ENDURANCE BELTING

HEAVY DUTY CONVEYOR BELTING



PRODUCT CATALOGUE

Index

Introduction 4

STEELCORD BELTING

Endurasteel 6
Endurasteel Plus 7

STEELCARCASS BELTING

Enduratrans / Enduracord 12

TEXTILE BELTING

Enduraply 16
Enduralon 26
Enduraspar 31

SPECIALTY PRODUCTS

Breakers 36
Low Modulus Belting 37
Endurastable 38
Endurance X-Ray Vision 40
Rip Detection 42
Enduratherm 43
Endurawood 47
Enduragrain 49
Endurarib 52
Endurawall 59
Enduralift 62
Endurapipe 63

Covers 65
Splice Material 68
Technical Information 69
Packaging 70

ENDURANCE BELTING

High Performance Belting

Whether you're moving rock, sand or soil you need conveyor belting that is durable, reliable, and efficient under even the most challenging conditions. Endurance Belting combines decades of belting design experience with excellence in manufacturing to ensure our belts work where they should – in the field. Available in both heavy duty textile and steelcord designs, our wide range of Endurance Belting assures you of the right solution for your application.





Backed by a 24-month warranty

Endurance Belting integrates the most innovative technologies, the highest quality materials and technical features to maximize your uptime. See endurancebelting.com/warranty for details.

ENDURANCE BELTING

Designed in North America for Reliability

We've spent the last 25 years perfecting the approach of designing and engineering our belts to North American and international standards, then having them built in China. This global approach to fabrication ensures our customers get an excellent value and quality combination that is hard to find with any domestic supplier.

COMMITMENT TO QUALITY

A big part of our success is the emphasis we put on quality at every step of the manufacturing process. Endurance Belting is only manufactured in modern facilities with ISO 9001, 14001 and 28001 ratings. We spend the time and effort to test the raw materials going into the fabrication of the belt so the end product we produce is top quality. Once built, every Endurance belt goes through destructive DIN quality assurance testing before it can earn the Endurance seal and be shipped to our customers.

R&D

Our R&D activities drive us to find new and innovative ways to solve problems faced by users of heavyweight conveyor belting. Just a few of the innovations that we help create through laboratory controlled testing include the design of special high impact fabrics for textile belts and being the first to offer in the market an ISO EN14973C1/C2 fire resistant compound.

CUSTOMER FOCUSED

Endurance is there to support you after the sale of our product, whether you need expert logistics to site, technical installation or start up support with our mobile application experts. Endurance has built its success by working as a true partner with our customers to make sure they are successful.



ENDURASTEEL

Steelcord Belting

FOR THE HEAVIEST HIGH TENSION MATERIAL HANDLING APPLICATIONS

Steelcord belts allow for the longest conveyor centers while still providing excellent flexibility around pulleys even at the highest tensions. ENDURASTEEL provides excellent impact resistance, with the number and size of the steelcords used selected to meet the required operating tensions and application needs. Because stretch is limited to 0.25% any sag between idlers is reduced, making the added belt weight negligible in the consideration for driving power requirements. Our commitment to quality is reflected in the materials we use. ENDURASTEEL belts adhere to the strict German DIN standard, while allowing complete flexibility in special cord and pitch situations.

Markets

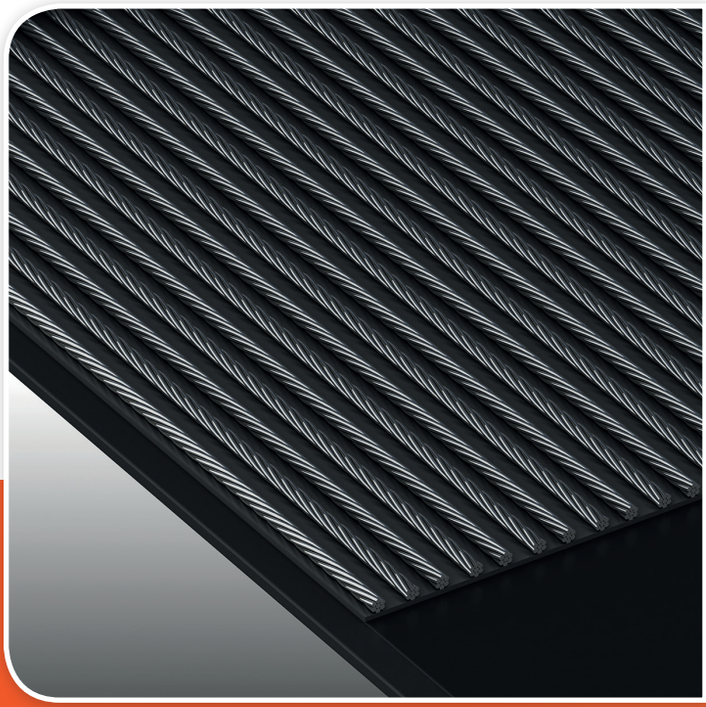
Aggregate, Cement, Coal, Hard Rock Ore, Power Generation, Steel Production.

Applications

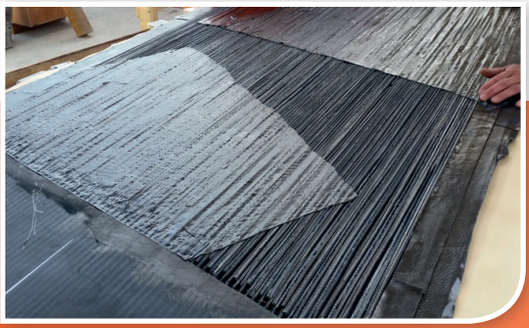
Mainlines, Overland Belts, Pit Belts, Ship Loaders, Slope Belts.

Advantages

- Extremely high transverse tear strength
- Efficient, long lasting splices
- Excellent flexibility
- Low Stretch
- Strength capabilities up to ST10000
- Widths up to 3000 mm
- ITA tested for splice efficiency







ENDURASTEEL PLUS

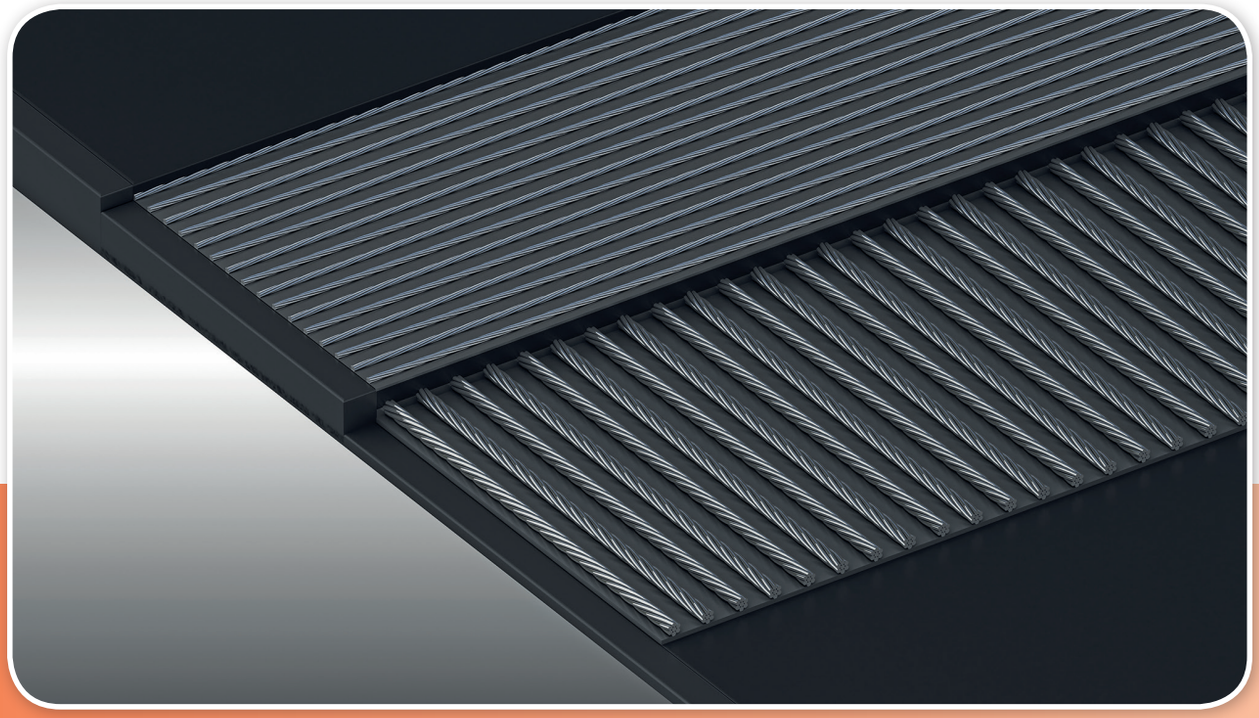
Steelcord Belting

Get all the benefits of ENDURASTEEL plus an elastic steelcord breaker embedded into the top cover. These transverse breaker cords solve a problem that is inherent in all steelcord belts; the reliance on rubber between the cords to provide lateral strength. At the moment of impact, the cushion rubber between the cords is put into tension and becomes very susceptible to puncturing and cutting. To solve this problem, the elastic steelcord breakers absorb the impact tensions and provide maximum shield protection.

Advantages

- Increases impact resistance
- Increases load support
- Increases puncture and rip resistance
- Eliminates rip propagation
- No adhesion compromise
- Loop sensor rip detection compatible
- High cut resistance
- No flexibility compromise around pulleys





Steelcord Belting Specifications

ENDURASTEEL Belt Data

	Units	ST500	ST630	ST800	ST1000	ST1120	ST1250	ST1400	ST1500
Breaking Strength	N/mm	500	630	800	1000	1120	1250	1400	1500
Max Operating Tension	N/mm	70	90	120	150	160	190	210	215
Max Operating Tension	PIW	400	514	685	857	914	1085	1200	1229
Cord Diameter	mm	2.7	2.7	3.1	3.7	3.8	4.1	4.3	4.5
Cord Pitch	mm	12	10	10	12	12	10	12	12
Belt Modulus	N/mm	36,000	45,360	57,600	72,000	80,640	90,000	100,800	108,000
Belt Modulus	PIW	205,715	259,200	329,143	411,430	460,802	514,287	576,002	617,144
Carcass Weight	Kg/sq. m	5.4	5.7	6.5	8.4	8.8	10.1	10.3	11.6
Carcass Weight	Lbs/sq. ft	1.11	1.17	1.33	1.72	1.80	2.07	2.11	2.38
Normal Minimum Covers	mm	4+4	5+4	5+4	5+4	5+4	5+4	5+4	5+4
Splice Type		One	One	One	One	One	One	One	Two
Splice Allowance	mm	450	550	600	600	650	650	750	750

ENDURASTEEL Minimum Pulley Diameter

100% Tension	mm	400	400	500	630	630	800	800	800
75% Tension	mm	400	400	450	500	500	630	630	630
50% Tension	mm	400	400	400	450	450	500	500	500
Snubs, Bends & Tails	mm	300	300	400	400	400	400	400	400
100% Tension	inches	16	16	20	24	24	30	30	30
75% Tension	inches	16	16	18	20	20	24	24	24
50% Tension	inches	16	16	16	18	18	20	20	20
Snubs, Bends & Tails	inches	12	12	16	16	16	16	16	16

ENDURASTEEL Troughability: Minimum Acceptable Width To Trough Properly When Running Empty

20 degree trough	mm	400	400	500	500	500	600	600	600
35 degree trough	mm	500	500	600	600	600	750	750	750
45 degree trough	mm	600	600	750	750	750	900	900	900
20 degree trough	inches	16	16	20	20	20	24	24	24
35 degree trough	inches	20	20	24	24	24	30	30	30
45 degree trough	inches	24	24	30	30	30	36	36	36

Notes

- Permanent elongation negligible, Elastic elongation 0.2 to 0.25%
- Operating Safety Factors are normally 6.7:1
- Belt Constructions normally conform to DIN Standard 22131
- Approx. cover densities: 1.14-1.20 kg/sq m per mm of rubber (Check with our technical personnel)
- Plus Breakers: Elastic steelcord type 2.0mm diameter x 8mm pitch
- Minimum belt width for troughability may change with addition of Plus Breaker, ask for details
- Splice length increases (for 21 degree bias increase length by (belt width x 0.4)

Steelcord Belting Specifications

ENDURASTEEL Belt Data (cont.)

	Units	ST1600	ST1800	ST2000	ST2250	ST2500	ST2800	ST3150	ST3500
Breaking Strength	N/mm	1600	1800	2000	2250	2500	2800	3150	3500
Max Operating Tension	N/mm	240	270	300	340	375	420	470	525
Max Operating Tension	PIW	1371	1543	1714	1843	2143	2400	2686	3000
Cord Diameter	mm	4.7	4.8	5.3	5.6	6.8	7.2	7.8	8.3
Cord Pitch	mm	12	12	12	12	15	15	15	15
Belt Modulus	N/mm	115,200	129,600	144,000	162,000	180,000	201,600	226,800	252,000
Belt Modulus	PIW	658,287	740,573	822,859	925,717	1,028,574	1,152,003	1,296,003	1,440,004
Carcass Weight	Kg/sq. m	12.4	12.8	14.1	15.9	19.5	20.6	22.4	23.1
Carcass Weight	Lbs/sq. ft	2.54	2.62	2.89	3.26	3.99	4.22	4.59	4.73
Normal Minimum Covers	mm	5+4	5+4	5+4	6+5	8+5	8+5	8+8	8+8
Splice Type		Two	Two	Two	Two	Two	Two	Two	Three
Splice Allowance	mm	750	1200	1200	1350	1350	1550	1550	2350

ENDURASTEEL Minimum Pulley Diameter

100% Tension	mm	800	800	1000	1000	1250	1250	1250	1250
75% Tension	mm	630	630	800	800	1000	1000	1000	1000
50% Tension	mm	500	500	630	630	800	800	800	800
Snubs, Bends & Tails	mm	400	400	500	500	630	630	630	630
100% Tension	inches	30	30	36	36	48	48	48	48
75% Tension	inches	24	24	30	30	42	42	42	42
50% Tension	inches	20	20	24	24	30	30	30	30
Snubs, Bends & Tails	inches	16	16	20	20	24	24	24	24

ENDURASTEEL Troughability: Minimum Acceptable Width To Trough Properly When Running Empty

20 degree trough	mm	600	600	600	600	750	750	750	750
35 degree trough	mm	750	750	750	750	800	800	900	900
45 degree trough	mm	900	900	900	900	900	900	900	900
20 degree trough	inches	24	24	26	26	30	30	30	30
35 degree trough	inches	30	30	30	30	32	32	36	36
45 degree trough	inches	36	36	36	36	36	36	36	36

Notes

- Permanent elongation negligible, Elastic elongation 0.2 to 0.25%
- Operating Safety Factors are normally 6.7:1
- Belt Constructions normally conform to DIN Standard 22131
- Approx. cover densities: 1.14-1.20 kg/sq m per mm of rubber (Check with our technical personnel)
- Plus Breakers: Elastic steelcord type 2.0mm diameter x 8mm pitch
- Minimum belt width for troughability may change with addition of Plus Breaker, ask for details
- Splice length increases (for 21 degree bias increase length by (belt width x 0.4)

Steelcord Belting Specifications

ENDURASTEEL Belt Data (cont.)

