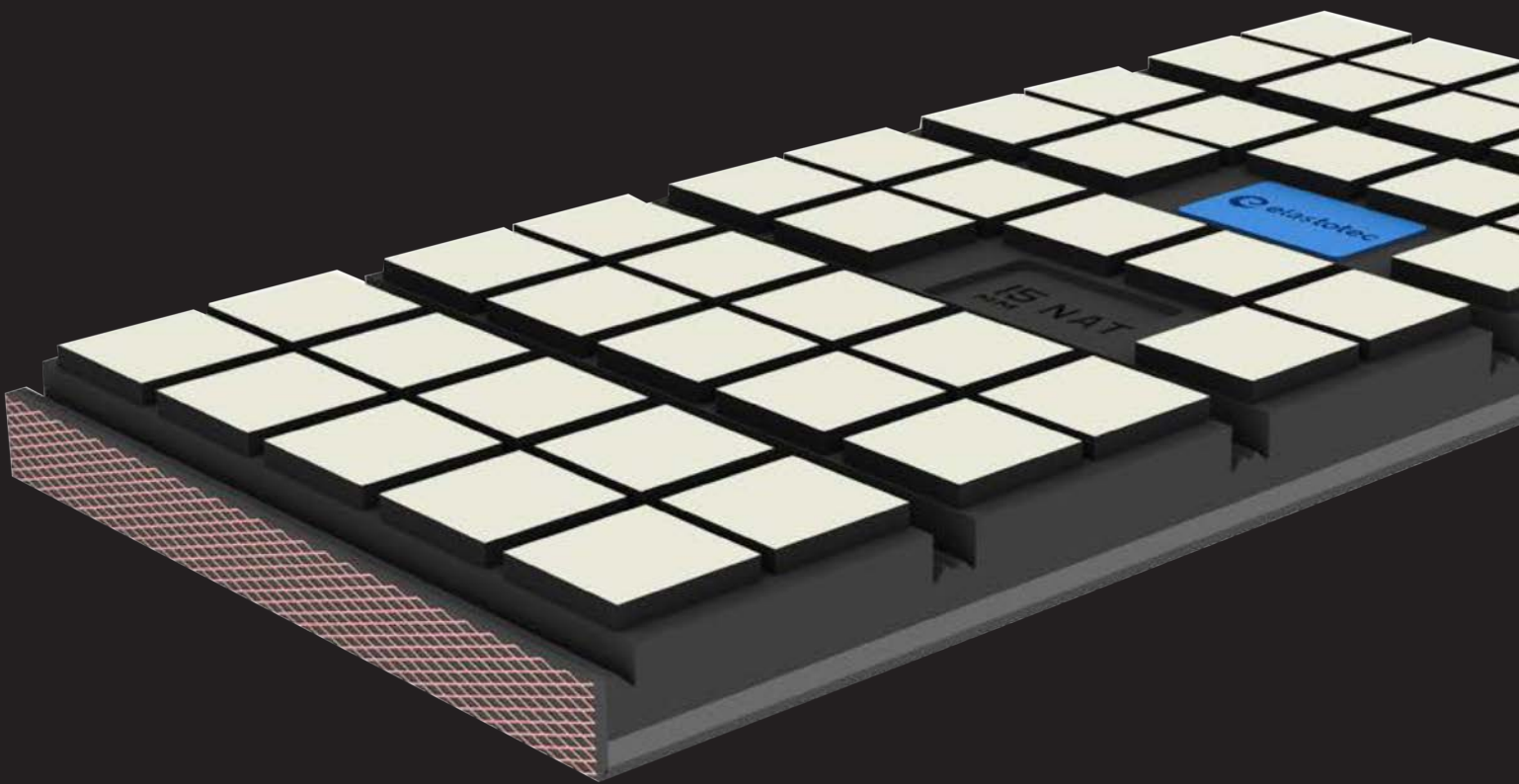




Crowned Lagging Range



Engineered to Perform

Elastotec's Crowned Lagging Range is engineered to improve belt tracking and extend pulley service life across a wide range of conveyor applications. Available in rubber, ceramic and polyurethane, the range is designed for application to flat pulley shells, creating a crowned profile that promotes improved belt alignment and stable conveyor operation.

