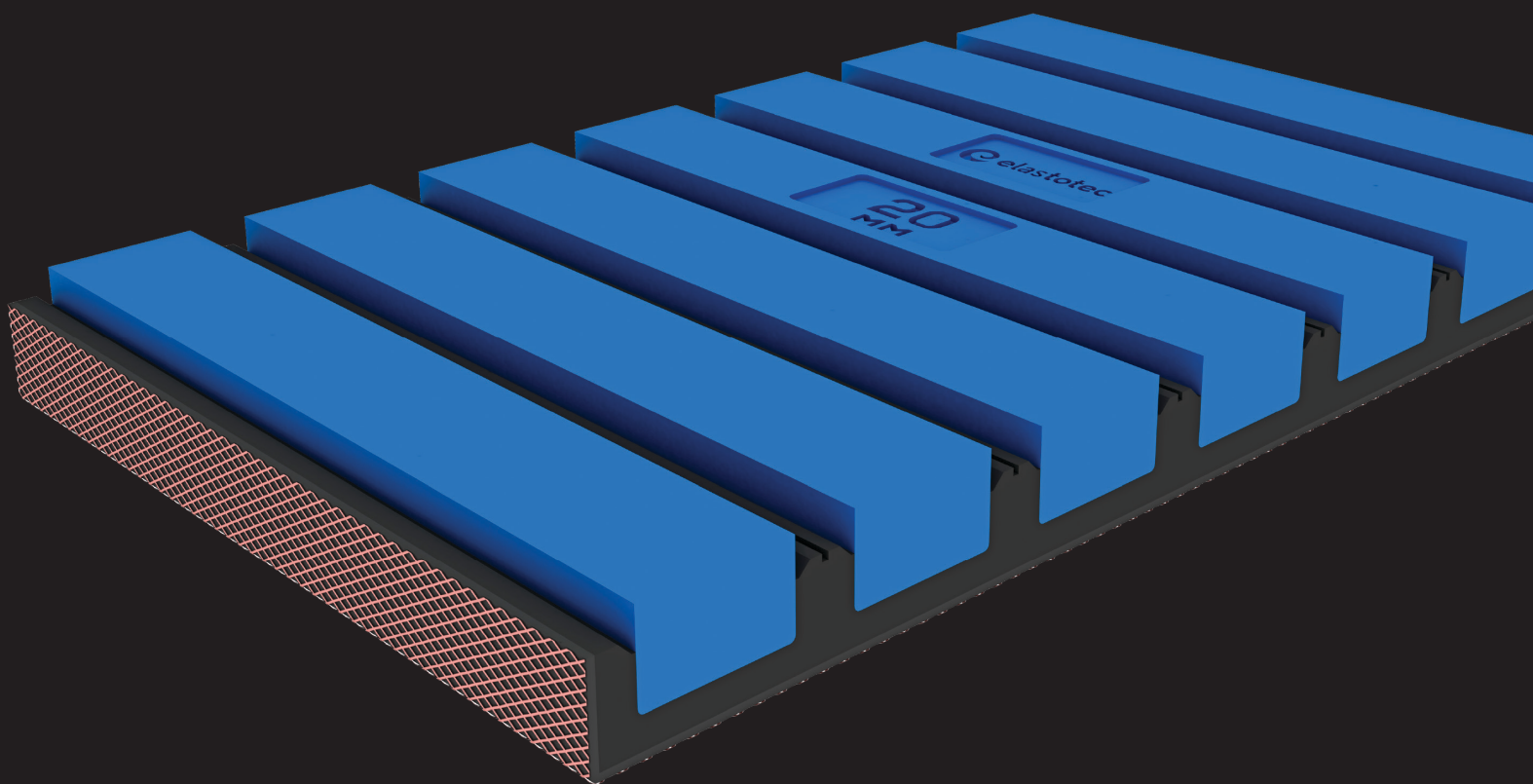




Polyurethane Lagging



Engineered to Perform

Elastotec Polyurethane Lagging is used to increase the service life of non-drive pulleys. Polyurethane's extreme abrasion resistance combined with its low coefficient of friction provide a solution to applications with premature wear when there is a requirement for no risk of damage to the belt cover.

Polyurethane is good for applications with carry back problems as it is slippery, resisting material build up. Polyurethane Lagging is a specially engineered molded thermoplastic polyurethane, inserted onto a rubber backing layer.

Polyurethane Lagging is currently only offered in NAT specification and is not available in FRAS.

