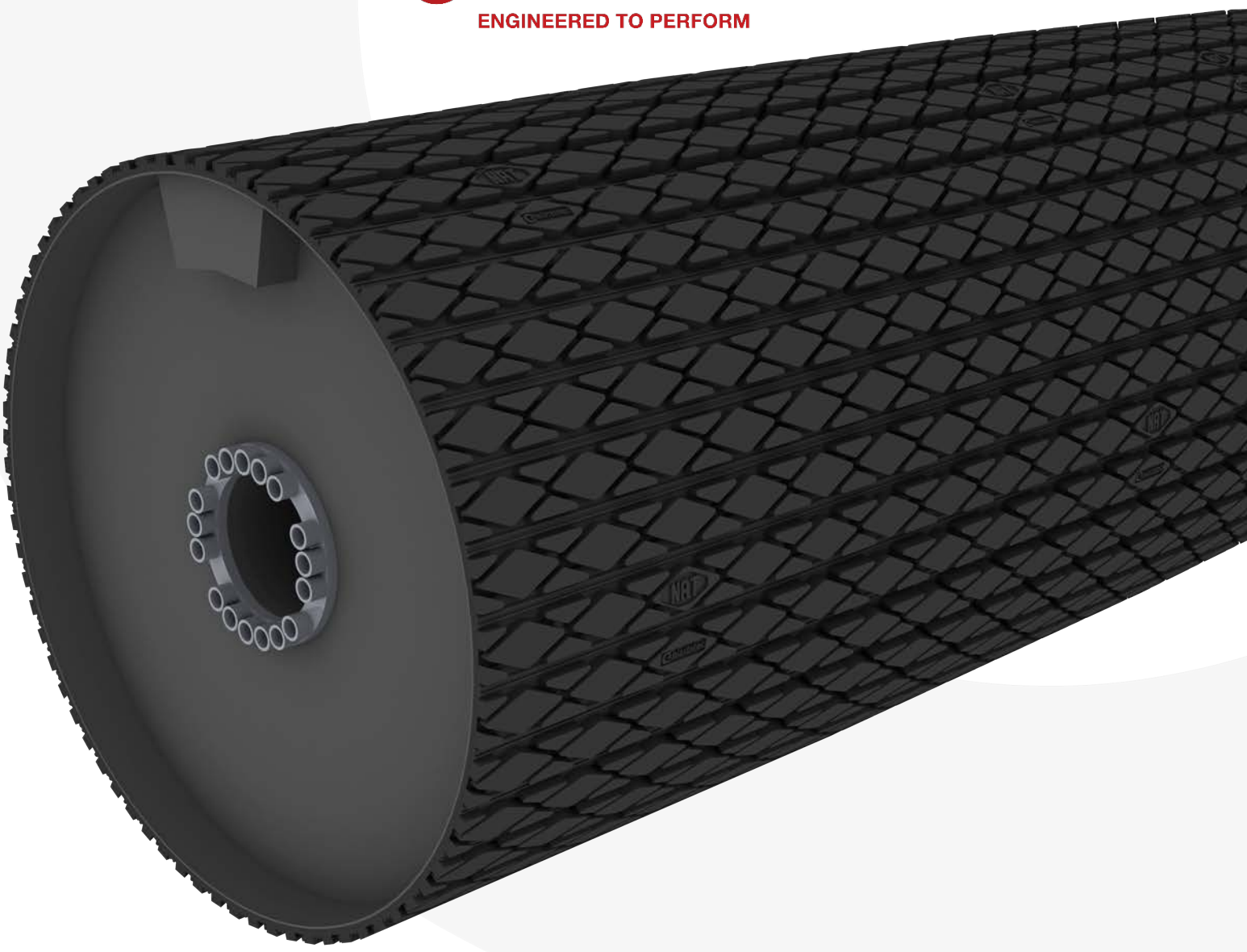
CROWNED DIAMOND RUBBER LAGGING

elastotec
ENGINEERED TO PERFORM



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CROWNED DIAMOND RUBBER LAGGING

DESCRIPTION

Elastotec Crowned Diamond Rubber lagging is designed to provide improved belt tracking in low to medium tension applications where existing rubber lagging is experiencing problems.

Strips are custom made to suit pulley diameter and face with. Tapered end pieces are vulcanised to a flat central section in a ratio of approximately 1/3 - 1/3 - 1/3.