Each lagging option is manufactured with a rubber bonding layer for reliable adhesion and is custom made to suit the pulley diameter and face width. Material selection can be tailored to suit specific operating conditions, whether the priority is improved tracking, enhanced wear resistance or reduced material build-up.

Designed primarily for non-drive pulleys, Elastotec Crowned Lagging provides a durable, engineered solution for extending maintenance intervals and improving conveyor reliability in demanding bulk materials handling environments.

PRODUCT	BEST FOR	KEY BENEFIT
Crowned Diamond Rubber Lagging	General-purpose non-drive pulleys	Improved belt tracking for low to medium tension conveyors
Crowned Ceramic Lagging	High wear applications	Exceptional wear resistance with improved belt tracking
Crowned Polyurethane Lagging	Wet, sticky or carryback applications	Superior abrasion resistance with low friction to minimise material build-up

Application

Elastotec Crowned Lagging is designed for use on conveyor pulleys to improve belt tracking, extend pulley service life and enhance conveyor performance across a wide range of operating conditions. Depending on the lagging material selected, it can be applied to drive, tail, snub, bend and take-up pulleys, with ceramic and polyurethane options recommended for non-drive pulleys.

The range is suited to conveyor systems operating in the mining, quarrying, mineral processing, metals processing and bulk materials handling industries, and can also be applied to other industrial conveyor applications.

Material options can be selected to suit specific operating requirements:

-  **Rubber** – Ideal for low to medium belt tension applications requiring improved belt tracking.
-  **Ceramic** – Recommended for non-drive pulleys where increased wear resistance and longer service life are required.
-  **Polyurethane** – Best suited to non-drive pulleys in high-abrasion, carryback or slip-prone applications, where its low coefficient of friction helps minimise belt wear and resist material build-up.

Key Features and Benefits

- Ⓢ **Designed to be applied to flat pulley shells which eliminates the need for machining.**
- Ⓢ Available in 250mm wide strips that can be made to suit any pulley size and make it easy to install.
- Ⓢ Available in highly abrasion resistant SBR for above ground applications and FRAS for underground and high risk applications.
- Ⓢ Polyurethane Lagging is not available in FRAS.
- Ⓢ High quality rubber formulations designed for good bonding, resistance to degradation by out door exposure, and good abrasion resistance.
- Ⓢ Buffed CN Bonding layer for increased adhesion for Cold Bonded application.
- Ⓢ Available with uncured bonding layer for Hot Vulcanised application. Improved belt tracking.
- Ⓢ Quick and easy to apply.
- Ⓢ Uniform bonding surface – no gaps.
- Ⓢ Uniform crown transition – kinder to the belt.
- Ⓢ Standard offering tapers from 15mm through the centre down to 12mm on the ends.
- Ⓢ Suitable for long term service at temperatures from - 40°C to +70°C.
- Ⓢ Coloured logos (Blue for SBR and Red for FRAS).

