









Elastotec Medium Double Row 42% Ceramic Lagging provides a mechanical interlock between lagging and belt on drive pulleys, and high abrasion resistance on non-drive pulleys.

Ceramic Lagging is specified when there is a requirement for:

- · More grip than what rubber lagging provides.
- Longer service life as a result of higher wear resistance than rubber.
- Ceramic Lagging with dimple tiles is used on drive pulleys to increase grip.
- Ceramic Lagging with smooth tiles is used on non-drive pulleys to increase wear resistance/service life.



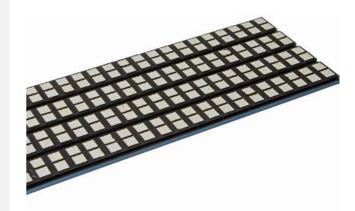
Elastotec Medium Double Row 42% Ceramic Lagging can be applied to conveyor drive, tail, snub, bend or take-up pulleys when there's a requirement for more grip than what Rubber Lagging provides or longer service life as a result of higher wear resistance than rubber. Ceramic Lagging is used for pulleys operating under extreme conditions. It is suitable for wet, clay-containing, muddy and abrasive materials. Also for belts under very high tension. Especially suitable for drive pulleys subject to extreme wear to eliminate slippage.





KEY FEATURES AND BENEFITS

- ✓ Up to 96% Aluminium oxide tile material provide extreme wear resistance.
- Rubber compound blended with CN polymers provides outstanding adhesion to ceramic tiles, rubber and metal
- ✓ Buffed CN bonding layer and buffed edges for optimum cold vulcanised adhesion to the pulley.
- Available in NAT/SBR for above ground applications and FRAS/MSHA certified for underground and highrisk applications.
- Ceramic tiles bonded to rubber on 5 sides to resist tile cracking and debonding.
- Supplied as custom length strips with rubber ends to suit any pulley size.
- Dimpled tiles for increased grip on drive pulleys, and smooth tiles to protect non drive pulleys from damaging the belt cover.
- Can be applied by cold bond or hot vulcanised.
- Cutting sipes allow adjustment of strip width to suit any pulley diameter.
- Available in a range of thicknesses (12,15, 20 and 25mm).
- ✓ Suitable for long term service at temperatures from -40°C to +70°C.
- ✓ Double Row tile pattern designed to deliver optimal performance and reduce lagging fatigue.









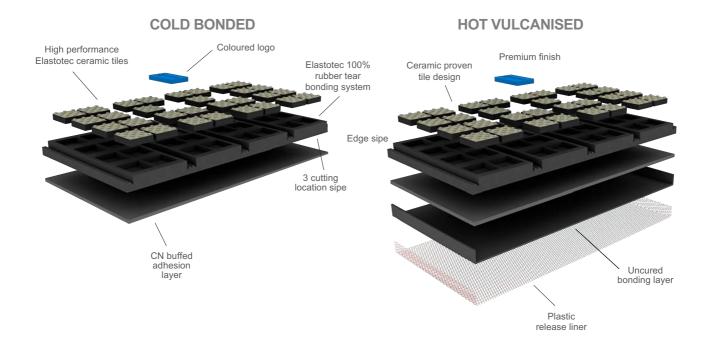




Elastotec Ceramic Lagging consists of vulcanised alumina tiles bonded into rubber.

The rubber is bonded to five surfaces of the tile to ensure tile cushioning and better adhesion strength. Tiles provide high abrasion resistance. Flexible rubber backing containing Elastotec rubber compounds is used to provide abrasion resistance and flexibility to the tile.

Elastotec ceramic pulley lagging is made using two different rubber layers extruded together. The top layer being the high abrasion resistant layer to which the tiles are vulcanised onto and the bottom layer being the adhesion CN bonding layer. Elastotec's specially formulated neoprene based CN bonding layer is engineered to achieve ultimate adhesion when bonded to steel pulley surfaces. Elastotec's CN bonding layer has a buffed finish to provide an optimum surface contact area that increases adhesion force.