Application

Polyurethane Lagging shall be specified on non-drive pulleys when:

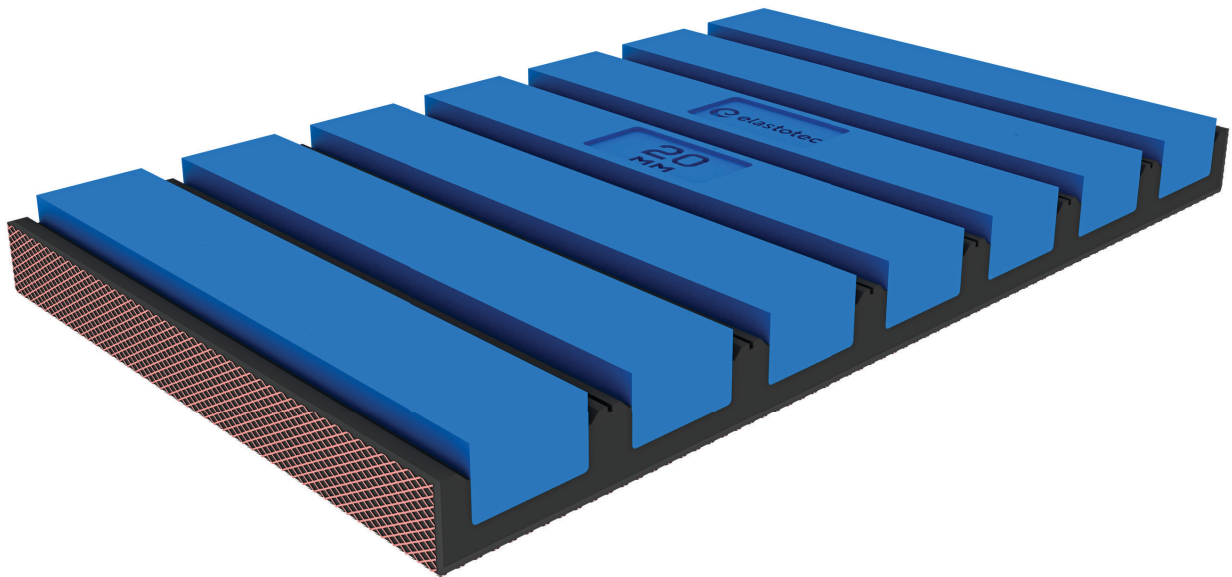
- Ⓢ There's a requirement for higher abrasion resistance than what achieved with rubber laggings.
- Ⓢ In applications where there's unavoidable slippage between the conveyor belt and the lagging surface, such as on bend pulleys and non-drive pulleys on turnover conveyors. Its low coefficient of friction make Polyurethane Lagging kind to the belt bottom cover.
- Ⓢ When there's buildup of material between the belt and the lagging.

Key Features and Benefits

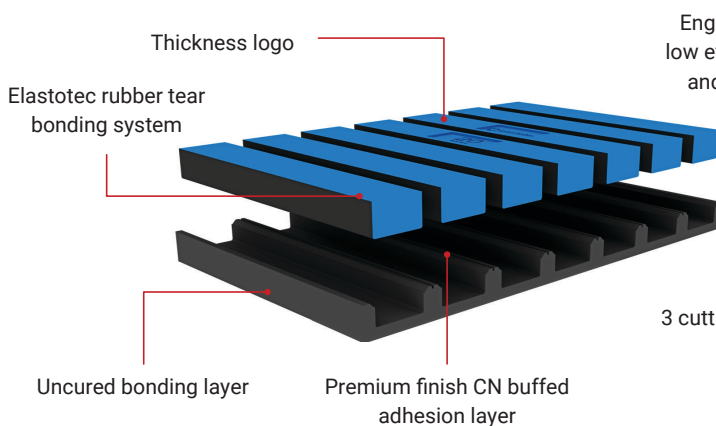
- Ⓢ Highly abrasion resistant polyurethane inserts prevent wear on pulley shell and offers positive dirt release and shedding. Highly abrasion resistant polyurethane inserts prevent wear on pulley shell and offers positive dirt release and shedding.
- Ⓢ Precision moulded strip with optimum polyurethane properties.
- Ⓢ Coloured TPU inserts.
- Ⓢ Supplied in strip form 250mm wide for easy handling.
- Ⓢ Low coefficient of friction difficult to stick to, resists build up and is kind to belt cover.
- Ⓢ Polyurethane inserts bonded to rubber on back and sides with 100% rubber tear bond.