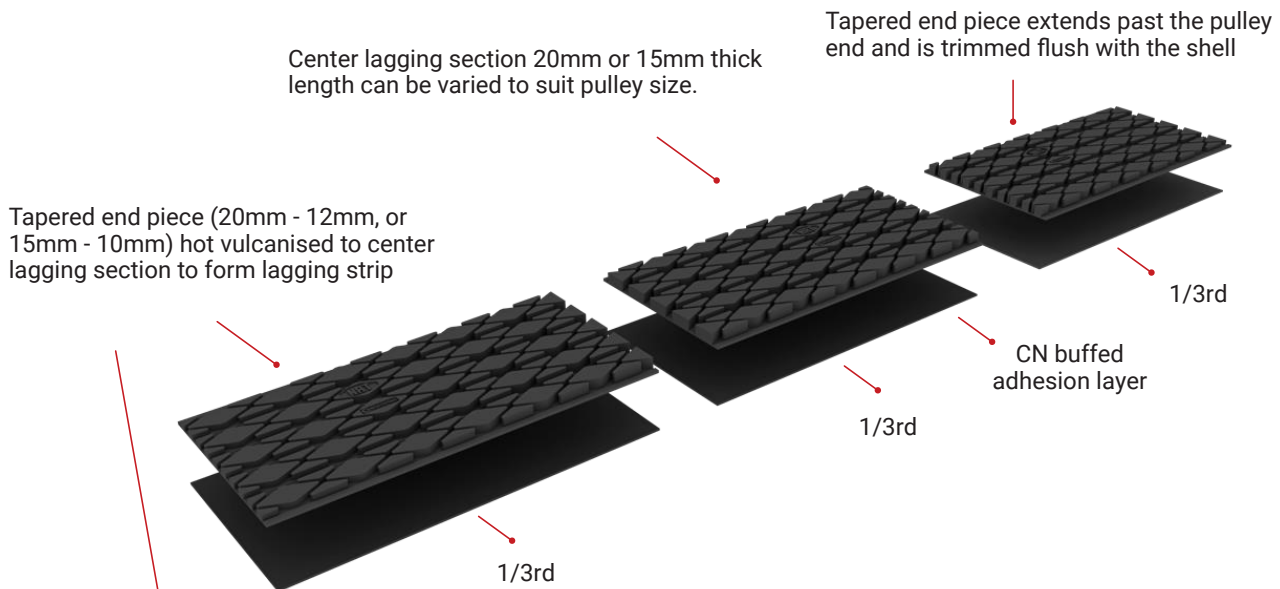


Design

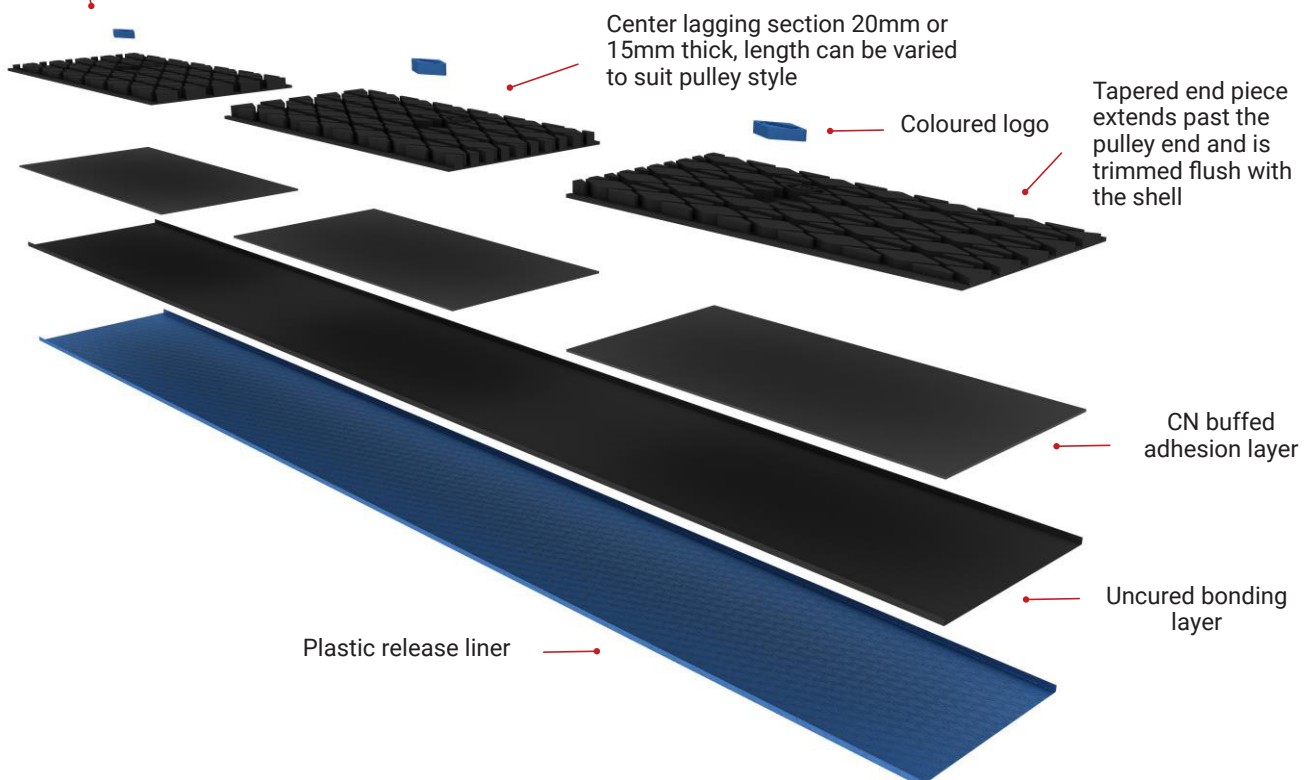
Crowned Rubber Lagging

Crowned lagging strips typically have a 1/3rd flat center section and two 1/3rd tapered end sections based on pulley face width.