APPLICATION

Elastotec Crowned Diamond Rubber Lagging is designed for use in low to medium belt tension applications, and can be applied to conveyor drive, tail, snub, bend or take-up pulleys. The lagging can be applied to a flat pulley shell which eliminates the need for machining. It is used for conveyor system applications in the mining, quarrying, mineral and metal processing industries but can be used on any conveyor pulley.

CROWNED DIAMOND RUBBER LAGGING

KEY FEATURES AND BENEFITS

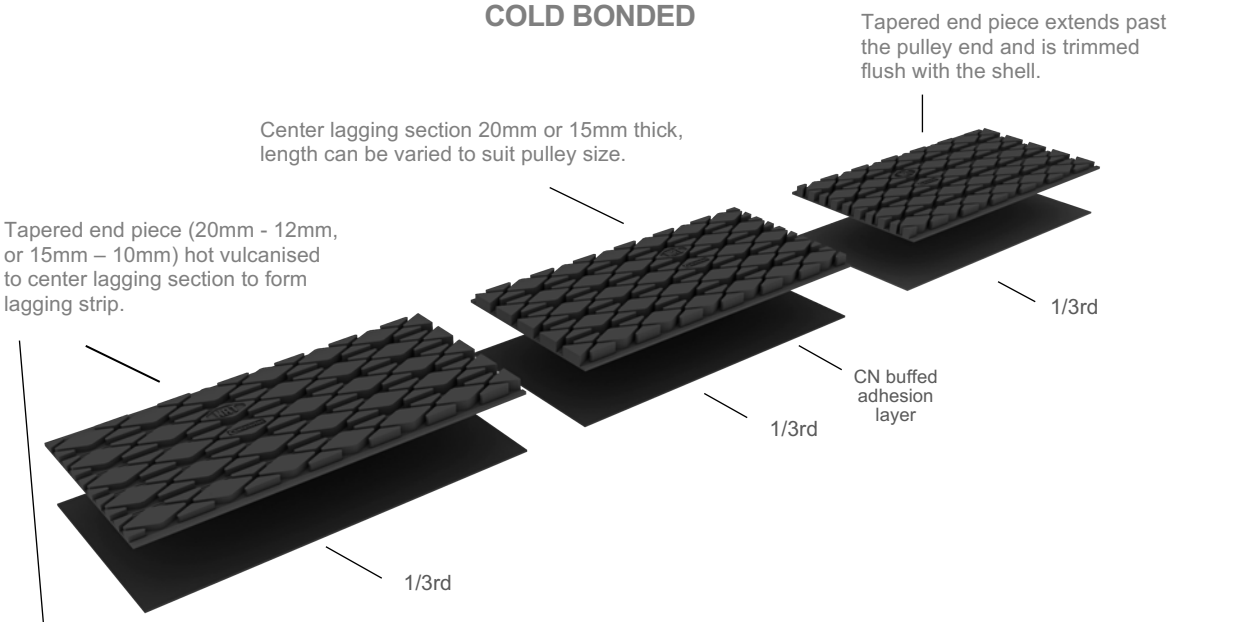
- Designed to be applied to flat pulley shells which eliminates the need for machining
- Improved belt tracking.
- Suitable for low and medium belt tension applications.
- Available in 250mm wide strips that can be made to suit any pulley size and make it easy to install.
- Available in highly abrasion resistant SBR for above ground applications and FRAS for underground and high risk applications.
- Coloured wear indicator (Blue for SBR and Red for 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.
- Optional thicknesses to suit a range of pulley sizes and applications (Tapered from 20mm to 12mm, or 15mm to 10mm)
- Suitable for long term service at temperatures from - 40°C to +70°C.