	Units	ST4000	ST4500	ST5000	ST5400	ST6300	ST7000	ST7500
Breaking Strength	N/mm	4000	4500	5000	5400	6300	7000	7500
Max Operating Tension	N/mm	600	675	750	810	945	1065	1125
Max Operating Tension	PIW	3429	3857	4286	4629	5400	6086	6429
Cord Diameter	mm	8.8	9.7	10.9	11.3	12.8	13.5	13.8
Cord Pitch	mm	15	16	17	17	19.5	19.5	21
Belt Modulus	N/mm	288,000	324,000	360,000	389,000	453,600	504,000	540,000
Belt Modulus	PIW	1,645,718	1,851,433	2,057,148	2,222,863	2,592,007	2,880,007	3,085,722
Carcass Weight	Kg/sq. m	25.9	29.1	32.2	33.9	39.4	41.3	Ask
Carcass Weight	Lbs/sq. ft	5.30	5.96	6.59	6.94	8.07	8.46	Ask
Normal Minimum Covers	mm	10+8	10+8	10+9	10+9	13+10	13+10	13+10
Splice Type		Three	Three	Four	Four	Ask	Ask	Ask
Splice Allowance	mm	2650	2800	4050	4450	Ask	Ask	Ask

ENDURASTEEL Minimum Pulley Diameter

100% Tension	mm	1400	1600	1800	1800	2000	2400	2400
75% Tension	mm	1250	1400	1400	1400	1800	2000	2000
50% Tension	mm	1000	1250	1250	1250	1400	1800	1800
Snubs, Bends & Tails	mm	800	1000	1000	1000	1250	1250	1250
100% Tension	inches	54	60	72	72	78	96	96
75% Tension	inches	48	54	54	60	72	78	78
50% Tension	inches	42	48	48	48	54	72	72
Snubs, Bends & Tails	inches	30	42	42	42	48	48	48

ENDURASTEEL Troughability: Minimum Acceptable Width To Trough Properly When Running Empty

20 degree trough	mm	750	900	900	900	1200	1400	1400
35 degree trough	mm	900	1050	1200	1200	1400	1600	1600
45 degree trough	mm	900	1050	1200	1200	1600	1800	1800
20 degree trough	inches	30	36	36	36	48	54	54
35 degree trough	inches	36	42	48	48	54	60	60
45 degree trough	inches	36	42	48	48	66	72	72

Notes

- Permanent elongation negligible, Elastic elongation 0.2 to 0.25%
- Operating Safety Factors are normally 6.7:1
- Belt Constructions normally conform to DIN Standard 22131
- Approx. cover densities: 1.14-1.20 kg/sq m per mm of rubber (Check with our technical personnel)
- Plus Breakers: Elastic steelcord type 2.0mm diameter x 8mm pitch
- Minimum belt width for troughability may change with addition of Plus Breaker, ask for details
- Splice length increases (for 21 degree bias increase length by (belt width x 0.4)

ENDURASTEEL Belt Data (cont.)

	Units	ST8000	ST9000	ST10000
Breaking Strength	N/mm	8000	9000	10000
Max Operating Tension	N/mm	1200	1350	1500
Max Operating Tension	PIW	6857	7714	8571
Cord Diameter	mm	14.0	14.8	15.5
Cord Pitch	mm	21	21	21
Belt Modulus	N/mm	576,000	648,000	720,000
Belt Modulus	PIW	3,291,437	3,702,866	4,114,296
Carcass Weight	Kg/sq. m	Ask	Ask	Ask
Carcass Weight	Lbs/sq. ft	Ask	Ask	Ask
Normal Minimum Covers	mm	13+10	13+10	13+10
Splice Type		Ask	Ask	Ask
Splice Allowance	mm	Ask	Ask	Ask

ENDURASTEEL Minimum Pulley Diameter

100% Tension	mm	Ask	Ask	Ask
75% Tension	mm	Ask	Ask	Ask
50% Tension	mm	Ask	Ask	Ask
Snubs, Bends & Tails	mm	Ask	Ask	Ask
100% Tension	inches	Ask	Ask	Ask
75% Tension	inches	Ask	Ask	Ask
50% Tension	inches	Ask	Ask	Ask
Snubs, Bends & Tails	inches	Ask	Ask	Ask

ENDURASTEEL Troughability: Minimum Acceptable Width To Trough Properly When Running Empty

20 degree trough	mm	Ask	Ask	Ask
35 degree trough	mm	Ask	Ask	Ask
45 degree trough	mm	Ask	Ask	Ask
20 degree trough	inches	Ask	Ask	Ask
35 degree trough	inches	Ask	Ask	Ask
45 degree trough	inches	Ask	Ask	Ask

Notes

- Permanent elongation negligible, Elastic elongation 0.2 to 0.25%
- Operating Safety Factors are normally 6.7:1
- Belt Constructions normally conform to DIN Standard 22131
- Approx. cover densities: 1.14-1.20 kg/sq m per mm of rubber (Check with our technical personnel)
- Plus Breakers: Elastic steelcord type 2.0mm diameter x 8mm pitch
- Minimum belt width for troughability may change with addition of Plus Breaker, ask for details
- Splice length increases (for 21 degree bias increase length by (belt width x 0.4)

ENDURATRANS & ENDURACORD

Steelcarcass Belting

FOR SPECIALTY HIGH TENSION MATERIAL HANDLING APPLICATIONS

This specialty line of steelcord belting is designed to function as an improved alternative for applications where textile belting stretch is more than desired, or higher tension service results in a textile belt having less than acceptable troughability. From the perspective of conventional steelcord belting both styles of belts, Enduracord and Enduratrans, remove or reduce most of the shortcomings faced by extremely low stretch and large diameter cords with significant spaces between them. Also, like all steelcord belting Enduratrans and Enduracord have a significant advantage over textile belting in its ability to retain its original physical properties longer, and thus offer stronger long term splice efficiency.

Markets

Hard Rock Mining, Aggregate Handling, Cement Plants, Steel Mills, Bulk Handling Terminal, Grain and Sugar Industries.

Applications

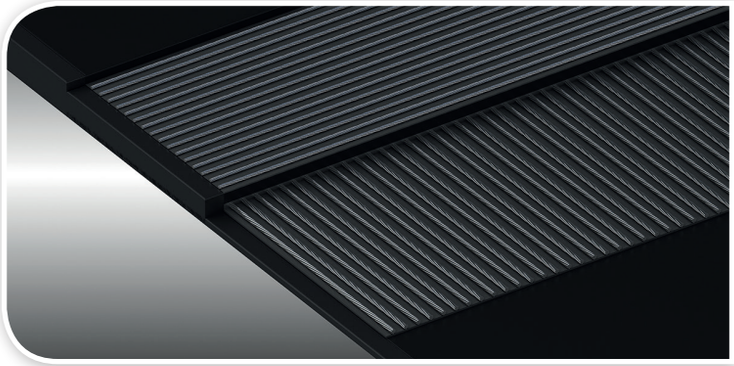
Mainlines, Overland, Ship Loaders, Slope Belts, Primary Crushers, Secondary Crushers.

DID YOU KNOW:

Enduratrans and Enduracord are produced by curing the belts under conventional D.I.N. and I.S.O. cord equi-tensioning methods thus ensuring ideal straightness and tracking.

Advantages

- Permit the use of smaller diameter pulleys
- Provide increased belt troughability
- Accepts tighter radius curves - both convex vertical and horizontal (M-SERIES)
- Reduced transition distances (M-SERIES)
- Acceptability for use with a crowned pulley (M-SERIES)
- Suitability for replacement of textile belting without major modification (M-SERIES)
- Tighter cord pitch means greater puncture, rip and impact resistance
- Smaller cords permit ideal rubber to steel adhesions through better penetration
- Allow hot finger splicing of the belt using a standard 8 Bar (116 PSI) textile vulcanizer



ENDURATRANS

Employs one 2.0 mm diameter elastic transverse steelcord breaker placed into the top cover on 8 mm pitch to provide very good load support, outstanding troughability and improved rip resistance.

Excellent for all but the most aggressive impact situations.

CORD TECHNOLOGY

Three very distinctly different cords provide increased degrees of elasticity making them ideally suited for specific operating conditions.

M-SERIES WARP CORD

The M-series are a special 4 x 7 warp cord configuration, offering increased elasticity that permits their use for a range of special needs, including the replacement of textile belting without serious conveyor modifications. They can accept crowned pulleys, wrap the smallest diameter pulleys and tolerate shorter transition distances. Convex vertical and horizontal curve radii can be seriously reduced by using this cord.

E-SERIES WARP CORD

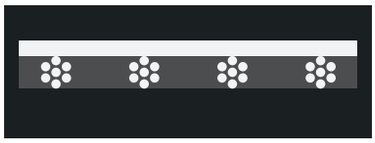
The E-series are a 7 x 7 warp cord configuration providing minimum elasticity typically used on overland conveyor where low stretch is required. This cord is used in the smallest diameters and tightest pitch to improve puncture resistance while ensuring superior troughability and excellent performance around small pulleys.

S-CORD TRANSVERSE BREAKER

The S-cords are a 3 x 7 weft cord configuration designed for extreme elasticity and maximum shock absorbency.

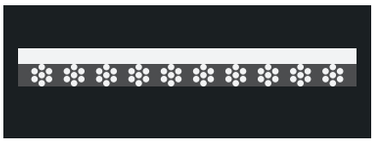
SEE HOW A CONVENTIONAL STEELCORD ST1400 COMPARES TO THE EQUIVALENT ENDURATRANS & ENDURACORD BELT:

Endurasteel Plus ST1400



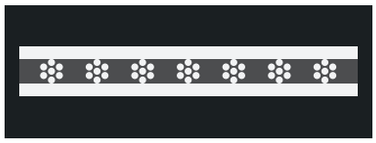
Cord ø - 4.10mm
Cord pitch - 12mm
Breaker - 2mm

Enduratrans M1-1400 1TA



Cord ø - 2.85mm
Cord pitch - 4.4mm
Breaker - 2mm

Enduracord E1-1400 2TA

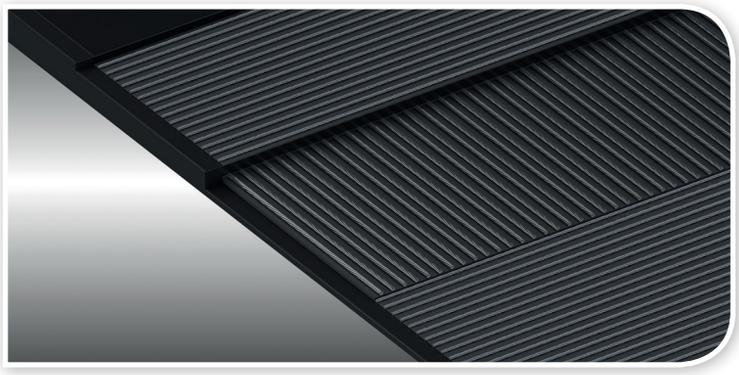


Cord ø - 3.10mm
Cord pitch - 6.2mm
Breaker - 1.6mm

ENDURACORD

Employs two 1.6mm diameter Super High Elastic transverse steelcord breakers, one in each cover, on 8 mm pitch to provide outstanding impact, puncture and rip protection while still providing excellent troughability and the ability to wrap very small pulleys.

Toughest belt on the market.



Steelcarcass Belting Specifications

M-CORDS

Designation Belt Tensile	N/mm	M1 500	M1 630	M1 800	M1 1000	M1 1250	M2 1400	M3 1600	M4 1800	M4 2000	M4 2250
Tension Range	N/mm	65	80	100	125	160	175	200	225	250	280
Tension Range	PIW	360	450	570	715	900	1000	1145	1285	1430	1600
Cord Structure	---	4 x 7	4 x 7	4 x 7	4 x 7	4 x 7	4 x 7	4 x 7	4 x 7	4 x 7	4 x 7
Cord Diameter	mm	2.85	2.85	2.85	2.85	2.85	2.85	3.50	3.80	3.80	3.80
Cord Pitch	mm	14.4	11.4	9.0	7.2	5.8	6.2	6.6	7.2	6.5	5.8

Enduratrans-M	**One elastic steelcord breaker 2.0mm diameter on 8mm pitch-125 cords per m.**								**Stretch: 0.4-0.6%**		
Carcass Gauge	mm	4.4	4.4	4.4	4.4	4.4	4.4	5.1	5.8	5.8	5.8
Carcass Weight	Kg/sq m	6.5	7.0	7.4	8.3	9.1	6.2	6.6	14.6	15.1	15.8
Max. Width	mm	1525	1525	1525	1525	1525	1525	1525	1828	1828	1676
Enduracord-M	**Two elastic steelcord breakers 1.6mm diameter on 8mm pitch-250 cords per m.**								**Stretch: 0.4-0.6%**		
Carcass Gauge	mm	5.6	5.6	5.6	5.6	5.6	5.6	6.3	6.6	6.6	6.6
Carcass Weight	Kg/sq m	10.3	11.0	11.5	12.4	13.3	13.6	14.1	16.7	17.3	18.0
Max. Width	mm	1828	1828	1828	1828	1828	1828	2000	2175	1828	1676

M Series Minimum Pulley Diameters											
Pulley Diameters	@ 100%	400	400	500	500	630	630	630	800	800	800
Pulley Diameters	@ 60%	315	315	400	400	500	500	500	630	630	630
Pulley Diameters	@ <30%	250	250	315	315	400	400	400	500	500	500
Pulley Diameters	Snubs	200	200	250	250	315	315	315	400	400	400

Notes

- Tension Ranges are dependent upon startup acceleration speeds
- All warp cords are eqiui-tensioned during belt production curing to ensure tension distribution
- Maximum widths can be increased if necessary by utilizing larger cord diameter warp cords
- Elastic breakers also available on a 4mm (DD) pitch as well as with Endurastable self- tracking breaker configuration
- Field splicing can be made at 8 Bar (112 PSI) utilizing a standard textile press on 2.85mm cords.
- Minimum pulley diameters are based upon a percentage of the tension range at an 8 safety factor
- Approx.cover rubber densities for (1mm). D-Series use 1.12 kg/sq. m. J-Series use 1.30 kg./ sq. m.