COLD BONDED



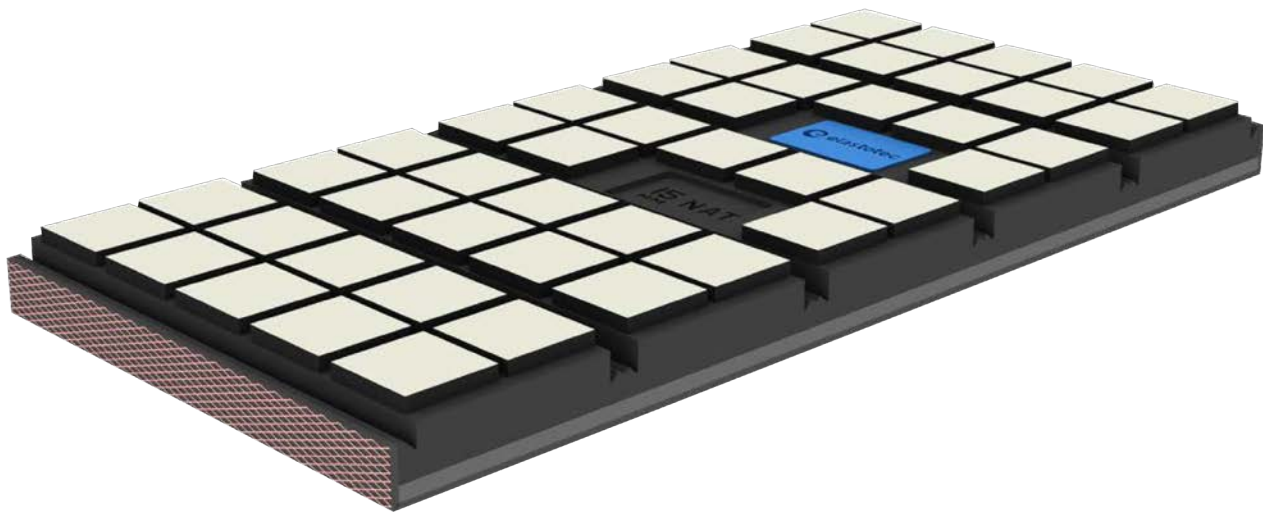
HOT VULCANISED



Crowned Ceramic Lagging

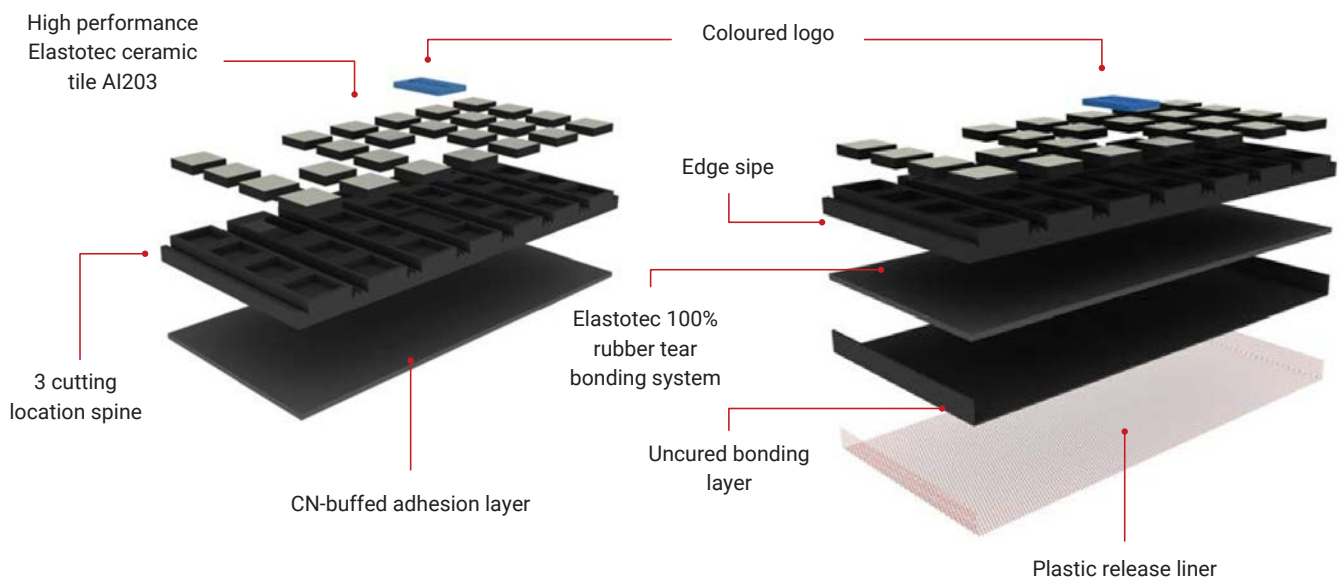
Crowned Ceramic Lagging strips are designed to ensure outstanding durability while helping to maintain belt alignment without the need for a machined crowned pulley shell.

The central portion of the strips has maximum thickness that gradually decreases towards the ends. Tiles are bonded to rubber on 5 sides to ensure maximum tile to rubber adhesion strength and reduce the risk of breakage.