CROWNED DIAMOND RUBBER LAGGING

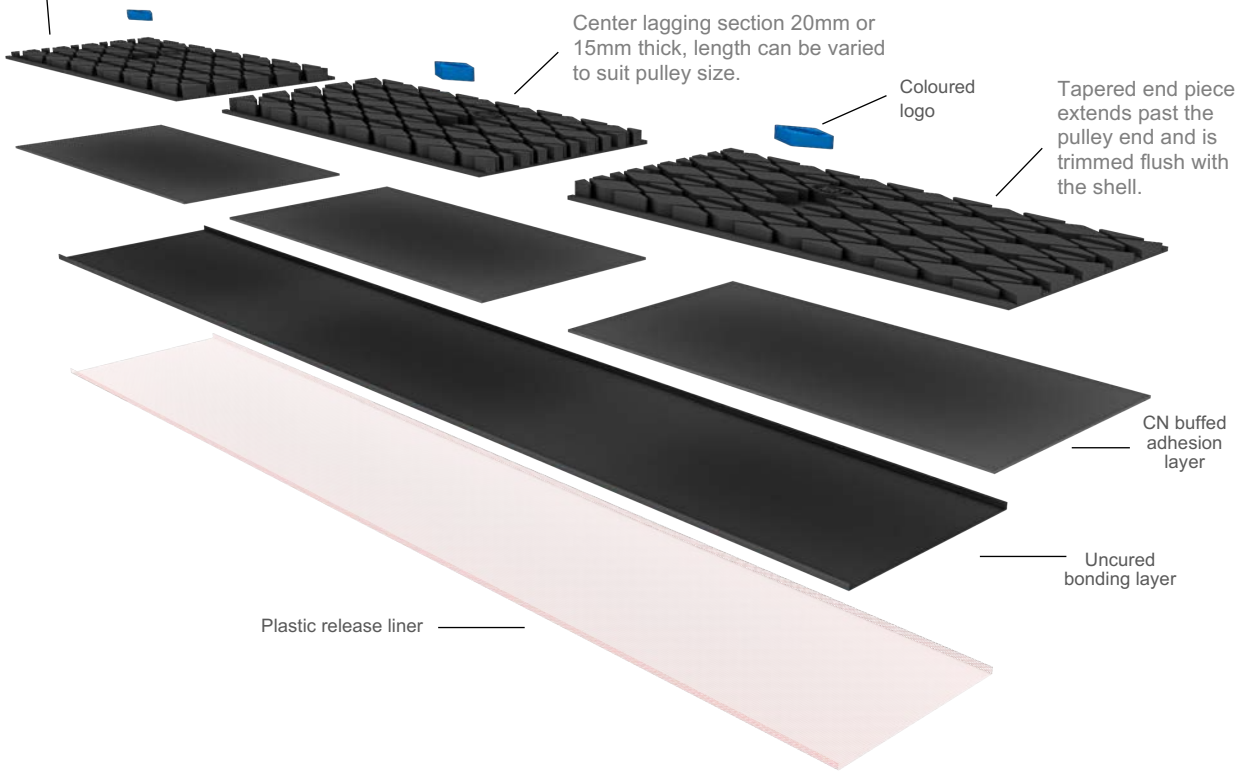
DESIGN

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 DIAMOND RUBBER LAGGING

RUBBER SPECIFICATIONS

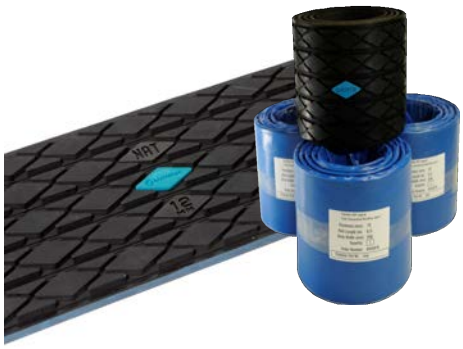
Typical values

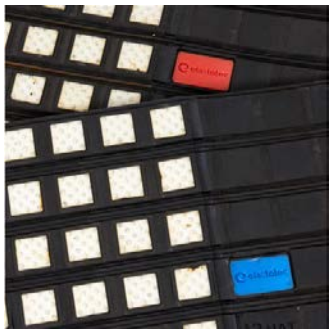
	NAT	FRAS
Polymer	SBR	Blend
Tensile strength (MPa) min ISO37	18.0	16.0
% Elongation min ISO37	550%	500%
Hardness (shore A) ISO868	65+/-5	65+/-5
Abrasion resistance max vol. loss ISO 4649 method A (non-rotating)	70mm^3	150mm^3
FRAS - MDG3608 and MSHA Standards	N/A	PASS/ACCEPTED
Heat ageing (Property change 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

CROWNED DIAMOND RUBBER LAGGING

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 lagging can be applied to pulleys by cold bonding or by hot vulcanisation.