Steelcarcass Belting Specifications

E-CORDS

Designation Belt Tensile	N/mm	E1 800	E1 1000	E1 1250	E1 1400	E2 1600	E2 1800	E3 2000	E4 2250	E4 2500
Tension Range	N/mm	100	125	160	175	200	225	250	280	315
Tension Range	PIW	570	715	900	1000	1145	1285	1430	1600	1785
Cord Structure	---	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7	7 x 7
Cord Diameter	mm	3.10	3.10	3.10	3.10	3.70	3.70	3.80	4.50	4.50
Cord Pitch	mm	12.3	9.8	7.7	6.2	8.5	7.6	7.2	8.8	8.0

Enduratrans-E	One elastic steelcord breaker 2.0mm diameter on 8mm pitch-125 cords per m.							Stretch: 0.2-0.3%	
Carcass Gauge	mm	5.1	5.1	5.1	5.1	5.7	5.7	5.8	6.5	6.5
Carcass Weight	Kg/sq m	10.4	10.5	11.0	11.4	12.3	13.0	13.8	14.6	17.6
Max. Width	mm	1525	1525	1525	1525	1525	1525	1828	1828	1828
Enduracord-E	**Two elastic steelcord breakers 1.6mm diameter on 8mm pitch-250 cords per m.**							**Stretch: 0.2-0.3%**	
Carcass Gauge	mm	6.7	6.7	6.7	6.7	7.3	7.3	7.4	8.1	8.1
Carcass Weight	Kg/sq m	12.4	12.6	13.0	13.5	14.2	14.9	15.7	16.9	19.5
Max. Width	mm	1828	1828	1828	1828	2134	2134	2134	2438	2400

M Series Minimum Pulley Diameters										
Pulley Diameters	@ 100%	630	630	800	800	800	800	800	1000	1000
Pulley Diameters	@ 60%	500	500	630	630	630	630	630	800	800
Pulley Diameters	@ <30%	400	400	500	500	500	500	500	630	630
Pulley Diameters	Snubs	315	315	400	400	400	400	400	500	500

Notes

- Tension Ranges are dependent upon startup acceleration speeds
- All warp cords are eqiui-tensioned during belt production curing to ensure tension distribution
- Maximum widths can be increased if necessary by utilizing larger cord diameter warp cords
- Elastic breakers also available on a 4mm (DD) pitch as well as with Endurastable self- tracking breaker configuration
- Field splicing can be made at 8 Bar (112 PSI) utilizing a standard textile press on 2.85mm cords.
- Minimum pulley diameters are based upon a percentage of the tension range at an 8 safety factor
- Approx.cover rubber densities for (1mm). D-Series use 1.12 kg/sq. m. J-Series use 1.30 kg./ sq. m.

ENDURAPLY
Textile Belting

FOR THE HEAVIEST MATERIAL HANDLING APPLICATIONS

ENDURAPLY is a specially designed polyester-nylon crowfoot carcass weave belt with high strength double cord weft that provides unequaled impact, puncture and rip protection in plied up belting. The warp and weft strength is the heaviest in the industry and assures low, predictable stretch. High quality rubber skims provide superior shock absorption and high adhesive strength. The molded edge construction ensures the belt operates at maximum straightness and trackability. All these features ensure ENDURAPLY belting is part of a trouble free and reliable system.

Markets

Hard Rock Mining, Coal Handling, Bulk Terminals, Cement Plants, Steel Plants, Aggregate Handling, Sand & Gravel, Wood Handling, Pulp & Paper Plants.

Applications

Primary Crushers, Secondary Crushers, Pit Belts, Stackers, Ship Unloaders, Mainlines, Coal Prep Plant, Log Debarkers, Log Decks, Shredders.

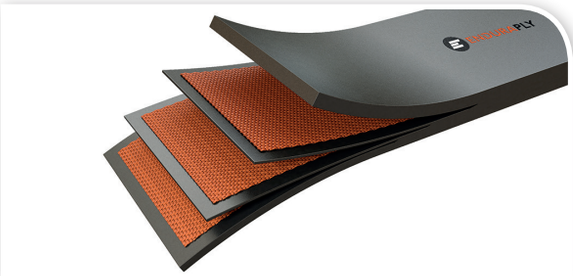
Advantages

- Extremely high rip and tear strength
- Easy & Efficient Spliceability
- Excellent flexibility
- Low Stretch
- Robust carcass gauges
- Widest widths 6600 (mm) with no longitudinal splices

DID YOU KNOW:

You can add an elastic steelcord breaker (Plus) to the top cover and increase puncture and rip resistance by 50% without compromising pulley diameter.







ENDURAPLY Belt Data (Imperial)

	EP675/3	EP900/4	EP1050/3	EP1350/3	EP1400/4	EP1500/3	EP1800/4
Belt Rating (PIW)	**375**	**500**	**600**	**750**	**800**	**900**	**1000**
Number of Plies	3	4	3	3	4	3	4
Fabric Type	EP	EP	EP	EP	EP	EP	EP
Fabric Weave	CFW	CFW	CFW	CFW	CFW	CFW	CFW
Carcass Gauge (in.)	0.189	0.252	0.252	0.26	0.336	0.307	0.347
Carcass Weight (lbs/sq ft)	1.044	1.433	1.495	1.597	1.986	1.89	2.15
Cover Weight for 1/32" (lbs/ sq ft)	0.187	0.187	0.187	0.187	0.187	0.187	0.187
Permanent Elongation %*	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (PIW)	Ask	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (ft-lbs)	800	1000	1200	1200	1400	1250	1450
Step Length (in.)	10	10	16	18	16	20	18
Fastener (Plate)	190	190	NR	NR	NR	NR	NR
Fastener (Hinge)	MS - 45	MS -55	MS - 55	MS - 65	MS - 55	NR	NR
Fastener (Superscrew)	63/65	100/105	100/105	125	180	180	180

CFW fabric is a premium Crowfoot Weave (polyester warp-nylon weft)
*Total elongation consists of permanent elongation plus elastic elongation. (CFW elastic elongation 0.5% - 0.8%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.

ENDURAPLY Minimum Pulley Diameter

Inches

100% Tension	18	24	24	30	30	30	36
80% Tension	16	20	20	24	24	24	30
60% Tension	14	18	18	20	20	20	24
40% Tension	14	16	16	18	18	18	20
Snubs, Bends & Tails	12	16	16	18	18	18	20

ENDURAPLY Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	20	30	24	30	30	30	36
35 degree	24	30	30	36	36	36	42
45 degree	30	36	36	42	42	42	48

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	72	84	84	84	96	96	96
	35 degree	60	72	72	72	84	84	84
	45 degree	60	72	72	72	84	84	84
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	60	72	72	72	84	84	84
	35 degree	60	60	60	60	72	72	72
	45 degree	48	54	54	54	72	60	72
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	54	72	72	72	84	72	84
	35 degree	54	60	60	60	72	60	72
	45 degree	48	54	54	54	60	60	60
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	48	60	60	60	72	66	72
	35 degree	42	54	54	54	60	54	60
	45 degree	36	48	48	48	54	54	54

Textile Belting Specifications

ENDURAPLY Belt Data (Imperial) (cont.)

	EP1750/5	EP2100/6	EP2250/5	EP2520/4	EP2500/5	EP3150/5
Belt Rating (PIW)	**1000**	**1200**	**1250**	**1440**	**1500**	**1800**
Number of Plies	5	6	5	4	5	5
Fabric Type	EP	EP	EP	EP	EP	EP
Fabric Weave	CFW	CFW	CFW	EP	CFW	EP
Carcass Gauge (in.)	0.42	0.504	0.433	0.41	0.492	0.512
Carcass Weight (lbs/sq ft)	2.478	2.989	2.621	2.050	2.867	2.560
Cover Weight for 1/32" (lbs/ sq ft)	0.187	0.187	0.187	0.187	0.187	0.187
Permanent Elongation %*	0.8	Ask	0.8	0.8	0.8	0.8
Avg Elastic Modulus (PIW)	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (ft-lbs)	1600	1800	1600	1600	1700	1800
Step Length (in.)	16	16	18	26	20	26
Fastener (Plate)	NR	NR	NR	NR	NR	NR
Fastener (Hinge)	NR	NR	NR	NR	NR	NR
Fastener (Superscrew)	180	200	200	200	200	200

CFW fabric is a premium Crowfoot Weave (polyester warp-nylon weft)
*Total elongation consists of permanent elongation plus elastic elongation. (CFW elastic elongation 0.5% - 0.8%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.

ENDURAPLY Minimum Pulley Diameter

Inches

100% Tension	36	48	42	42	54	60
80% Tension	30	42	36	36	48	54
60% Tension	24	36	30	30	42	48
40% Tension	20	30	24	24	36	42
Snubs, Bends & Tails	20	30	24	24	30	30

ENDURAPLY Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	36	42	42	48	48	54
35 degree	42	48	48	54	54	60
45 degree	48	54	54	60	60	66

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	108	114	114	108	120	120
	35 degree	96	108	108	96	108	120
	45 degree	96	108	108	96	108	108
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	96	108	108	102	108	120
	35 degree	84	96	96	96	102	120
	45 degree	84	96	96	84	96	108
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	96	108	108	96	108	114
	35 degree	84	96	96	84	96	108
	45 degree	72	84	84	72	84	96
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	84	96	96	84	102	108
	35 degree	72	84	84	72	90	96
	45 degree	72	84	78	60	78	84

ENDURAPLY Belt Data (Metric)

	EP675/3	EP900/4	EP1050/3	EP1350/3	EP1400/4	EP1500/3	EP1800/4
Belt Rating (N/mm)	**66**	**88**	**105**	**131**	**140**	**157**	**175**
Number of Plies	3	4	3	3	4	3	4
Fabric Type	EP	EP	EP	EP	EP	EP	EP
Fabric Weave	CFW	CFW	CFW	CFW	CFW	CFW	CFW
Carcass Gauge (mm)	4.8	6.4	6.4	6.6	8.5	7.8	8.8
Carcass Weight (kg/sq. m)	5.1	7.0	7.3	7.8	9.7	9.2	10.5
Cover Weight for 1 mm (kg/sq. m)	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Permanent Elongation %*	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (kN/m)	Ask	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (Joules)	1080	1360	1620	1620	1900	1685	1970
Step Length (mm)	250	250	400	450	400	500	450
Fastener (Plate)	190	190	NR	MS - 65	NR	NR	NR
Fastener (Hinge)	MS - 45	MS -55	MS - 55	NR	MS - 55	NR	NR
Fastener (Superscrew)	63/65	100/105	100/105	125	180	180	180

CFW fabric is a premium Crowfoot Weave (polyester warp-nylon weft)
*Total elongation consists of permanent elongation plus elastic elongation. (CFW elastic elongation 0.5% - 0.8%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.

ENDURAPLY Minimum Pulley Diameter

Millimeters

100% Tension	450	600	600	750	750	750	900
80% Tension	400	500	500	600	600	600	750
60% Tension	350	450	450	500	500	500	600
40% Tension	350	400	400	450	450	450	500
Snubs, Bends & Tails	300	400	400	450	450	450	500

ENDURAPLY Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	500	750	600	750	750	750	900
35 degree	600	750	750	900	900	900	1050
45 degree	750	900	900	1050	1050	1050	1200

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	1829	2135	2135	2135	2440	2440	2440
	35 degree	1525	1829	1829	1829	2135	2135	2135
	45 degree	1525	1829	1829	1829	2135	2135	2135
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	1525	1829	1829	1829	2135	2135	2135
	35 degree	1525	1525	1525	1525	1829	1829	1829
	45 degree	1220	1370	1370	1370	1829	1525	1829
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	1370	1829	1829	1829	2135	1829	2135
	35 degree	1370	1525	1525	1525	1829	1525	1829
	45 degree	1220	1370	1370	1370	1525	1525	1525
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	1220	1525	1525	1525	1829	1600	1829
	35 degree	1067	1370	1370	1370	1525	1400	1525
	45 degree	915	1220	1220	1220	1370	1370	1370

Textile Belting Specifications

ENDURAPLY Belt Data (Metric) (cont.)

	EP1750/5	EP2100/6	EP2250/5	EP2520/4	EP2500/5	EP3150/5
Belt Rating (N/mm)	**175**	**210**	**219**	**252**	**263**	**315**
Number of Plies	5	6	5	4	5	5
Fabric Type	EP	EP	EP	EP	EP	EP
Fabric Weave	CFW	CFW	CFW	Flat	CFW	Flat
Carcass Gauge (mm)	10.7	12.8	11.0	10.4	12.5	13.0
Carcass Weight (kg/sq. m)	12.1	14.6	12.8	12.1	14	15.2
Cover Weight for 1 mm (kg/sq. m)	1.15	1.15	1.15	1.15	1.15	1.15
Permanent Elongation %*	0.8	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (kN/m)	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (Joules)	2170	2440	2170	2170	2300	2440
Step Length (mm)	400	400	450	650	500	650
Fastener (Plate)	NR	NR	NR	NR	NR	NR
Fastener (Hinge)	NR	NR	NR	NR	NR	NR
Fastener (Superscrew)	180	200	200	200	200	200

CFW fabric is a premium Crowfoot Weave (polyester warp-nylon weft)
*Total elongation consists of permanent elongation plus elastic elongation. (CFW elastic elongation 0.5% - 0.8%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.

ENDURAPLY Minimum Pulley Diameter

Millimeters

100% Tension	900	1200	1050	1050	1370	1525
80% Tension	750	1050	900	900	1200	1370
60% Tension	600	900	750	750	1050	1220
40% Tension	500	750	600	600	900	1050
Snubs, Bends & Tails	500	750	600	600	750	750

ENDURAPLY Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	900	1050	1050	1200	1200	1370
35 degree	1050	1200	1200	1370	1370	1500
45 degree	1200	1370	1370	1500	1500	1675

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	2740	2895	2895	2740	3040	3040
	35 degree	2440	2740	2740	2440	2740	3040
	45 degree	2440	2740	2740	2440	2740	3040
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	2440	2740	2740	2590	2740	3040
	35 degree	2135	2440	2440	2440	2590	3040
	45 degree	2135	2440	2440	2135	2440	2740
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	2440	2740	2740	2440	2740	2895
	35 degree	2135	2440	2440	2135	2440	2740
	45 degree	1829	2135	2135	1829	2135	2440
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	2135	2440	2440	2135	2590	2740
	35 degree	1829	2135	2135	1829	2286	2440
	45 degree	1829	2135	1980	1525	1980	2135

PROBLEM SOLVERS

We have a number of specialty belts that are designed to solve specific problems.

ENDURAPLY-LM

All the benefits of ENDURAPLY with a low modulus (LM) carcass.
The specialty low modulus carcass provides increased elasticity for conveyors with short transitions from trough to pulley face, tight convex vertical curves and crowned tail pulleys on short centered conveyors.

PROBLEMS SOLVED

- Greater forgiveness in dirty operating environments

ENDURAPLY-LMB

All the benefits of ENDURAPLY LM with a textile breaker (B) embedded in the top cover.
ENDURAPLY LMB belting includes a heavy duty transverse nylon cord breaker embedded into the top cover to heighten impact, puncture and rip resistance. The transverse cord breakers do not compromise the belts ability to wrap very small pulleys.

PROBLEMS SOLVED

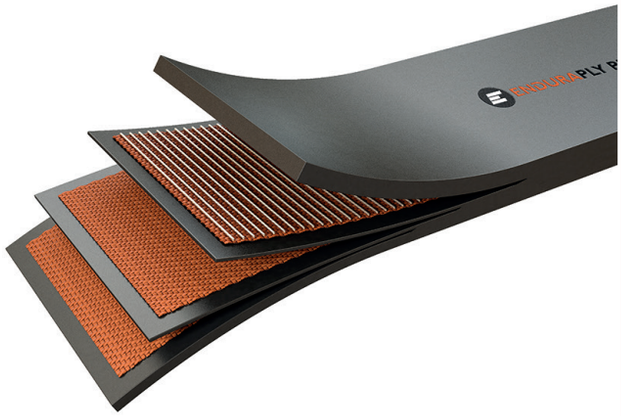
- High impact and dirty operating environments

ENDURAPLY-LM PLUS

All the benefits of ENDURAPLY LM with an elastic steelcord breaker embedded in the top cover.
ENDURAPLY LM PLUS belting can handle the most intense situations to guard against rips and punctures. The elastic steelcord breakers offer up to 500 ft-lbs of increased impact resistance and increased load support without compromising the belts ability to wrap very small pulleys.