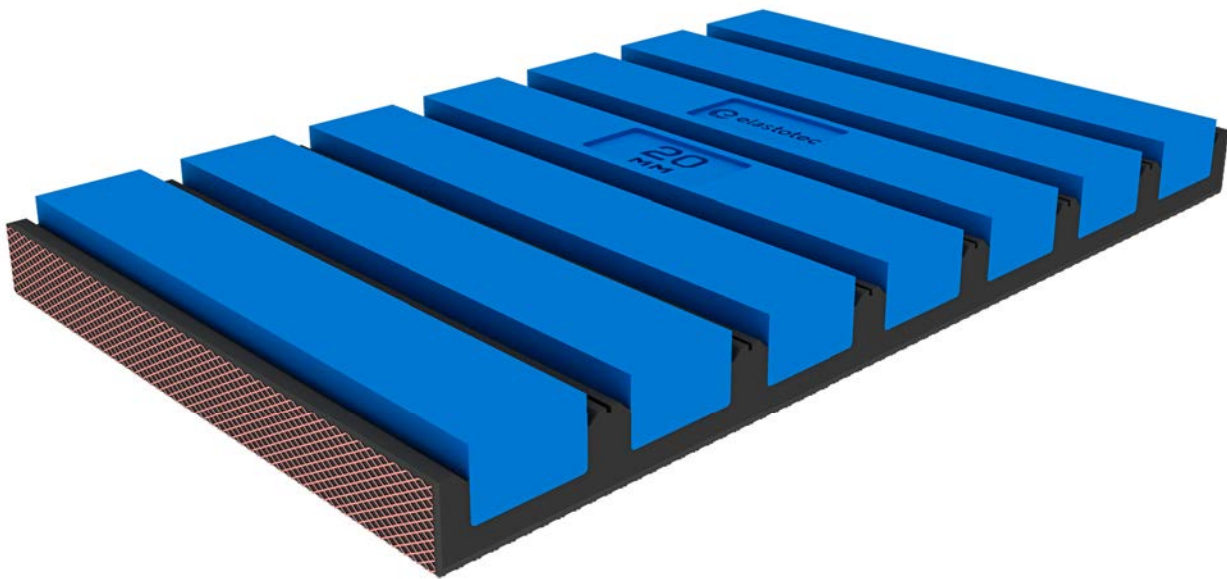
COLD BONDED

HOT VULCANISED

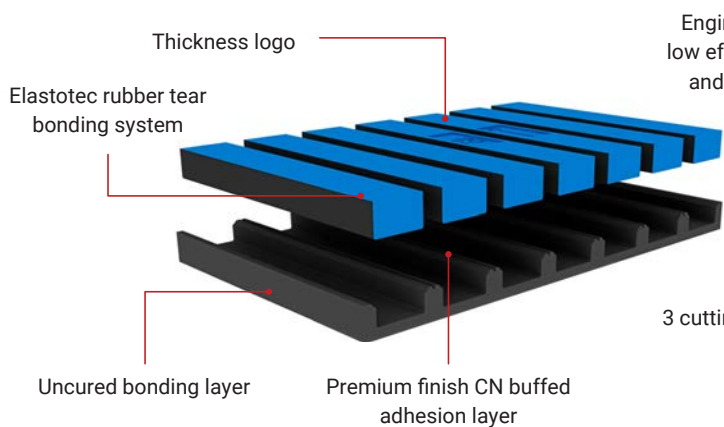


Polyurethane Lagging

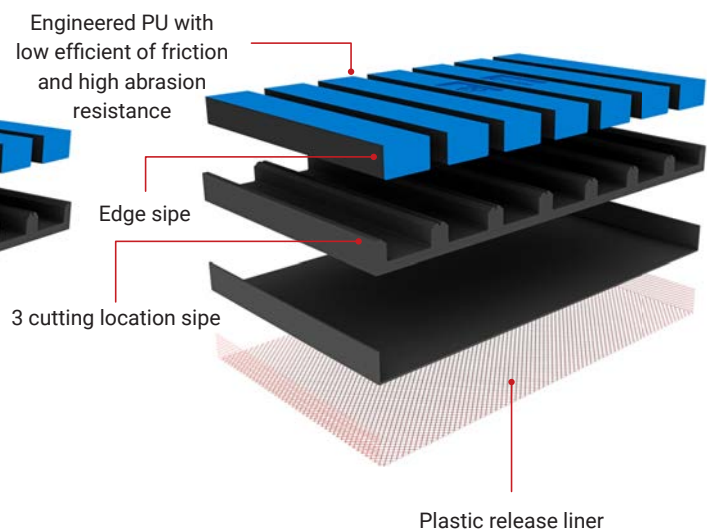
Elastotec Polyurethane Lagging is 250mm wide to ensure easy handling and application. It is supplied in long roll lengths that fit on standard sized pallets to eliminate waste and for cost effective transportation and storage. It can be supplied in thicknesses from 10mm to 20mm. It can be supplied with 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