Design

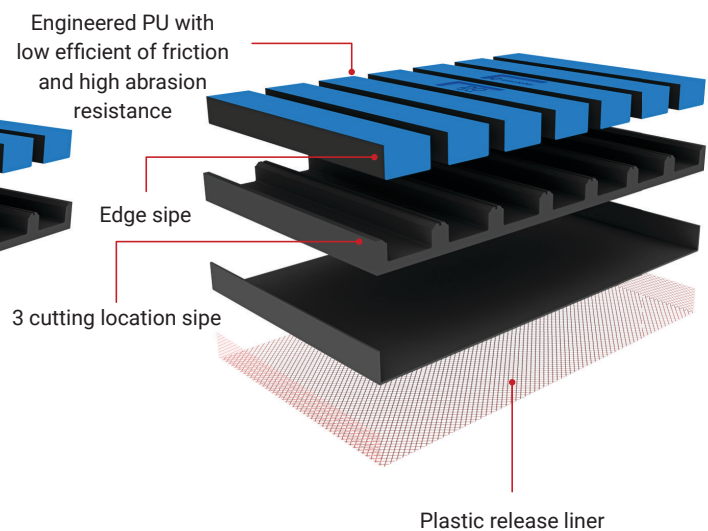
Elastotec Polyurethane Lagging is 250mm wide to ensure easy handling and application. It is supplied in long roll lengths that fit on standard sized pallets to eliminate waste and for cost effective transportation and storage. It can be supplied in thicknesses from 10mm to 20mm. It can be supplied with a buffed CN bonding layer ready for cold bonding or an uncured bonding layer ready for hot vulcanizing (compatible with hot air autoclaves only)



COLD BONDED



HOT VULCANISED



Polyurethane Specifications

Typical values

Hardness (shore A)	85+/-5	ASTM D2240
Tensile strength	40 Mpa	DIN53504
Elongation at break	500%	ASTM D412
Abrasion loss (volume loss)	25mm3	DIN 53516 – non rotating - method A
FRAS	Not Available	

ELASTOTEC POLYURETHANE LAGGING CAN BE APPLIED TO PULLEYS BY COLD BONDING OR BY HOT VULCANISATION.

ELASTOTEC COLD BOND LAGGING

Elastotec Polyurethane Lagging Cold Bonding has the CNbuffed bonding layer packed in plastic to protect and keep it fresh and free from contamination until application to the pulley.

A rubber tear bond is achieved by using Elastotec Metal Primer 2205 and Elastotec Cold Bonding Adhesive to chemically interlock with the CN bonding layer, making a strong interface between the layers.

An Elastotec approved applicator using the Elastotec application procedure will achieve reliable adhesion levels that exceed the 9 N/mm industry standard and are typically at 12 N/mm.



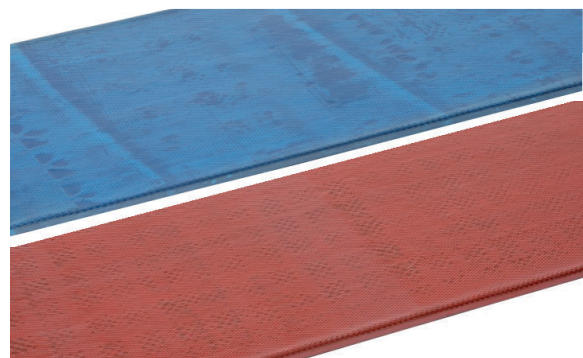
ELASTOTEC HOT VULCANISING LAGGING

Elastotec Polyurethane Lagging Hot Vulcanising has a 1.2mm thick uncured rubber layer applied to the back and sides of the lagging.

Hot Vulcanising Lagging is supplied packed in plastic to protect and keep the uncured bonding layer fresh and free from contamination until application to the pulley.

Application by a trained Elastotec approved applicator using the Elastotec application procedures will guarantee a 100% rubber tear bond between the lagging and the pulley shell with typical adhesion values exceeding 20 N/mm.

Hot Vulcanised Polyurethane Lagging is only suitable for vulcanisation using hot air autoclaves and is not compatible with steam heated autoclaves.



LAGGING SPECIFICATIONS – POLYURETHANE LAGGING

COLD BONDED – NAT

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	MAX ROLL LENGTH	WEIGHT/lm
Polyurethane Lagging 12mm	ELA-PU-PLN-N-12	249mm-251mm	10.8mm-11.8mm	58.2m	3.70kg
Polyurethane Lagging 20mm	ELA-PU-PLN-N-20	249mm-251mm	19mm-20mm	35.0m	6.39kg

Product code for different lengths: Add 5-digit number indicating length in mm.