PROBLEMS SOLVED

- High impact applications requiring excellent flexibility around pulleys
- Increased load support, puncture and rip resistance
- Eliminates rip propagation
- No adhesion compromise
- Loop sensor rip detection compatible
- Excellent cut resistance



Textile Belting Specifications

ENDURAPLY-LM Belt Data (Imperial)

	NN500/2	NN750/3	NN1200/3	NN1600/4	NN2000/4	NN2000/5
Belt Rating (PIW)	**250**	**375**	**600**	**800**	**1000**	**1000**
Number of Plies	2	3	3	4	4	5
Fabric Type	NN	NN	NN	NN	NN	NN
Breaker in Top Cover	-	-	-	-	-	-
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (in.)	0.134	0.201	0.236	0.315	0.347	0.394
Carcass Weight (lbs/sq ft)	0.795	1.106	1.453	1.801	2.026	2.252
Cover Weight for 1/32" (lbs/ sq ft)	0.187	0.187	0.187	0.187	0.187	0.187
Permanent Elongation %*	2.2	2.2	2.2	2.2	2.2	2.2
Avg Elastic Modulus (PIW)	13400	20,000	Ask	Ask	Ask	Ask
Impact Rating (ft-lbs)	450	700	1100	1400	1600	1800
Step Length (in.)	10	8	16	16	20	16
Fastener (Plate)	140	190	NR	NR	NR	NR
Fastener (Hinge)	MS-35	MS - 45	MS - 65	MS - 65	NR	NR
Fastener (Superscrew)	35/63	63/65	100/105	180/185	180/185	180/185

Heavy Duty Nylon Fabric in warp and weft.
* Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for NN 1.5% - 2.2%)
Elastic steelcord breakers increase impact resistance by as much as 500 ft-lbs. Other specifications are available upon request in Enduraply-LM, Enduraply-LMB, or Enduraply-LM Plus. Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge. Elastic transverse steelcord breakers (2mm diameter on 8mm pitch) add 0.0273 PIW/ft to belt weight (1.6 kg/sq. m.)"

ENDURAPLY LM Minimum Pulley Diameter

Inches

100% Tension	12	16	24	30	36	42
80% Tension	10	14	20	24	30	36
60% Tension	10	12	18	20	24	30
40% Tension	8	10	16	18	20	24
Snubs, Bends & Tails	8	10	16	18	20	24

Diameters are recommended to be increased 20% on winged pulleys and with high heat applications
Because NN fabrics are 20% more flexible than EP or CFW it is permissible to use 6 ply constructions for special needs

ENDURAPLY LM Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	16	18	30	36	36	42
35 degree	18	24	30	36	36	42
45 degree	24	30	36	42	42	48

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY LM Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	48	60	84	96	96	108
	35 degree	42	54	72	84	84	96
	45 degree	36	48	72	84	84	96
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	48	60	72	84	84	96
	35 degree	36	48	60	72	72	84
	45 degree	36	42	54	72	72	84
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	42	54	72	84	84	96
	35 degree	36	48	60	72	72	84
	45 degree	36	42	54	60	60	72
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	36	48	60	72	72	84
	35 degree	30	42	54	60	60	72
	45 degree	NR	36	48	54	54	72

ENDURAPLY-LM Belt Data (Imperial) (cont.)

	NN900/3 LMB	NN1050/3 LMB	NN1200/3 PLUS	NN1600/4 PLUS	NN2000/4 PLUS	NN2000/5 PLUS
Belt Rating (PIW)	**450**	**525**	**600**	**800**	**1000**	**1000**
Number of Plies	3+1	3+1	3+1	4+1	4+1	5+1
Fabric Type	NN	NN	NN	NN	NN	NN
Breaker in Top Cover	Nylon	Nylon	Steel	Steel	Steel	Steel
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (in.)	0.201	0.217	0.236	0.315	0.347	0.394
Carcass Weight (lbs/sq ft)	1.105	1.228	1.781	2.219	2.354	2.579
Cover Weight for 1/32" (lbs/ sq ft)	0.187	0.187	0.187	0.187	0.187	0.187
Permanent Elongation %*	2.2	2.2	2.2	2.2	2.2	2.2
Avg Elastic Modulus (PIW)	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (ft-lbs)	1100	1250	1600	1900	2100	2300
Step Length (in.)	12	16	16	16	20	16
Fastener (Plate)	190	190	NR	NR	NR	NR
Fastener (Hinge)	MS -55	MS -55	MS - 65	MS - 65	NR	NR
Fastener (Superscrew)	63/65	80/85	100/105	180/185	180/185	180/185

Heavy Duty Nylon Fabric in warp and weft.
* Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for NN 1.5% - 2.2%)
Elastic steelcord breakers increase impact resistance by as much as 500 ft-lbs. Other specifications are available upon request in Enduraply-LM, Enduraply-LMB, or Enduraply-LM Plus. Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge. Elastic transverse steelcord breakers (2mm diameter on 8mm pitch) add 0.0273 PIW/ft to belt weight (1.6 kg/sq. m.)"

ENDURAPLY LM Minimum Pulley Diameter

Inches

100% Tension	18	24	24	30	36	42
80% Tension	16	18	20	24	30	36
60% Tension	14	16	18	20	24	30
40% Tension	12	14	16	18	20	24
Snubs, Bends & Tails	12	14	16	18	20	24

Diameters are recommended to be increased 20% on winged pulleys and with high heat applications
Because NN fabrics are 20% more flexible than EP or CFW it is permissible to use 6 ply constructions for special needs

ENDURAPLY LM Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	30	24	36	42	42	48
35 degree	30	30	36	42	48	48
45 degree	36	36	42	48	48	54

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY LM Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	78	84	90	102	102	114
	35 degree	66	72	78	90	90	102
	45 degree	66	72	78	90	90	102
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	66	72	78	90	90	102
	35 degree	66	60	66	78	78	90
	45 degree	54	54	60	78	78	90
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	60	72	78	90	90	102
	35 degree	60	60	66	78	78	90
	45 degree	54	54	60	66	66	78
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	54	60	66	78	78	90
	35 degree	48	54	60	66	66	78
	45 degree	42	48	54	60	60	78

Textile Belting Specifications

ENDURAPLY-LM Belt Data (Metric)

	NN500/2	NN750/3	NN1200/3	NN1600/4	NN2000/4	NN2000/5
Belt Rating (N/mm)	**44**	**66**	**105**	**140**	**175**	**175**
Number of Plies	2	3	3	4	4	5
Fabric Type	NN	NN	NN	NN	NN	NN
Breaker	-	-	-	-	-	-
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (mm)	3.4	4.5	6	8	8.8	10
Carcass Weight (kg/sq. m)	3.6	4.9	7.1	8.8	9.9	11
Cover Weight for 1 mm (kg/sq. m)	1.15	1.15	1.15	1.15	1.15	1.15
Permanent Elongation %*	2.2	2.2	2.2	2.2	2.2	2.2
Avg Elastic Modulus (kN/m)	2345	Ask	Ask	Ask	Ask	Ask
Impact Rating (Joules)	550	950	1500	1900	2170	2440
Step Length (mm)	250	200	400	400	500	400
Fastener (Plate)	140	190	NR	NR	NR	NR
Fastener (Hinge)	MS-35	MS - 45	MS - 65	MS - 65	NR	NR
Fastener (Superscrew)	35/63	63/65	100/105	180/185	180/185	180/185

Heavy Duty Nylon Fabric in warp and weft.
* Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for NN 1.5% - 2.2%)
Elastic steelcord breakers increase impact resistance by as much as 500 ft-lbs. Other specifications are available upon request in Enduraply-LM, Enduraply-LMB, or Enduraply-LM Plus. Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge. Elastic transverse steelcord breakers (2mm diameter on 8mm pitch) add 0.0273 PIW/ft to belt weight (1.6 kg/sq. m.)"

ENDURAPLY LM Minimum Pulley Diameter

Millimeters

100% Tension	300	400	600	750	900	1050
80% Tension	250	350	500	600	750	900
60% Tension	250	300	450	500	600	750
40% Tension	200	250	400	450	500	600
Snubs, Bends & Tails	200	250	400	450	500	600

Diameters are recommended to be increased 20% on winged pulleys and with high heat applications
Because NN fabrics are 20% more flexible than EP or CFW it is permissible to use 6 ply constructions for special needs

ENDURAPLY LM Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	400	450	750	900	900	1050
35 degree	450	600	750	900	900	1050
45 degree	600	750	900	1050	1050	1200

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY LM Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	1220	1829	2135	2440	2440	2740
	35 degree	1067	1525	1829	2135	2135	2440
	45 degree	915	1400	1829	2135	2135	2440
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	1220	1675	1829	2135	2135	2440
	35 degree	915	1525	1525	1829	1829	2135
	45 degree	915	1375	1370	1829	1829	2135
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	1067	1525	1829	2135	2135	2440
	35 degree	915	1400	1525	1829	1829	2135
	45 degree	750	1067	1370	1525	1525	1829
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	915	1220	1525	1829	1829	2135
	35 degree	750	1067	1370	1525	1525	1829
	45 degree	NR	915	1220	1370	1370	1829

ENDURAPLY-LM Belt Data (Metric) (cont.)

	NN900/3 LMB	NN1050/3 LMB	NN1200/3 PLUS	NN1600/4 PLUS	NN2000/4 PLUS	NN2000/5 PLUS
Belt Rating (N/mm)	**79**	**92**	**105**	**140**	**175**	**175**
Number of Plies	3+1	3+1	3+1	4+1	4+1	5+1
Fabric Type	NN	NN	NN	NN	NN	NN
Breaker	Nylon	Nylon	Steel	Steel	Steel	Steel
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (mm)	5.1	5.5	6	8	8.8	10
Carcass Weight (kg/sq. m)	5.4	6	8.7	10.4	11.5	12.6
Cover Weight for 1 mm (kg/sq. m)	1.15	1.15	1.15	1.15	1.15	1.15
Permanent Elongation %*	2.2	2.2	2.2	2.2	2.2	2.2
Avg Elastic Modulus (kN/m)	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (Joules)	1500	1700	2175	2580	2850	3100
Step Length (mm)	300	400	400	400	500	400
Fastener (Plate)	190	190	NR	NR	NR	NR
Fastener (Hinge)	MS - 55	MS -55	MS - 65	MS - 65	NR	NR
Fastener (Superscrew)	63/65	80/85	100/105	180/185	180/185	180/185

Heavy Duty Nylon Fabric in warp and weft.
* Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for NN 1.5% - 2.2%)
Elastic steelcord breakers increase impact resistance by as much as 500 ft-lbs. Other specifications are available upon request in Enduraply-LM, Enduraply-LMB, or Enduraply-LM Plus. Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge. Elastic transverse steelcord breakers (2mm diameter on 8mm pitch) add 0.0273 PIW/ft to belt weight (1.6 kg/sq. m.)"

ENDURAPLY LM Minimum Pulley Diameter

Millimeters

100% Tension	450	600	600	750	900	1050
80% Tension	400	450	500	600	750	900
60% Tension	350	400	450	500	600	750
40% Tension	300	350	400	450	500	600
Snubs, Bends & Tails	300	350	400	450	500	600

Diameters are recommended to be increased 20% on winged pulleys and with high heat applications
Because NN fabrics are 20% more flexible than EP or CFW it is permissible to use 6 ply constructions for special needs

ENDURAPLY LM Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	750	600	900	1050	1050	1200
35 degree	750	750	900	1050	1200	1200
45 degree	900	900	1050	1200	1200	1370

Troughability figures above, are based upon top cover being equal to, or greater than bottom cover

ENDURAPLY LM Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	1980	2135	2285	2590	2590	2895
	35 degree	1675	1829	1980	2285	2285	2590
	45 degree	1675	1829	1980	2285	2285	2590
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	1675	1829	1980	2285	2285	2590
	35 degree	1675	1525	1675	1980	1980	2285
	45 degree	1370	1370	1525	1980	1980	2285
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	1525	1829	1980	2285	2285	2590
	35 degree	1525	1525	1675	1980	1980	2285
	45 degree	1370	1370	1525	1675	1675	1980
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	1370	1525	1675	1980	1980	2285
	35 degree	1220	1370	1525	1675	1675	1980
	45 degree	1067	1220	1370	1525	1525	1980

ENDURALON

Textile Belting

FOR SECONDARY APPLICATIONS

This polyester-nylon flat weave conveyor belt is designed with a full traditional carcass gauge and will successfully handle all aggregates, mining and industrial products up to and including 8 inches in size. It has excellent load support, impact and stretch characteristics. The weft has been upgraded to increase rip resistance and provide proper splice strength when operating with fasteners. Excellent reliability and economy for all but the most severe applications.

Markets

Aggregate, Bulk Handling Terminals, Cement, Coal, Mining, Pulp & Paper, Recycling, Sand & Gravel, Steel Production, Wood Production.

Applications

Primary Crushers, Secondary Crushers, Pit Belts, Stackers, Ship Unloaders, Mainlines, Coal Prep Plant, Log Debarkers, Long Decks, Shredders.

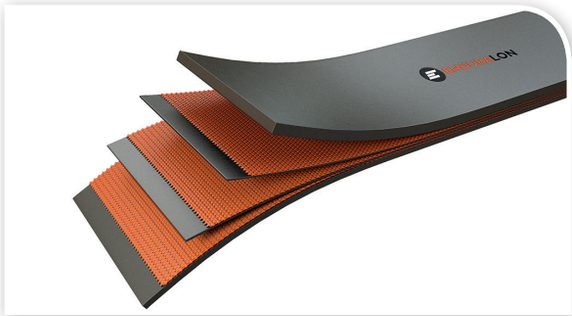
Advantages

- High tear strength
- Easy Splicing
- Excellent flexibility
- Low Stretch
- Robust carcass gauges
- Widest Widths 6600 mm - no longitudinal splices

DID YOU KNOW:

You can add an elastic steelcord breaker (Plus) to the top cover and increase puncture and rip resistance by 50% without compromising pulley diameter.









ENDURALON Belt Data (Imperial)

	EP400/2	EP500/3	EP630/3	EP800/3	EP800/4	EP1050/3
Belt Rating (PIW)	**250**	**330**	**375**	**500**	**500**	**600**
Number of Plies	2	3	3	3	4	3
Fabric Type	EP	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (in.)	0.118	0.161	0.177	0.189	0.236	0.213
Carcass Weight (lbs/sq ft)	0.7	0.96	1.04	1.11	1.39	1.25
Cover Weight for 1/32" (lbs/ sq ft)	0.187	0.187	0.187	0.187	0.187	0.187
Permanent Elongation %	0.8	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (PIW)	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (ft-lbs)	450	600	675	825	885	1000
Step Length (in.)	10	8	10	12	10	15
Fastener (Plate)	140	190	190	190	NR	NR
Fastener (Hinge)	MS - 35	MS - 45	MS - 45	MS - 55	MS - 55	MS - 55
Fastener (Superscrew)	35	63/65	63/65	80/85	80/85	100/105

*Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for EP 1.0%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.
Minimum of 9.1 to 9.6 safety factor utilized in reaching tension rating.