Rubber Specifications

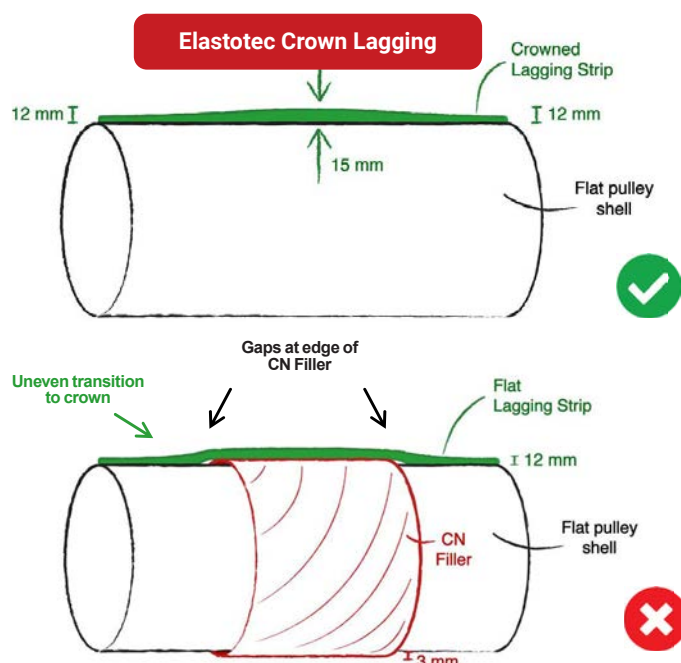
Typical values

	NAT	FRAS
Polymer	SBR	Blend
Tensile strength (MPa) min ISO37	18.0	16.0
% Elongation min ISO37	550%	500%
Hardness (shore A) ISO868	65+/-5	60+/-5
Abrasion resistance max vol. loss ISO 4649 method A (non-rotating)	70mm ³	150mm ³
Hardness (shore A) ISO868	N/A	PASS/ACCEPTED
Heat ageing (Property change after 70°C 168hs)	Tensile strength +1% Elongation -15% Hardness 5 points	Tensile strength +5% Elongation -1% Hardness 3 points
Continuous operating temperature	-40/+70°C	-40/+70°C

Ceramic Specifications

Typical values

Aluminium oxide	96%
Specific gravity g/cm ³	3.7
Vickers hardness HV (10)	1000 plus
Flexural strength (Mpa)	300
Compressive strength (Mpa)	1800
Fracture Toughness (Mpa m ^{1/2})	3.5



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)	25mm ³	DIN 53516 – non rotating - method A
FRAS	Not Available	

NAT AND FRAS

Elastotec Rubber and Ceramic Laggings are available in both SBR (NAT) and FRAS approved compounds. FRAS lagging is MDG3608 certified and MSHA accepted, made of a fire resistant and antistatic compound that is primarily used in applications where there is a risk of fire and/or explosion as a safety precaution. These applications include underground coal mines, power stations, grain handling facilities and sugar terminals. Elastotec uses blue coloured inserts to identify SBR (NAT) rubber products and red coloured inserts to identify FRAS rubber products.



ELASTOTEC CROWNED DIAMOND RUBBER LAGGING CAN BE APPLIED TO PULLEYS BY COLD BONDING OR BY HOT VULCANISATION.

ELASTOTEC COLD BOND LAGGING

Elastotec Crowned Diamond Rubber 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.

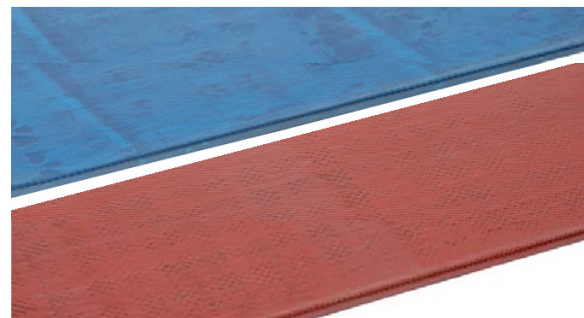


ELASTOTEC HOT VULCANISING LAGGING

Elastotec Crowned Diamond Rubber 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.



LAGGING SPECIFICATIONS – CROWNED DIAMOND RUBBER LAGGING

COLD BONDED – NAT

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
Crowned Diamond Rubber Lagging 15mm NAT Cold Bond	ELA-CWRL-DIA-N-15P	250mm-252mm	15mm (centre) down to 10mm (ends)	fit to pulley size
Crowned Diamond Rubber Lagging 20mm NAT Cold Bond	ELA-CWRL-DIA-N-20	250mm-252mm	20mm (centre) down to 12mm (ends)	fit to pulley size

COLD BONDED – FRAS

DIMENSIONS

CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
ELA-CWRL-DIA-F-15	250mm-252mm	15mm (centre) down to 10mm (ends)	fit to pulley size
ELA-CWRL-DIA-F-20	250mm-252mm	20mm (centre) down to 12mm (ends)	fit to pulley size