ELASTOTEC COLD BONDING RUBBER LAGGING

Elastotec Cold Bonding Rubber Lagging has the CN buffed 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.

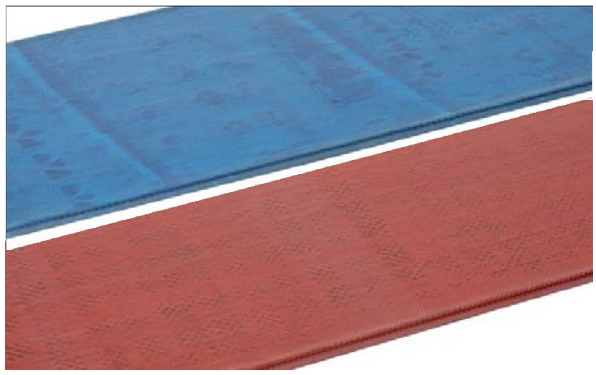
An Elastotec approved applicator using the Elastotec application procedure will achieve reliable adhesion levels that exceed the 9 N/mm industry standard and are typically at 12 N/mm.

ELASTOTEC HOT VULCANISING RUBBER LAGGING

Elastotec Hot Vulcanising Rubber Lagging 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	LENGTH
Crowned Diamond Rubber Lagging 15mm NAT Cold Bond	ELA-CROWN-RL-DIA-N-15	250mm-252mm	15mm (centre) down to 10mm (ends)	fit to pulley size
Crowned Diamond Rubber Lagging 20mm NAT Cold Bond	ELA-CROWN-RL-DIA-N-20	250mm-252mm	20mm (centre) down to 12mm (ends)	fit to pulley size

COLD BONDED – FRAS

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH
Crowned Diamond Rubber Lagging 15mm FRAS Cold Bond	ELA-CROWN-RL-DIA-F-15	250mm-252mm	15mm (centre) down to 10mm (ends)	fit to pulley size
Crowned Diamond Rubber Lagging 20mm FRAS Cold Bond	ELA-CROWN-RL-DIA-F-20	250mm-252mm	20mm (centre) down to 12mm (ends)	fit to pulley size

HOT VULCANISED – NAT

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH
Crowned Diamond Rubber Lagging 15mm NAT Hot Vulc	ELA-CROWN-RL-DIA-N-15V	251mm-255mm	15mm (centre) down to 10mm (ends)	fit to pulley size
Crowned Diamond Rubber Lagging 20mm NAT Hot Vulc	ELA-CROWN-RL-DIA-N-20V	251mm-255mm	20mm (centre) down to 12mm (ends)	fit to pulley size

HOT VULCANISED – FRAS

DIMENSIONS

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH
Crowned Diamond Rubber Lagging 15mm	ELA-CROWN-RL-DIA-F-15V	251mm-255mm	15mm (centre) down to 10mm (ends)	fit to pulley size
Crowned Diamond Rubber Lagging 20mm	ELA-CROWN-RL-DIA-F-20V	251mm-255mm	20mm (centre) down to 12mm (ends)	fit to pulley size

CROWNED DIAMOND RUBBER LAGGING

LAGGING SPECIFICATIONS – THICKNESS OPTIONS

10mm thick  **15mm thick**

Crowned Rubber Diamond Lagging with 15mm centre thickness
only recommended for pulleys with diameters **over 400mm**.

12mm thick  **20mm thick**

Crowned Rubber Diamond Lagging with 20mm centre thickness
only recommended for pulleys with diameters **over 600mm**.

Thickness variation (all strips/pulley) +/-0.5mm. Product code for different lengths: Add 5 digits indicating the overall strip length in mm. Strip length to always be 100mm longer than face width to allow overhang for trimming after application.

Example:
Strip: Crowned Rubber Lagging for pulley face width 1500mm natural rubber, hot vulcanised: ELA-CROWN-RLDIA-N-20V-01600

STORAGE

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

COLD BONDING 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

- <7°C and away from UV and ozone generating equipment 12 months. Products stored for longer than 6 months will need to be re-tested for adhesion before being used, and the recommended shelf life is 12 months.

ADHESIVES AND PRIMERS

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

Products stored under the above conditions for longer periods of time than recommended need to be re-tested for adhesion before being used.

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