ENDURALON Minimum Pulley Diameter

Inches

100% Tension	12	16	18	20	24	20
80% Tension	10	14	16	18	20	18
60% Tension	10	12	14	16	16	16
40% Tension	8	10	12	14	14	16
Snubs, Bends & Tails	8	10	12	14	14	14

ENDURALON Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	16	18	20	24	24	24
35 degree	18	24	24	30	30	30
45 degree	24	30	30	36	36	36

ENDURALON Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	48	60	60	72	84	84
	35 degree	42	54	54	60	72	72
	45 degree	36	48	48	54	72	66
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	48	54	60	72	72	72
	35 degree	36	48	48	54	60	60
	45 degree	36	42	42	48	54	60
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	42	48	54	60	60	72
	35 degree	36	42	48	54	54	60
	45 degree	30	36	42	48	48	54
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	36	42	48	54	54	60
	35 degree	30	36	42	48	48	54
	45 degree	NR	30	36	42	42	48

Textile Belting Specifications

ENDURALON Belt Data (Imperial) (cont.)

	EP1000/4	EP1250/3	EP1400/4	EP1600/4	EP2000/5
Belt Rating (PIW)	**600**	**800**	**800**	**1000**	**1250**
Number of Plies	4	3	4	4	5
Fabric Type	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (in.)	0.252	0.236	0.284	0.315	0.394
Carcass Weight (lbs/sq ft)	1.47	1.39	1.66	1.86	2.33
Cover Weight for 1/32" (lbs/ sq ft)	0.187	0.187	0.187	0.187	0.187
Permanent Elongation %	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (PIW)	Ask	Ask	Ask	Ask	Ask
Impact Rating (ft-lbs)	1070	1100	1200	1350	1450
Step Length (in.)	12	18	15	18	18
Fastener (Plate)	NR	NR	NR	NR	NR
Fastener (Hinge)	MS - 55	MS - 65	MS - 65	NR	NR
Fastener (Superscrew)	100/105	125	125	180	200

*Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for EP 1.0%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.
Minimum of 9.1 to 9.6 safety factor utilized in reaching tension rating.

ENDURALON Minimum Pulley Diameter

Inches

100% Tension	24	24	30	36	42
80% Tension	20	20	24	30	36
60% Tension	18	18	20	24	30
40% Tension	16	16	18	20	24
Snubs, Bends & Tails	16	16	18	20	24

ENDURALON Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	30	24	30	30	36
35 degree	36	30	36	36	42
45 degree	42	36	42	42	48

ENDURALON Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	84	84	96	96	116
	35 degree	84	72	84	84	108
	45 degree	72	72	84	84	108
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	84	72	84	84	108
	35 degree	72	60	72	72	96
	45 degree	66	54	72	72	96
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	72	72	84	84	108
	35 degree	66	60	72	72	96
	45 degree	60	54	60	60	84
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	66	60	72	72	96
	35 degree	60	54	60	60	84
	45 degree	54	48	54	54	78

ENDURALON Belt Data (Metric)

	EP400/2	EP500/3	EP630/3	EP800/3	EP800/4	EP1050/3
Belt Rating (N/mm)	**44**	**58**	**66**	**88**	**88**	**105**
Number of Plies	2	3	3	3	4	3
Fabric Type	EP	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (mm)	3.0	4.1	4.5	4.8	6.0	5.4
Carcass Weight (kg/sq. m)	3.4	4.7	5.1	5.4	6.8	6.1
Cover Weight for 1 mm (kg/sq. m)	1.15	1.15	1.15	1.15	1.15	1.15
Permanent Elongation %	0.8	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (kN/m)	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (Joules)	600	800	900	1100	1200	1350
Step Length (mm)	250	200	250	300	250	375
Fastener (Plate)	140	190	190	190	NR	NR
Fastener (Hinge)	MS - 35	MS - 45	MS - 45	MS - 55	MS - 55	MS - 55
Fastener (Superscrew)	35	63/65	63/65	80/85	80/85	100/105

*Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for EP 1.0%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.
Minimum of 9.1 to 9.6 safety factor utilized in reaching tension rating.

ENDURALON Minimum Pulley Diameter

Millimeters

100% Tension	300	400	450	500	600	500
80% Tension	250	350	400	450	500	450
60% Tension	250	300	350	400	400	400
40% Tension	200	250	300	400	350	400
Snubs, Bends & Tails	200	250	300	350	350	350

ENDURALON Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	400	450	500	600	600	600
35 degree	450	600	600	750	750	750
45 degree	600	750	750	900	900	900

ENDURALON Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	1220	1525	1525	1829	2135	2135
	35 degree	1067	1370	1370	1525	1829	1829
	45 degree	915	1220	1220	1370	1829	1675
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	1220	1370	1525	1829	1829	1829
	35 degree	915	1220	1220	1370	1525	1525
	45 degree	915	1067	1067	1220	1370	1525
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	1067	1220	1370	1525	1525	1829
	35 degree	915	1067	1220	1370	1370	1525
	45 degree	762	915	1067	1220	1220	1370
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	915	1067	1220	1370	1370	1525
	35 degree	762	915	1067	1220	1220	1370
	45 degree	NR	762	915	1067	1067	1220

Textile Belting Specifications

ENDURALON Belt Data (Metric) (cont.)

	EP1000/4	EP1250/3	EP1400/4	EP1600/4	EP2000/5
Belt Rating (N/mm)	**105**	**140**	**140**	**175**	**219**
Number of Plies	4	3	4	4	5
Fabric Type	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (mm)	6.4	6.0	7.2	8.0	10.0
Carcass Weight (kg/sq. m)	7.2	6.8	8.1	9.1	11.4
Cover Weight for 1 mm (kg/sq. m)	1.15	1.15	1.15	1.15	1.15
Permanent Elongation %	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (kN/m)	Ask	Ask	Ask	Ask	Ask
Impact Rating (Joules)	1450	1500	1625	1800	2000
Step Length (mm)	300	450	375	450	450
Fastener (Plate)	NR	NR	NR	NR	NR
Fastener (Hinge)	MS - 55	MS - 65	MS - 65	NR	NR
Fastener (Superscrew)	100/105	125	125	180	200

*Total elongation consists of permanent elongation plus elastic elongation. (Elastic elongation for EP 1.0%)
Wherever possible, the carcass gauge plus the bottom cover should, at least equal the top cover gauge.
Minimum of 9.1 to 9.6 safety factor utilized in reaching tension rating.

ENDURALON Minimum Pulley Diameter

Millimeters

100% Tension	600	600	750	900	1050
80% Tension	500	500	600	750	900
60% Tension	450	450	500	600	750
40% Tension	400	400	450	500	600
Snubs, Bends & Tails	400	400	450	500	600

ENDURALON Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	750	600	750	750	900
35 degree	900	750	900	900	1050
45 degree	1050	900	1050	1050	1200

ENDURALON Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	2135	2135	2440	2440	2946
	35 degree	2135	1829	2135	2135	2740
	45 degree	1829	1829	2135	2135	2740
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	2135	1829	2135	2135	2740
	35 degree	1829	1525	1829	1829	2440
	45 degree	1675	1370	1829	1829	2440
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	1829	1829	2135	2135	2740
	35 degree	1675	1525	1829	1829	2440
	45 degree	1525	1370	1525	1525	2135
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	1675	1525	1829	1829	2440
	35 degree	1525	1370	1525	1525	2135
	45 degree	1370	1220	1370	1370	1981

ENDURASPAR

Textile Belting

FOR LIGHTER APPLICATIONS

This economical product is best suited for lightly loaded and modest impact applications. This polyester-nylon plain weave conveyor belt has a reduced carcass gauge but still has excellent predictable load support and stretch characteristics. The nylon weft provides superior durability.

Markets

Aggregate, Cement, Coal, Power Generation, Steel Production.

Applications

General light applications.

Advantages

- Good load support
- Easy Splicing
- Excellent flexibility
- Low Stretch



Textile Belting Specifications

ENDURASPAR Belt Data (Imperial)

	EP250/2	EP315/2	EP400/2	EP400/3	EP500/3	EP500/4
Belt Rating (PIW)	**170**	**220**	**250**	**250**	**330**	**330**
Number of Plies	2	2	2	3	3	4
Fabric Type	EP	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (in.)	0.079	0.087	0.106	0.118	0.130	0.158
Carcass Weight (lbs/sq ft)	0.491	0.512	0.635	0.717	0.758	0.942
Cover Weight for 1/32" (lbs/ sq ft)	0.189	0.189	0.189	0.189	0.189	0.189
Permanent Elongation %	1.0	1.0	1.0	1.0	1.0	1.0
Impact Rating (ft-lbs)	220	300	400	370	520	480
Step Length (in.)	5	6	8	5	6	5
Fastener (Plate)	140	140	140	140	190	190
Fastener (Hinge)	MS - 35	MS - 35	MS - 45	MS - 45	MS - 45	MS - 45
Fastener (Superscrew)	35	35	35	63/65	63/65	63/65

ENDURASPAR Minimum Pulley Diameter

Inches

100% Tension	10	10	12	12	14	16
80% Tension	8	8	10	10	12	14
60% Tension	8	8	10	10	12	14
40% Tension	6	6	8	8	10	12
Snubs, Bends & Tails	6	6	8	8	10	12

ENDURASPAR Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	12	14	16	16	18	20
35 degree	16	18	20	20	24	24
45 degree	20	24	24	24	30	30

ENDURASPAR Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	36	42	48	48	54	60
	35 degree	30	36	42	42	48	54
	45 degree	24	30	36	36	42	48
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	30	36	48	42	48	54
	35 degree	24	30	36	36	36	48
	45 degree	18	24	36	30	30	42
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	NR	30	42	36	42	48
	35 degree	NR	24	36	30	36	36
	45 degree	NR	18	30	24	30	30
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	NR	NR	36	NR	NR	NR
	35 degree	NR	NR	30	NR	NR	NR
	45 degree	NR	NR	NR	NR	NR	NR

ENDURASPAR Belt Data (Imperial) (cont.)

	EP600/3	EP630/4	EP800/3	EP800/4	EP1000/4
Belt Rating (PIW)	**375**	**440**	**500**	**500**	**600**
Number of Plies	3	4	3	4	4
Fabric Type	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (in.)	0.158	0.173	0.177	0.205	0.236
Carcass Weight (lbs/sq ft)	0.921	1.003	1.085	1.27	1.433
Cover Weight for 1/32" (lbs/ sq ft)	0.189	0.189	0.189	0.189	0.189
Permanent Elongation %	1.0	1.0	1.0	1.0	1.0
Impact Rating (ft-lbs)	560	590	640	660	950
Step Length (in.)	8	6	10	8	10
Fastener (Plate)	190	190	190	190	NR
Fastener (Hinge)	MS - 45	MS - 45	MS - 55	MS - 55	MS - 55
Fastener (Superscrew)	63/65	80/85	100/105	100/105	100/105

ENDURASPAR Minimum Pulley Diameter

Inches

100% Tension	18	18	20	24	24
80% Tension	16	16	18	20	20
60% Tension	16	16	16	16	18
40% Tension	12	14	14	12	16
Snubs, Bends & Tails	12	14	14	12	16

ENDURASPAR Troughability: Minimum belt width acceptable to trough properly when running empty

Inches

20 degree	20	24	24	24	30
35 degree	24	30	30	30	36
45 degree	30	36	36	36	42

ENDURASPAR Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Inches

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	60	66	72	72	84
	35 degree	54	60	60	60	72
	45 degree	48	54	54	54	72
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	60	60	60	66	72
	35 degree	48	54	60	60	60
	45 degree	42	48	48	48	54
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	54	54	54	60	72
	35 degree	48	48	54	54	60
	45 degree	42	42	48	48	54
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	48	48	48	54	60
	35 degree	42	42	48	48	54
	45 degree	36	36	42	42	48

Textile Belting Specifications

ENDURASPAR Belt Data (Metric)

	EP250/2	EP315/2	EP400/2	EP400/3	EP500/3	EP500/4
Belt Rating (N/mm)	**30**	**39**	**44**	**45**	**58**	**60**
Number of Plies	2	2	2	3	3	4
Fabric Type	EP	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (mm)	2.0	2.2	2.7	3.0	3.3	4.0
Carcass Weight (kg/sq. m)	2.4	2.5	3.1	3.5	3.7	4.6
Cover Weight for 1 mm (kg/sq. m)	1.16	1.16	1.16	1.16	1.16	1.16
Permanent Elongation %	1.0	1.0	1.0	1.0	1.0	1.0
Impact Rating (Joules)	300	400	550	500	700	650
Step Length (mm)	125	160	200	125	160	125
Fastener (Plate)	140	140	140	140	190	190
Fastener (Hinge)	MS - 35	MS - 35	MS - 45	MS - 45	MS - 45	MS - 45
Fastener (Superscrew)	35	35	35	63/65	63/65	63/65

ENDURASPAR Minimum Pulley Diameter

Millimeters

100% Tension	250	250	300	300	350	400
80% Tension	200	200	250	250	300	350
60% Tension	200	200	250	250	300	350
40% Tension	160	160	200	200	250	300
Snubs, Bends & Tails	160	160	200	200	250	300

ENDURASPAR Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	300	350	400	400	450	500
35 degree	400	450	500	500	600	600
45 degree	500	600	600	600	750	750

ENDURASPAR Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	915	1067	1220	1220	1372	1524
	35 degree	762	915	1067	1067	1220	1372
	45 degree	600	762	915	915	1067	1220
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	762	915	1220	1067	1220	1372
	35 degree	610	762	915	915	915	1220
	45 degree	457	610	915	762	762	1067
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	NR	762	1067	915	1067	1220
	35 degree	NR	610	915	762	915	915
	45 degree	NR	457	762	610	762	762
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	NR	NR	915	NR	NR	NR
	35 degree	NR	NR	762	NR	NR	NR
	45 degree	NR	NR	NR	NR	NR	NR

ENDURASPAR Belt Data (Metric) (cont.)

	EP600/3	EP630/4	EP800/3	EP800/4	EP1000/4
Belt Rating (N/mm)	**66**	**77**	**88**	**88**	**105**
Number of Plies	3	4	3	4	4
Fabric Type	EP	EP	EP	EP	EP
Fabric Weave	Flat	Flat	Flat	Flat	Flat
Carcass Gauge (mm)	4.0	4.4	4.5	5.2	6.0
Carcass Weight (kg/sq. m)	4.5	4.9	5.3	6.2	7
Cover Weight for 1 mm (kg/sq. m)	1.16	1.16	1.16	1.16	1.16
Permanent Elongation %	1.0	1.0	1.0	1.0	1.0
Impact Rating (Joules)	760	800	870	900	1300
Step Length (mm)	200	160	250	200	250
Fastener (Plate)	190	190	190	190	NR
Fastener (Hinge)	MS - 45	MS - 45	MS - 55	MS - 55	MS - 55
Fastener (Superscrew)	63/65	80/85	100/105	100/105	100/105

ENDURASPAR Minimum Pulley Diameter

Millimeters

100% Tension	450	450	500	600	600
80% Tension	400	400	450	500	500
60% Tension	400	400	400	400	450
40% Tension	300	350	350	300	400
Snubs, Bends & Tails	300	350	350	300	400

ENDURASPAR Troughability: Minimum belt width acceptable to trough properly when running empty

Millimeters

20 degree	500	600	600	600	750
35 degree	600	750	750	750	900
45 degree	750	900	900	900	1050

ENDURASPAR Load Support: Maximum belt width acceptable to support a fully loaded belt handling a specific density material on a specific trough angle

Millimeters

0-40 lb./cu. Ft (0-640 kg/cu. M)	20 degree	1524	1676	1829	1829	2135
	35 degree	1372	1525	1524	1524	1829
	45 degree	1220	1372	1372	1372	1829
41 - 80 lb./cu. Ft (641 - 1280kg/cu. M)	20 degree	1524	1525	1524	1676	1829
	35 degree	1220	1372	1524	1524	1524
	45 degree	1067	1220	1220	1220	1372
81 - 120 lb./cu. Ft (1281 - 1920kg/cu. M)	20 degree	1372	1372	1372	1524	1829
	35 degree	1220	1220	1372	1372	1524
	45 degree	1067	1067	1220	1220	1372
120+ lb./cu. Ft (1920+ kg/cu. M)	20 degree	1220	1220	1525	1372	1524
	35 degree	1067	1067	1220	1220	1372
	45 degree	915	915	1067	1067	1220

BREAKERS

Adding breakers to our standard belting gives a wide range of capabilities depending on their construction and position in the belt.