HOT VULCANISED – NAT

DIMENSIONS

CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
ELA-CWRL-DIA-N-15V	251mm-255mm	15mm (centre) down to 10mm (ends)	fit to pulley size
ELA-CWRL-DIA-N-20V	251mm-255mm	20mm (centre) down to 12mm (ends)	fit to pulley size

HOT VULCANISED – FRAS

DIMENSIONS

CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
ELA-CWRL-DIA-F-15V	251mm-255mm	15mm (centre) down to 10mm (ends)	fit to pulley size
ELA-CWRL-DIA-F-20V	251mm-255mm	20mm (centre) down to 12mm (ends)	fit to pulley size



LAGGING SPECIFICATIONS – CROWNED CERAMIC

80% LAGGING

COLD BONDED – NAT

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-N-15P	250mm-252mm	15mm middle 12mm ends	fit to pulley size

COLD BONDED – FRAS

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-F-15P	250mm-252mm	15mm middle 12mm ends	fit to pulley size

HOT VULCANISED – NAT

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-N-15PV	250mm-252mm	15mm middle 12mm ends	fit to pulley size

HOT VULCANISED – FRAS

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	MAX ROLL LENGTH
Crowned Ceramic Lagging 15mm Smooth Tiles	ELA-CWDRC80-F-15PV	250mm-252mm	15mm middle 12mm ends	fit to pulley size

Thickness variation (all strips/pulley) +/-0.5mm.

Product code for different lengths: Add 5 digits indicating the ceramic length in mm. In general, the ceramic length corresponds to the belt width.

The total strip length (ceramic + rubber end pieces) is always 100mm longer than face width to allow overhang for trimming after application.

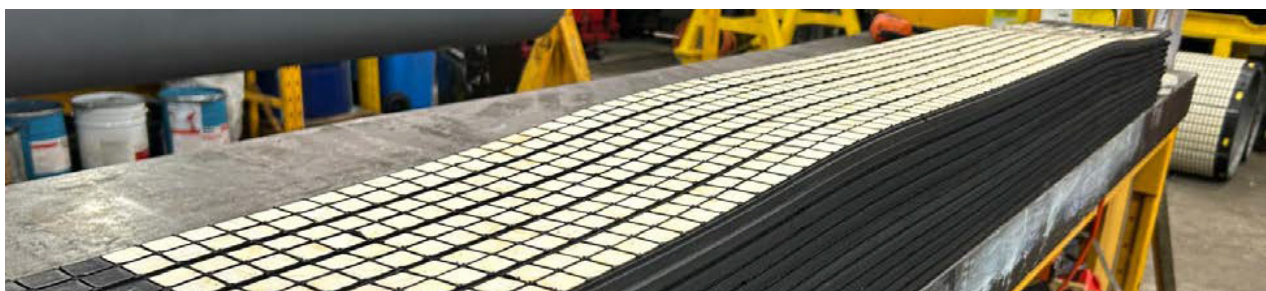
Example:

Strip: Crowned 80% Ceramic Lagging, smooth tiles, for pulley face width 1900mm, hot vulcanised: ELA-CWDRC80-F-15PV-01900

Recommendation for lagging thicknesses suitability for pulley diameters

15mm for pulleys 600mm diameter or larger

Crowned Ceramic Lagging is available in other ceramic coverage options (i.e. 20% or 80%), and other lagging thicknesses. Please contact your Elastotec representative for more information.



LAGGING SPECIFICATIONS – POLYURETHANE LAGGING

COLD BONDED – NAT

DIMENSIONS

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

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

20mm 1.2m strip product code: NL-CWPU-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	NL-CWPU-PLN-N-12V	249mm-251mm	12.0mm-13.4mm	9.7m	4.21kg
Polyurethane Lagging 20mm	NL-CWPU-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.

20mm 1.2m strip product code: NL-CWPU-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.



+61 (0)2 8987 1922



sales@elastotec.com.au



elastotec.com.au



61 Somersby Falls Rd,
Somersby NSW 2250, Australia