RUBBER SPECIFICATIONS

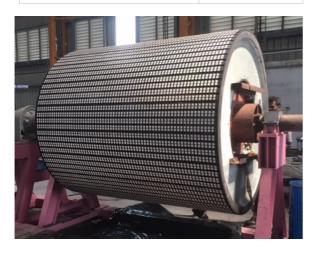
Typical values

	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

CERAMIC SPECIFICATIONS

Typical values

Aluminium oxide	96%
Specific gravity g/cm3	3.7
Vickers hardness HV (10)	1000 plus
Flexural strength (Mpa)	300
Compressive strength (Mpa)	1800
Fracture Toughness (Mpa m1/2)	3.5









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 - COLD BONDED 42% CERAMIC LAGGING

COLD BONDED - NAT

DIMENSIONS DIMPLE TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-N-12K	250mm-252mm	11.5mm-12.5mm	58.2m	6.10kg
42% Ceramic Lagging 15mm	ELA-DRC42-N-15K	250mm-252mm	15mm-16mm	48.5m	6.90kg
42% Ceramic Lagging 20mm	ELA-DRC42-N-20K	250mm-252mm	19mm-20mm	38.8m	7.20kg

DIMENSIONS PLAIN TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-N-12P	250mm-252mm	11.5mm-12.5mm	58.2m	6.50kg
42% Ceramic Lagging 15mm	ELA-DRC42-N-15P	250mm-252mm	15mm-16mm	48.5m	7.20kg
42% Ceramic Lagging 20mm	ELA-DRC42-N-20P	250mm-252mm	19mm-20mm	38.8m	7.80kg

COLD BONDED - FRAS

DIMENSIONS DIMPLE TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-F-12K	250mm-252mm	11.5mm-12.5mm	58.2m	6.40kg
42% Ceramic Lagging 15mm	ELA-DRC42-F-15K	250mm-252mm	15mm-16mm	48.5m	7.10kg
42% Ceramic Lagging 20mm	ELA-DRC42-F-20K	250mm-252mm	19mm-20mm	38.8m	7.70kg

DIMENSIONS PLAIN TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-F-12P	250mm-252mm	11.5mm-12.5mm	58.2m	7.00kg
42% Ceramic Lagging 15mm	ELA-DRC42-F-15P	250mm-252mm	15mm-16mm	48.5m	7.70kg
42% Ceramic Lagging 20mm	ELA-DRC42-F-20P	250mm-252mm	19mm-20mm	38.8m	8.30kg

Product code for different strip lengths:

Add 5-digit number indicating ceramic length in mm.

Strip: 15mm thick cold bonded, NAT, 1.2m ceramic length product code: ELA-DRC42-N-15K-01200

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

Ceramic lagging with thickness >15mm only recommended for pulleys with diameters over 600mm.





LAGGING SPECIFICATIONS – HOT VULCANISED 42% CERAMIC LAGGING

HOT VULCANISED - NAT

DIMENSIONS DIMPLE TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-N-12KV	250mm-252mm	12.5mm-13.7mm	9.7m	6.60kg
42% Ceramic Lagging 15mm	ELA-DRC42-N-15KV	250mm-252mm	16mm-17.2mm	9.7m	7.40kg
42% Ceramic Lagging 20mm	ELA-DRC42-N-20KV	250mm-252mm	21mm-22.2mm	9.7m	7.70kg

DIMENSIONS PLAIN TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-N-12PV	251mm-255mm	13mm-14.2mm	9.7m	7.00kg
42% Ceramic Lagging 15mm	ELA-DRC42-N-15PV	251mm-255mm	16mm-17.2mm	9.7m	7.70kg
42% Ceramic Lagging 20mm	ELA-DRC42-N-20PV	251mm-255mm	21mm-22.2mm	9.7m	8.30kg

HOT VULCANISED - FRAS

DIMENSIONS DIMPLE TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-F-12KV	250mm-252mm	12.5mm-13.7mm	9.7m	6.90kg
42% Ceramic Lagging 15mm	ELA-DRC42-F-15KV	250mm-252mm	16mm-17.2mm	9.7m	7.60kg
42% Ceramic Lagging 20mm	ELA-DRC42-F-20KV	250mm-252mm	21mm-22.2mm	9.7m	8.30kg

DIMENSIONS PLAIN TILES

PRODUCT	CODE	WIDTH	THICKNESS	LENGTH	WEIGHT/Im
42% Ceramic Lagging 12mm	ELA-DRC42-F-12PV	251mm-255mm	13mm-14.2mm	9.7m	7.50kg
42% Ceramic Lagging 15mm	ELA-DRC42-F-15PV	251mm-255mm	16mm-17.2mm	9.7m	8.30kg
42% Ceramic Lagging 20mm	ELA-DRC42-F-20PV	251mm-255mm	21mm-22.2mm	9.7m	8.80kg

The 42% Ceramic Lagging is supplied in strips with a central ceramic length to match the belt width and 130mm rubber end pieces at each side.







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 yearsHot 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.

elastotec

For more information, please contact:

- +61 2 8987 1922
- 1/61 Somersby Falls Rd Somersby NSW 2050 Australia
- sales@elastotec.com.au
- Follow us /Elastotec

www.elastotec.com.au