OPEN MESH BREAKERS (OMB)

The greater distance rubber is from the carcass, or stabilizer, the less effective it is for abrasion, cutting or gouging. For that reason, in very thick covers an internal stabilizer with open flow construction is often added.

ADVANTAGE

- Increased cut and gouge protection

TEXTILE CORD BREAKERS (B)

Most often used in textile belts because its adhesion is equal to the textile carcass. It can be used as a method of increasing load support and impact resistance, yet not compromising flexibility around pulleys.

ADVANTAGE

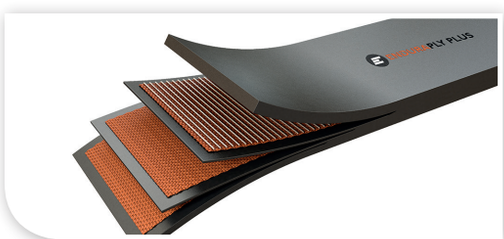
- Increased load support, impact, puncture and rip resistance

ELASTIC STEELCORD BREAKERS (PLUS)

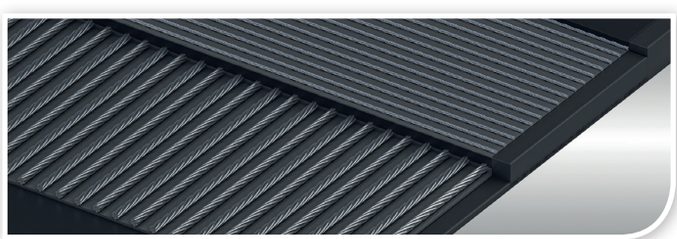
PLUS breakers utilize specially wound elastic steelcords that create a shield for the carcass from sharp cutting and impacting objects, thus improving belt puncture resistance. They also increase load support without any compromise of minimum pulley diameters. The natural adhesion of steel to rubber is as much as 50 times that of textile making the product robust with extreme adhesion integrity. The PLUS breaker is often added to both Enduraply and Endurasteel belts. When used with Endurasteel belting these transverse breaker cords solve a problem that is inherent in all steelcord belts; the reliance on rubber between the cords to provide lateral strength. At the moment of impact, the cushion rubber between the cords is put into tension and becomes very susceptible to puncturing and cutting. To solve this problem, the elastic steelcord breakers absorb the impact tensions and provide maximum shield protection.

ADVANTAGES

- Increased load support, puncture and rip resistance
- Eliminates rip propagation
- No adhesion compromise
- Loop sensor rip detection compatible
- Excellent cut resistance



Enduraply Plus



Endurasteel Plus

LOW MODULUS BELTING

PROBLEM SOLVERS

Low modulus belting has the unique property of excellent elasticity that can be deployed in a number of technically demanding situations to help solve some engineering problems.

PROBLEMS SOLVED

- Can handle tight radius curves
- Excellent for systems with short transitions
- Can wrap small pulleys
- Great for crowned pulleys on short centered conveyors
- Forgiving in a dirty operating environment

Endurance Belting has several low modulus belting options:

ENDURABORE

Tunnel boring projects require conveyor belting that is designed to be reliable, durable, efficient and effective no matter how challenging conditions are. Backed by decades of design experience, Endurabore belts integrate the most innovative technologies with features to excel under the most challenging tunnel boring applications. Endurance Belting offers a range of fire resistant tunneling products, from flat belting for the TBM tail, to specialty belting for elevating material to the surface with High Angle Conveyors (HAC) or more conventional Sidewall belting.

ENDURAPLY-LM

Enduraply-LM is the go to low modulus belt for the mining and industrial sectors of the market. Offering all the benefits of low modulus belting with increased carcass weights to deal with higher impact, more aggressive working environments.

DID YOU KNOW:

Adding a textile (B) or steelcord (Plus) breaker embedded in the top cover heightens impact, puncture and rip resistance. The Plus breakers offer up to 500 ft-lbs of increased impact resistance and increased load support without compromising the belts ability to wrap small pulleys.

ENDURASTABLE

Self Tracking Belting

FOR THE SPECIALTY MATERIAL HANDLING APPLICATIONS

ENDURASTABLE is available in textile (EP) or steelcord (ST) belting. It has unique panels of breakers positioned in the top and bottom covers to match the size of the center carrying idler for your system. This belt has the ability to internally induce self tracking on troughed systems. This unique belt and its self tracking properties are great, especially for reversible systems.

Markets

Aggregate, Cement, Coal, Hard Rock, Power Generation, Steel Production.

Applications

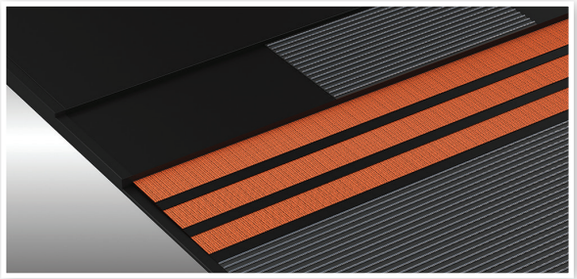
Concave curved systems, Reversing systems, High troughing situations.

Advantages

- Self tracking on troughed systems
- Excellent for tracking reversing systems
- Deep troughability can allow for increased capacity
- Resists lifting on concave curve system

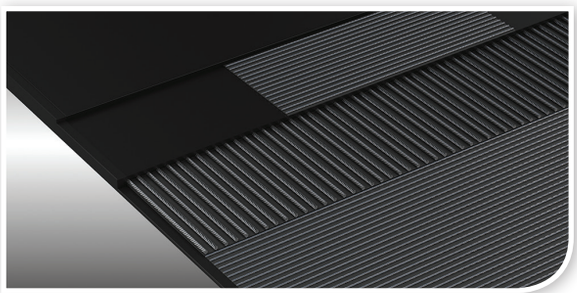






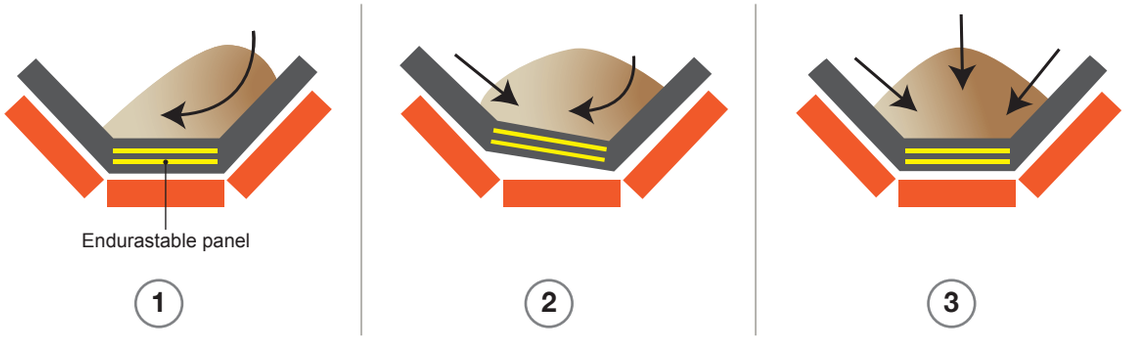
ASK ABOUT OUR TEXTILE BREAKERS

Endurastable is available with our newly developed economical textile breakers.



HOW DOES IT WORK?

The bridging effect of the breaker panels creates a rigid section and adds weight and rigidity to the middle of the belt. These design features give the belt its self tracking properties by driving the belt down into the trough, discouraging it from climbing the idlers.



1. The material shifts or is side loaded
2. This naturally causes the belt to want to ride up the idler, however the stiff center panel prevents the belt from climbing the idler
3. This forces the belt back down in the center of the idler

DO I NEED A SPECIAL CONVEYOR SYSTEM?

No, your existing system can be retrofitted with an Endurastable belt. We will need to take some measurements of your conveyor so that we can tailor the belt for your system, but any system can enjoy the benefits of this self track belt. Converting to an Endurastable belt will offer a number of benefits over a conventional belt:

- Keeping the belt tracking properly will increase lifetime of the belt
- Less maintenance and downtime dealing with the conveyor
- Offers excellent tracking for reversible conveyors

ENDURANCE X-RAY VISION

The Endurance steelcord X-Ray Vision Service utilizes a portable manually placed system, which allows for easy and temporary installation on any conveyor. With no capital investment required and very little down time, our technicians can X-Ray the entire length of the belt while running up to 12m/sec.

BENEFITS OF ENDURANCE X-RAY VISION

ONGOING CONVEYOR PREVENTIVE MAINTENANCE PROGRAM

- Our analysis allows your staff to make critical proactive changes to the system and plan maintenance belt repairs to prevent unexpected failures and down time.

BELT DAMAGING EVENT ANALYSIS

- After an unexpected belt damaging event has occurred, we are on-call to travel to site to assist in damage assessment & repair planning for safe fast recommissioning & start-up.

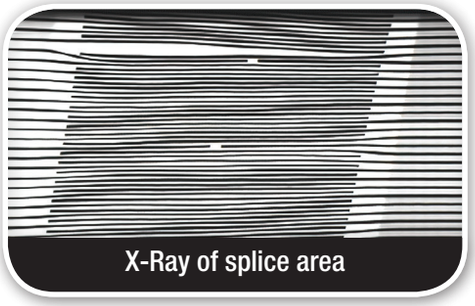
SPLICE INSPECTION

- Check that splice procedures and best practices are followed on ST-Belt Splices
- If the splice is done poorly, it can create a dangerous situation for personnel and equipment.





X-Ray of broken cords



X-Ray of splice area



ENDURANCE X-RAY VISION OFFERS PROTECTION

PROTECT your People

Safety is the first priority for your organization.
Protect your people and mitigate disastrous outcomes caused by unseen belt damage.

PROTECT your Production

Mitigate costly unexpected down time. Protect your production with proactive maintenance guided by regularly inspecting and reviewing the internal condition of your steelcord belt.



PROTECT your Equipment

Damaged or broken belts can wreak havoc to your conveying system. Protect your equipment and get ahead of any issues by scheduling regular inspections of your steelcord belts.

PROTECT your Investment

A steelcord conveyor belt is a significant expense. Protect your investment and have small problems identified and dealt with before they create bigger problems.

RIP DETECTION

RIP DETECTION AVAILABLE WITH OUR STEELCORD AND TEXTILE BELTS

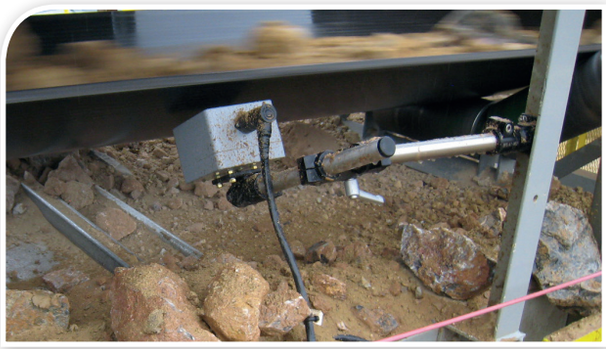
The newest generation system offered by Coal Control provides superior rip protection and a wide range of user friendly features that make the system simple to administer. Mitigating unforeseen belt failure, reducing the operational cost associated with downtime and the need to carry a spare belt on location are the key reasons many users consider the benefits of rip detection.

Coal Control focuses on definitive analytical software that assesses real time working conditions allowing the user to be aware of a potential problem and where it is before it occurs.

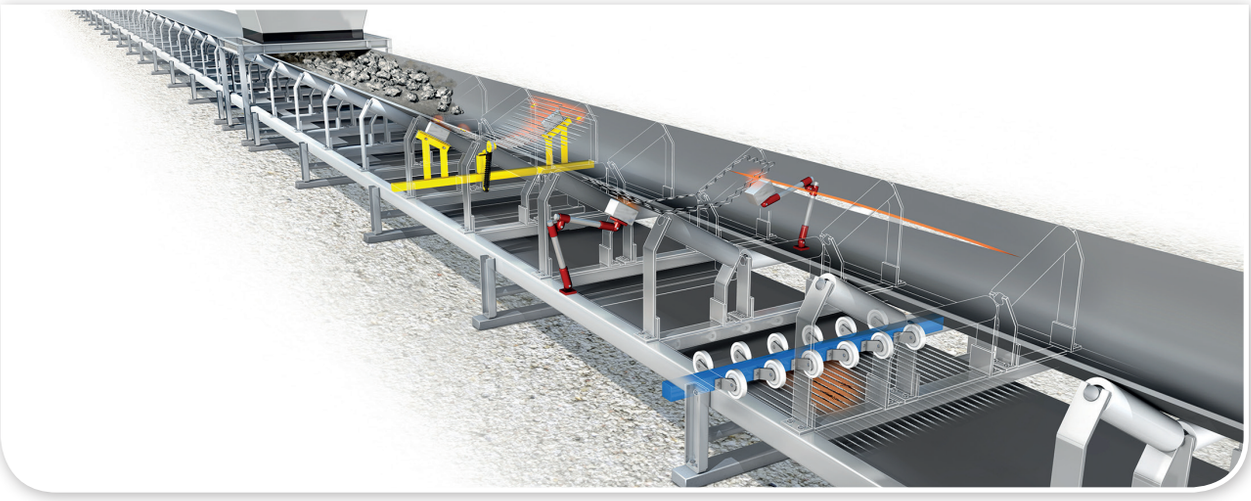
Learn more about coal control **at coal-control.com**

Advantages

- Strongest impact shielded loop antennae
- Strongest signal transmission
- Advanced analytical software
- Smartphone notification capable
- User friendly







ENDURATHERM

FOR HIGH HEAT MATERIAL HANDLING APPLICATIONS

Technologically, more advancements have been made to upgrading the belt life of heat resistant belting than most other sectors of belting. As a result the decisions by customers on which belt to use for a specific application have become much more challenging.

No longer is heat resistant belting one sulphur cured SBR or EPDM belt. Curing agents have changed from sulphur to peroxide resulting in improved resistance to hardening and cracking.

Additionally, modified base elastomers have been developed (EPR/EPM) that improve heat range, simplified splicing and in some cases improved abrasion resistance.