Example: 12mm 58.2m roll product code: ELA-PU-PLN-N-12-58200

20mm 1.2m strip product code: ELA-PU-PLN-N-20-01200

For strips always allow 100mm extra length over the pulley face width to have 50mm at each end of overhang

HOT VULCANISED

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	MAX ROLL LENGTH	WEIGHT/lm
Polyurethane Lagging 12mm	ELA-PU-PLN-N-12V	249mm-251mm	12.0mm-13.4mm	9.7m	4.21kg
Polyurethane Lagging 20mm	ELA-PU-PLN-N-20V	249mm-251mm	20.2mm-21.6mm	9.7m	6.90kg

Product code for different lengths: Add 5 digit number indicating length in mm.

Example: 12mm 9.7m roll product code: ELA-PU-PLN-N-12V-09700

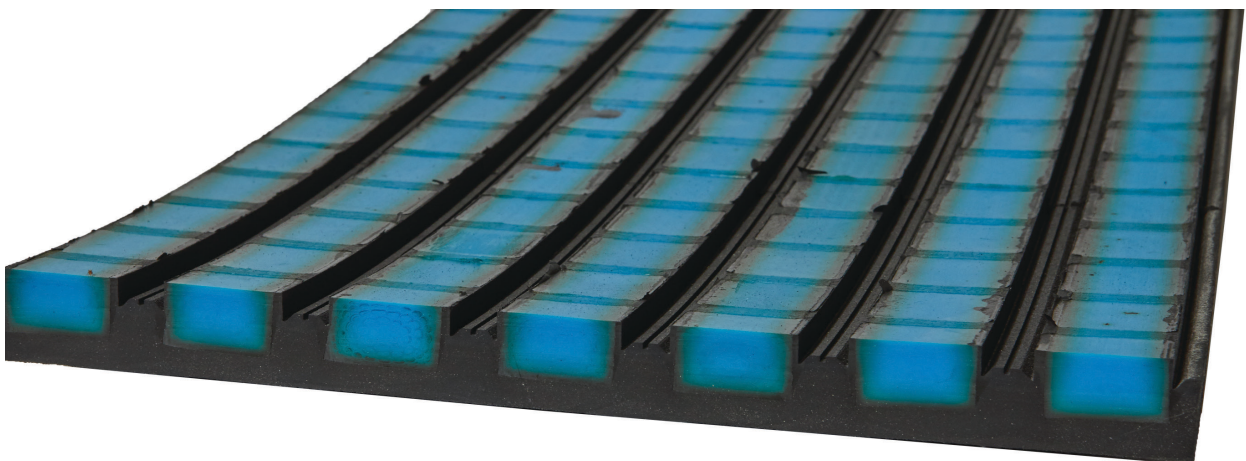
20mm 1.2m strip product code: ELA-PU-PLN-N-20V-01200

For strips always allow 100mm extra length over the pulley face width to have 50mm at each end of overhang.

Recommendations for minimum pulley diameters for each thickness. (use same format/wording as on other catalogues)

12mm Polyurethane Lagging suitable for pulleys 300mm diameter and over

20mm Polyurethane Lagging suitable for pulleys 1000mm diameter and over



Storage Recommendations

- Stock usage based on a first-in first-out method (FIFO).
- The storage room for lagging must be cool, dry and dust-free.
- Avoid storage places near sources of ozone generating equipment.
- Do not store outside.
- Avoid storage in direct sunlight and strong artificial light as UV light can damage the products and may lead to a premature ageing.
- Under no circumstances should fuels, lubricants, acids, disinfectants, solvents or other chemicals be stored in the same storage area.
- Keep the storage place clean. Protect the material from dust, water etc. with suitable coverings.
- Allow 24 hours before use when lagging is removed from cold storage.

Shelf Life

DIRECT BOND LAGGING AND WEAR PANELS

- Stored <25°C 5 years shelf life
- Inspect and evaluate condition of backing tape after 5 years

COLD BOND LAGGING AND WEAR PANELS

- Stored <25°C 3 years shelf life
- Light buffing of bonding surfaces is recommended if over 4 months from production date

HOT VULCANISED LAGGING AND WEAR PANELS

- Stored <7°C 12 months shelf life
- Store away from UV and ozone generating equipment
- Products stored for longer than 12 months require adhesion testing before use

ADHESIVES AND PRIMERS

- Store in flammable goods cabinet
- Shelf life Stored <25°C
 - Primers: 2 years
 - Cold Bonding adhesive: 2 years
 - Direct Bond adhesive: 2 years
- Shelf life Stored <7°C
 - Hot vulcanising adhesive: 12 months

IMPORTANT: For HV Rubber Cement stored at <7°C ensure this is brought to room temperature over a minimum of 24 hours before the drums are opened. This is to prevent condensation of water and contamination of the rubber cement.



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