Markets

Cement Plants, Steel Mills, Pelletizing Plants, Lime Plants, Smelters, Foundries, Potash Processing.

Advantages

- Anti-cracking
- Splicing reliability
- Maintains belting flexibility

Applications

Cement clinker, Ore pelletizing, Sintering and coking, Calcined lime, Smelting and refining, Steel mills.

Enduratherm

COVERS

TEA - SBR HEAT
An entry level S.B.R. heat resistant compound designed to give a normal (D-Series) abrasion grade belting, increased life in a moderately elevated heat situation. Splicing and abrasion are very good and easily performed. Cover surface cracking can, however, occur when confronted with heat spikes over 150°C. Used effectively in drying situations.

TEB - CIIR HEAT-CHEMICAL
Is a chlorinated BUTYL heat and chemical resistant belt capable of handling material to 180-200°C. Used extensively for handling warm to hot cement-avoiding belt curl as well as for chemical resistance. Noted for long term resistance to weathering and leaching.

TEC - EPDM HEAT
Is an economical EPDM utilizing a peroxide curing agent to provide excellent anti-cracking in high heat situations. This compound will perform most of your regular day to day heat belt needs. Splicing can be performed efficiently and abrasion resistance is good for all but the most abrasive situations. Used for most cement, and hot sand applications.

TEJ - EPDM HEAT-FLAME
Offers economical EPDM heat resistance combined with practical and reliable flame retardancy. Commonly used in cement and steel industries.

TEM - EPM HEAT
Offers excellent EPM technology at an economical cost. Excellent anti-cracking and good abrasion resistance. Excellent adhesions provide ease in splicing as well as longterm joint life. Used in applications where continual increased heat spikes need to be tolerated.

TEX-EPR-HC HEAT-ABRASION
Is the current “state of the art” EPR offering the finest technology presently available.
Excellent anti-cracking, extreme heat resistance, “Outstanding” abrasion resistance, easy splicing, TEX has it all. Used for applications where abrasion, extreme heat, and long term anti-cracking resistance can significantly improve production.

TJX - EPR HEAT-FLAME ABRASION
This cover compound is similar to TEX, but offers the added protection of reliable flame retardancy. This added protection is possible with only slight compromise to the other characteristics.

TEG - NBR HEAT-OIL
Utilizes a heat resistant NITRILE compound to provide a blended oil and heat resistance capability. This cover compound is commonly used for hot tar and asphalt handling.



DID YOU KNOW:

It is important to differentiate belt surface and lumpy material heat ratings when evaluating your need.

COVER GRADE	Base Elastomer	Surface Temp.	Material Temp. Fines (Max.)	Material Temp. Lumpy (Max.)	Elevator Service	Anti Cracking	Oil Resistance	Flame Resistance	Max Abrasion cu mm DIN 53516 / ISO4649	Hot Spliceability
TEA	S.B.R.	130°C / 266°F	130°C / 266°F	150°C / 300°F	80°C/ 175°F	Good	No	No	150	Excellent
TEB	CIIR	150°C / 300°F	180°C / 350°F	175°C / 350°F	130°C./ 266°F	Very good	No	No	200	Excellent
TEC	EPDM	180°C / 350°F	180°C / 350°F	350°C / 660°F	150°C / 300°F	Very good	No	No	200	Good
TEM	EPM	180°C / 350°F	200°C / 400°F	400°C / 750°F	150°C / 300°F	Excellent	No	No	150	Very good
TEX	EPM	200°C / 400°F	200°C / 400°F	400°C / 750°F	150°C / 300°F	Superior	No	No	110	Excellent
TEJ	EPDM	180°C / 350°F	200°C / 400°F	250°C / 480°F	150°C / 300°F	Very good	No	YES (ISO-340)	200	Good
TJX	EPR	180°C / 350°F	200°C / 400°F	250°C / 480°F	150°C / 300°F	Excellent	No	YES (ISO-340)	120	Excellent
TEG	NBR	130°C / 266°F	150°C / 300°F	150°C / 300°F	NR	Fair	Yes	No	220	Good

TEG must have oil present in material handled to resist cracking at elevated temperatures.

CARCASSES

There are a number of carcass options for our high heat Enduratherm belting. Commonly used carcasses such as polyester and heat resistant (Type 6.6) nylon lose strength at about 150°C (300°F.). These standard carcasses also melt at approximately 250°C (485°F.) so insulation and isolation are often a necessity. Rubber functions as an insulator, making it advisable to maintain sufficient top cover for insulation. Alternatively, specialty carcass materials have the ability to resist and shield against extreme heat.

	Polyester-Nylon	Type 6.6 Nylon	Steelcarcass
Type	EP	HN or NG	M or E
Benefits	Economical Good heat stability Low stretch	Outstanding adhesions and splice strength.	Economical vs Aramid Wrap very small pulleys Excellent retention of physical characteristics at very elevated temperatures.

BREAKERS

Breakers are used to achieve a number of goals in heat applications:

- Provide load support, puncture and rip protection.
- Prevent belt splitting when rubber between the cords in steelcord belts becomes brittle
- Shield and insulate the carcass from “red hot” material causing carcass burn through.

Common breakers used for heat applications are Basalt and steelcord breakers

- Basalt (BF) shields are insulators and isolators protecting the carcass from overheating reducing heat by 40°C. They are also extremely heat stable to very high temperatures.
- Elastic steelcord (SF) breakers are impervious to heat and are extremely effective in preventing “red hot” burn through.



DID YOU KNOW:

Insulation breakers can reduce heat exposure to the carcass by as much as 40C when installed into the top cover.

Steelcord PLUS breakers can provide outstanding burn through from red hot material.

Enduratherm

ENDURATHERM

COMPOUND	TEA	TEA	TEB	TEC	TEC	TEC	TEM	TEX	TEX
Fabric	EP	EP	EP	EP	EP	EP	EP	EP	EP
Elastomer	SBR	SBR	CIIR	EPDM	EPDM	EPDM	EPM	EPR	EPR
Rating (PIW)	250	330	330	250	330	330	330	330	330
Rating (N/mm)	44	58	58	44	58	58	58	58	58
Plies	3	3	3	3	3	3	3	3	3
Carcass gauge (inches)	0.108	0.168	0.168	0.108	0.168	0.168	0.201	0.118	0.118
Carcass gauge (mm)	2.7	4.5	4.5	2.7	4.5	4.5	5.1	3.0	3.0
Carcass Wt. (lbs/sq ft)	0.634	1.022	1.022	0.593	0.981	0.981	1.124	0.736	0.736
Carcass Wt. (kg/sq m)	3.1	5.0	5.0	2.9	4.8	4.8	5.5	3.6	3.6
Cover 1/32" Wt. (lbs/sq ft)	0.184	0.184	0.184	0.174	0.174	0.174	0.176	0.183	0.183
Cover 1 mm Wt. (kg/sq m)	1.13	1.13	1.13	1.07	1.07	1.07	1.085	1.128	1.128
Top cover (inches)	0.188	0.188	0.188	0.236	0.236	0.354	0.236	0.197	0.236
Top cover (mm)	4.8	4.8	4.8	6.0	6.0	9.0	6.0	4.5	6.0
Bottom cover (inches)	0.063	0.063	0.063	0.079	0.079	0.079	0.059	0.059	0.079
Bottom cover (mm)	1.6	1.6	1.6	2.0	2.0	2.0	1.5	1.5	2.0
Abrasion rating (cumm)	150	150	150	200	200	200	150	110	110

DID YOU KNOW:

All EP belt strengths are available in TEA, TEB and TEC grades.

ENDURAWOOD

FOR THE WOOD HANDLING INDUSTRY

The wood handling industry has unique and demanding operational conditions, having to deal with chemicals (terpenes), cold weather (-60F), cutting and gouging, extreme impacting and the need for low friction belts to slide across steel conveyor beds. The Endurawood line of belting was specifically designed to meet these challenges and provide longer term reliable service.

ENDURAWOOD XL (2 PLY 250 PIW)

Ideal for woodchips and bark, the Endurawood XL offers excellent light duty flexibility and offers strong fastener holding from polyester-nylon (Flat weave) fabric with enhanced weft cords. Terpene resistant covers (GMF) ensure both low temperature operation (-40c) and excellent abrasion resistance.

ENDURAWOOD M & XM (3 PLY 375 PIW)

Designed for small logs and slabs, the Endurawood M with it's 3 ply construction provides increased impact resistance and the ability to hot or cold splice with high efficiency. Terpene resistant covers (GMF) ensure both low temperature operation (-40c) and excellent abrasion resistance.

ENDURAWOOD XH & XXH (3 PLY 600 PIW)

This heavy log belt utilizes a special polyester-nylon crowfoot weave with enhanced weft and heavy gauge high quality skim rubber to absorb the extreme shock of larger logs. Cover rubber is a high tensile abrasion, cut and gouge resistant D6 grade.

ENDURAWOOD MSD (3 PLY 225 PIW)

Special non-marking soft durometer rubber for high coefficient of friction, to slow down lumber transferring from high speed system.



DID YOU KNOW:

- You can order an NR back cover, which is a special low friction elastomer supplied on the back cover as an alternative to bare back. This cover permits the belt to slide on steel or wooden beds as well as isolates the bottom ply from terpines and caustic liquids.
- You can add an elastic steelcord breaker (Plus) to the top cover and increase puncture and rip resistance by 50% without compromising pulley diameter.

Endurawood

ENDURAWOOD Belt Data (Imperial)

	MSD	XL	M	XM	XH	XH Plus	XXH
Belt Rating (PIW)	**225**	**250**	**375**	**375**	**600**	**600**	**600**
Number of Plies	3	2	3	3	3	3	3
Fabric Weave	Flat	Flat	Flat	CFW	CFW	CFW	CFW
Fabric Type	EP	EP	EP	EP	EP	EP	EP
Carcass Gauge (in.)	0.161	0.138	0.169	0.252	0.252	0.252	0.354
Carcass Weight (lbs/sq ft)	0.96	0.8	1.04	1.551	1.495	1.823	2.1
Cover Weight for 1/32" (lbs/ sq ft)	0.182	0.192	0.192	0.192	0.192	0.192	0.192
Permanent Elongation %*	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (PIW)	Ask	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (ft-lbs)	600	450	675	800	1100	1600	1300
Step Length (in.)	8	10	10	10	16	16	16
Fastener (Plate)	190	140	190	190	NR	NR	NR
Fastener (Hinge)	MS - 45	MS - 35	MS -45	MS -45	MS - 55	MS - 55	MS - 55
Fastener (Superscrew)	35	35	63	63	100	100	100

* Total elongation consists of initial elongation plus permanent elongation (allow 1% elastic elongation)
** XH Plus includes a "Plus" steelcord breaker for impact, puncture and rip protection

ENDURAWOOD Minimum Pulley Diameter

Inches

100% Tension	16	14	18	24	24	24	30
80% Tension	14	12	16	20	20	20	24
60% Tension	12	10	14	18	18	18	20
40% Tension	10	8	12	16	16	16	18
Snubs, Bends & Tails	10	8	12	16	16	16	18

ENDURAWOOD Belt Data (Metric)

	MSD	XL	M	XM	XH	XH Plus	XXH
Belt Rating (N/mm)	**39**	**44**	**66**	**66**	**105**	**105**	**105**
Number of Plies	3	2	3	3	3	3	3
Fabric Weave	Flat	Flat	Flat	CFW	CFW	CFW	CFW
Fabric Type	EP	EP	EP	EP	EP	EP	EP
Carcass Gauge (mm)	4.1	3.5	4.5	6.4	6.4	6.4	9.0
Carcass Weight (kg/sq. m)	4.7	3.9	5.1	7.3	7.3	8.0	10.3
Cover Weight for 1/32" (kg/sq. m)	1.12	1.18	1.18	1.18	1.18	1.18	1.18
Permanent Elongation %*	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Avg Elastic Modulus (kN/m)	Ask	Ask	Ask	Ask	Ask	Ask	Ask
Impact Rating (Joules)	800	600	900	1100	1490	2175	1750
Step Length (mm)	200	250	250	250	400	400	400
Fastener (Plate)	190	140	190	190	NR	NR	NR
Fastener (Hinge)	MS - 45	MS - 35	MS -45	MS -45	MS - 55	MS - 55	MS - 55
Fastener (Superscrew)	35	35	63	63	100	100	100

* Total elongation consists of initial elongation plus permanent elongation (allow 1% elastic elongation)
** XH Plus includes a "Plus" steelcord breaker for impact, puncture and rip protection

ENDURAWOOD Minimum Pulley Diameter

Millimeters

100% Tension	400	350	450	600	600	600	750
80% Tension	350	300	400	500	500	500	600
60% Tension	300	250	350	450	450	450	500
40% Tension	250	200	300	400	400	400	450
Snubs, Bends & Tails	250	200	300	400	400	400	450

ENDURAGRAIN

FOR THE GRAIN HANDLING INDUSTRY

The Enduragrain line of belting is designed to meet the unique operational needs of the grain handling industry. All Enduragrain belts are designed with high static conductivity to prevent risk of sparks; as well as having excellent flame retardancy, suitable oil resistance and the ability to operate even at low temperatures. With today's synthetic, controlled low stretch carcasses combined with special covers compounded for both safety and prolonged belt life, you will find the Enduragrain belt that is right for your application.

Applications

Feed silos, Elevators, Milling Operations

DID YOU KNOW:

Troughing at even higher degrees is possible by utilizing Endurastable breakers.

Advantages

- High Static Conductivity (certified to pass ISO-284 static conductivity test)
- Flame Retardancy (DIN, ISO, ASTM and CSA)
- Oil Resistance
- Low stretch
- Excellent bolt holding mechanical joint strength







Enduragrain

CARCASS SELECTION

Endurance Belting has three carcass styles in both elevator and conveyor series, each having different strengths.

- **ENDURAGRAIN CFW (Enduraply Carcass)**
  A plied polyester warp belt with a special double cord offset weave and an extra high strength weft for rip resistance and load support in conveyor applications and bolt holding in bucket elevator applications. Stretch is kept to a minimum by utilizing high modulus polyester and adjusted safety factors for bucket elevator applications.
- **Enduragrain SW (Enduralok Carcass)**
  Is a straight warp polyester belt (no crimp) combined with a very heavy duty nylon two layer straight cord weft. Used primarily for bucket elevator applications due to its low stretch, and excellent bolt holding characteristics.



DID YOU KNOW:

Enduragrain CFW and SW can be Special Ordered with a transverse steelcord PLUS breaker to further increase bolt holding and mechanical joint strength.

COVER SELECTION

The cover compounds for the Enduragrain line of belting are all flame resistant and ISO284 certified anti static. All you need to do is pick the one that has the right characteristics for your application.

Cover Rubber Grade	Flame Resistant Standard	Anti Static Standard	Low operating temp	Swell % 70hrs @ 70°C SAE #3 Oil	Swell % 70hrs @ 70°C Soybean	Swell % 70hrs @ 100°C Soybean	Swell % 70hrs @ 100°C Canola
JGS	DIN-K	ISO284	-10°C	13.2	6.4	6.4	5.6
JGM	DIN-K	ISO284	-30°C	66.6	43.2	43.2	36.2
JGL	DIN-K	ISO284	-40°C	103.4	-	-	-
JCC	CSA	ISO284	-40°C	103.4	-	-	-

JGS Is the ultimate in oil swell resistance-designed for prolonged handling of cracked soybean and canola.
JGM Is designed for mixed handling of grains and occasional periods of soybean and canola.
JGL Is designed for grain handling applications (wheat-oats-barley) focusing on low temperature operating abilities.
JCC Is designed for grain handling applications requiring special Canadian CSA-C flame certifications.

ENDURAGRAIN Conveyor Service

			CFW					SW			
Belt rating-conveyor (piw)			375	400	600	800	1000	375	440	660	800
Belt rating (n/mm)			66	70	105	140	175	66	88	115	140
Carcass type			Enduraply	Enduraply	Enduraply	Enduraply	Enduraply	Enduralok	Enduralok	Enduralok II	Enduralok II
Plies			3	2	3	4	5	1	1	2	2
Carcass gauge (inches)			0.189	0.188	0.252	0.336	0.420	0.139	0.142	0.270	0.300
Carcass gauge (mm)			4.8	4.7	6.4	8.5	10.7	3.5	3.6	6.900	7.600
Carcass weight (lbs/sq ft)			1.044	1.000	1.400	1.836	2.230	0.516	0.528	1.344	1.488
Cover weight 1/32" (lbs/sq ft)			0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Modulus (elastic) stretch (piw)			Ask	Ask	Ask	Ask	Ask	Ask	Ask	Ask	Ask
Total stretch %			1.8	1.8	1.8	1.8	1.8	1.6	1.6	1.6	1.6
Splice step length (inches)			12	16	16	16	16	Finger	Finger	Finger	Finger
Troughability	20	degrees	20	20	30	30	36	20	24	24	30
(Empty)	35	degrees	24	24	30	36	42	24	30	30	36
	45	degrees	30	30	36	42	48	30	36	36	42
Load support	20	degrees	60	60	72	84	96	66	72	84	96
(0-50 Pcf)	35	degrees	60	54	60	72	84	54	60	84	96
	45	degrees	48	48	54	72	78	48	54	84	96
Min. Pulley diameters		81-100%	18	18	24	30	36	18	20	30	36
		61-80%	16	16	20	24	30	16	18	24	24
		<60%	14	14	16	18	24	14	16	20	20

ENDURARIB

FOR MODERATE INCLINE MATERIAL HANDLING APPLICATIONS

This rib style chevron belt is specially designed for inclined conveyors. Our belts have been specifically developed with fully integral cleats to meet the demands of a wide range of applications, from packed products to bulk material that needs to be prevented from sliding. Endurarib belts are available in several high-quality covers including abrasion, heat, fire, and oil resistant.

Markets

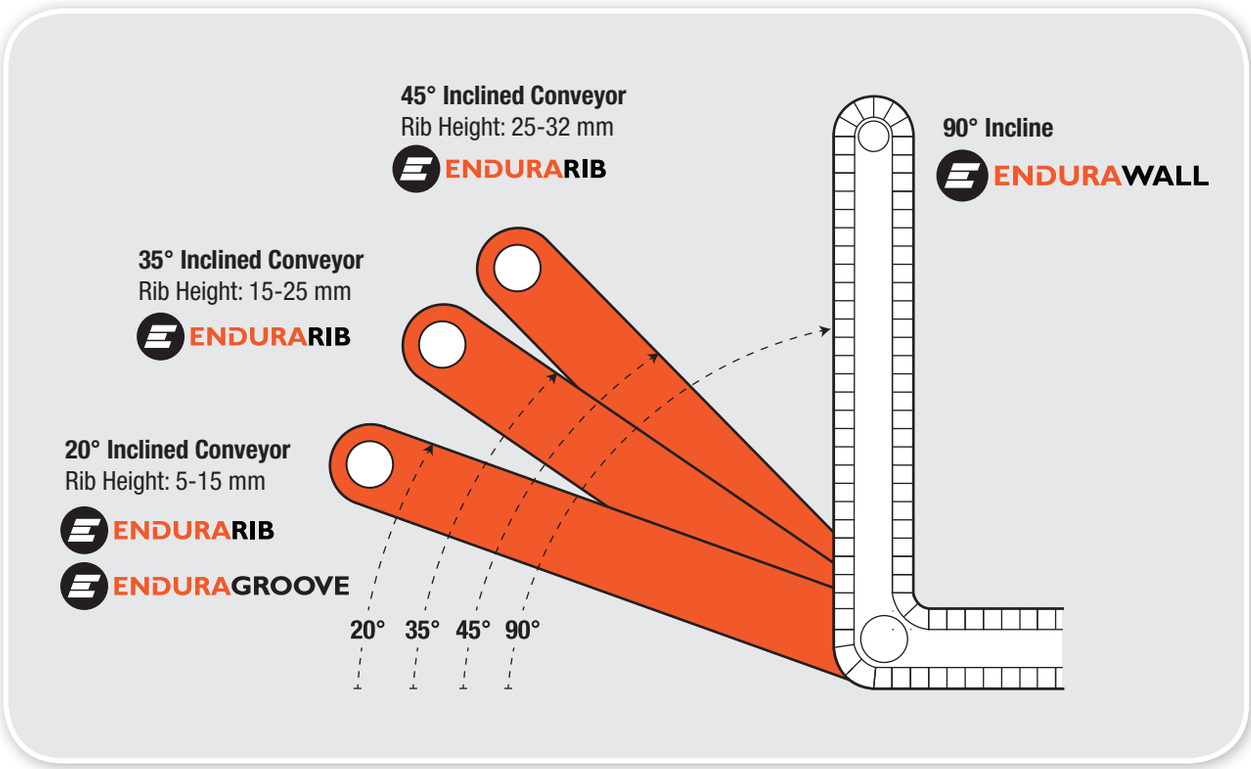
Heavy Mining, Coal Handling, Bulk Terminals, Waste & Recycling Plants, Bagged Maternal, Aggregate Handling, Road Construction, Grain Silos, Mobile Crushers & Screening Equipment, Pulp & Paper, Wood Handling.

Applications

Bulk or bagged materials on inclined surface at angles of less than 45 degrees.

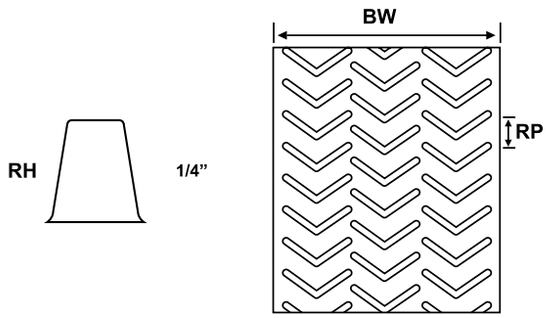
Advantages

- Integral cleats result in a longer working life of the belt
- Convey loose and package material on inclines greater than 20 degrees
- Improve efficiency of the system, by preventing slide back, during transport of material
- Can be used with small pulley diameters

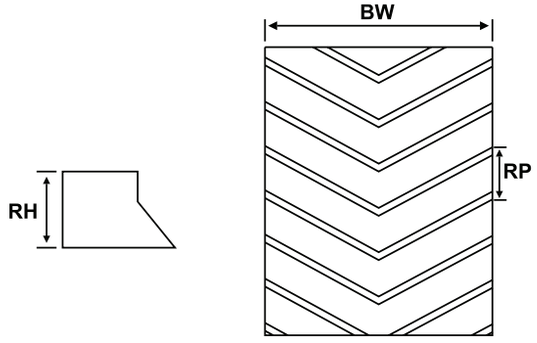


Endurarib

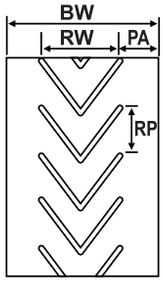
Rib Type	Pattern	Rib Height (mm)	Rib Width (mm)	Rib Pitch (mm)	Belt Width (mm)	Mold Type
V6	V6	6(1/4")	15(6")	76(3")	600 to 1820	A



Rib Type	Pattern	Rib Height (mm)	Rib Width (mm)	Rib Pitch (mm)	Belt Width (mm)	Mold Type
C5	C5	5	300 to 1200	100	300 to 1200	A
C10	C10	10	300 to 1200	100	300 to 1200	A
C15	C15	15	280 to 1200	125	400 to 650	A



Rib Type	Pattern	Rib Height (mm)	Rib Width (mm)	Rib Pitch (mm)	Belt Width (mm)	Mold Type
- C2.5	C2.5	-2,5	1,150	400	1,150 to 1,600	S
- C3	C3	-3	610	165	610 to 1,000	S
- C4	C4	-4	864	200	1,067	S



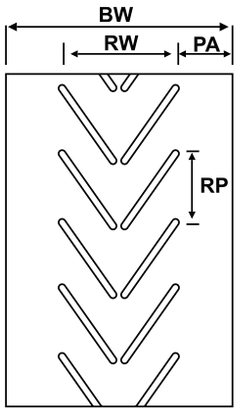
GOOD TO KNOW:
Enduragroove belts are suitable for inclines up to 25 degrees and can be kept clean with belt scrapers.

Endurarib

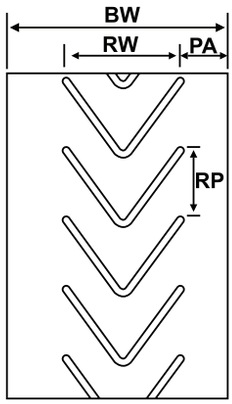
Rib Type	Pattern	Rib Height (mm)	Rib Width (mm)	Rib Pitch (mm)	Belt Width (mm)	Mold Type
C15	C15V250	15	250	250	350 to 500	G
	C15V300	15	300	146	400-550	E
	C15V330	15	330	250	400 to 650	AC
	C15V450	15	450	219	600 to 650	E
	C15V450	15	450	300	500 to 800	AC
	C15V600	15	600	370	700 to 800	E
	C15P280	15	280	250	300	A
	C15P375	15	375	261	450 to 800	A
	C15P380	15	380	250	400 to 850	B
	C15P385	15	385	250	450 to 650	CD
	C15P500	15	500	337	600 to 750	A
	C15P600	15	600	370	750 to 1000	C
	C15P600	15	600	250	650 to 1000	D
	C15P620	15	620	250	650 to 1000	A
	C15P750	15	750	250	800 to 1200	D
	C15P750	15	750	300	800 to 1200	B
	C15P780	15	780	250	800 to 1200	A



Open V (P)



Closed V (V)

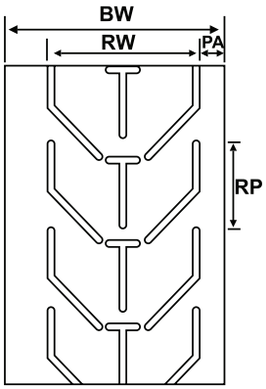


Endurarib

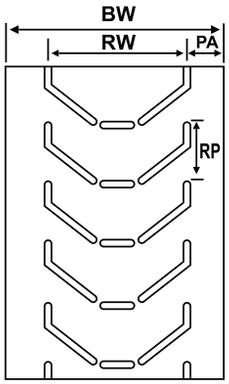
Rib Type	Pattern	Rib Height (mm)	Rib Width (mm)	Rib Pitch (mm)	Belt Width (mm)	Mold Type
C25	C25P450	25	450	335	500 to 700	A
	C25P450	25	450	330	600 to 800	D
	C25P550	25	550	250	600 to 800	C
	C25P550	25	550	330	600 to 800	D
	C25P584	25	584	250	600 to 900	A
	C25P750	25	750	330	800 to 1400	BCD
	C25P785	25	785	334	800 to 1200	A
	C25P1000	25	1000	400	1200 to 1600	A

CP25P450 / 550 / 584 / 1000



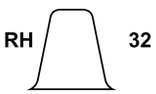


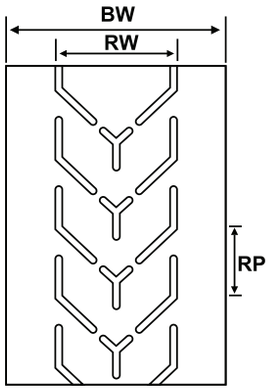
CP25P750 / 785



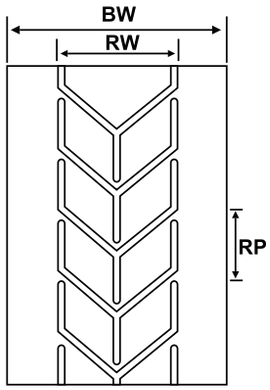
Rib Type	Pattern	Rib Height (mm)	Rib Width (mm)	Rib Pitch (mm)	Belt Width (mm)	Mold Type
Y32	Y32P450	32	450	255	500 to 800	A
	Y32P600	32	600	300	700 to 1050	D
	Y32P605	32	605	303	650 to 1050	A
	Y32P800	32	800	330	900 to 1250	D
	Y32P810	32	810	345	900 to 1200	A

Y32P450

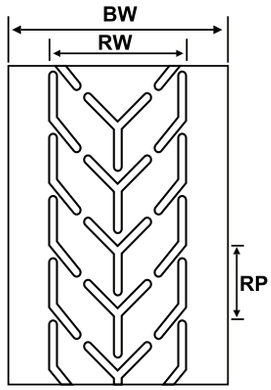




Y32P600 / 605



Y32P800 / Y32810



ENDURAWALL

FOR HIGH ANGLE MATERIAL APPLICATION

Corrugated sidewall conveyor belting has long been established as the industry standard for high angle bulk material conveying. Endurawall corrugated sidewall belting is specifically designed to meet the needs of this highly technical industry segment. Our quality manufacturing hot bonding process allows us to hot vulcanize both the cleats and sidewalls to the base belt, extending belt life in almost every application. The hot bonding process and outstanding performance features combined with our technical expertise make Endurawall the ideal solution for both new installations and existing belt replacements.

Markets

Aggregate, Cement, Coal, Hard Rock, Power Generation, Steel Production.

Applications

High Angle.

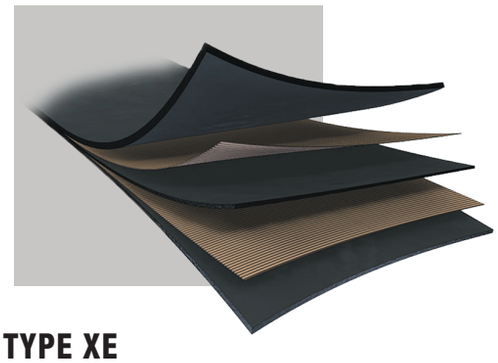
Advantages

- Convey at angles up to 90 degrees and minimize space requirements
- Lower spillage
- Hot bonding dramatically increases the adhesion of the sidewalls and cleats to the base belt, resisting separation & delamination over time and at extreme hot or cold temperatures



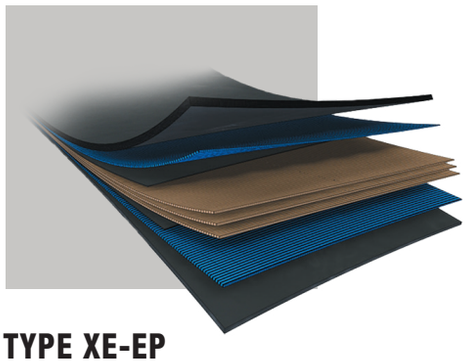


BASE BELTS



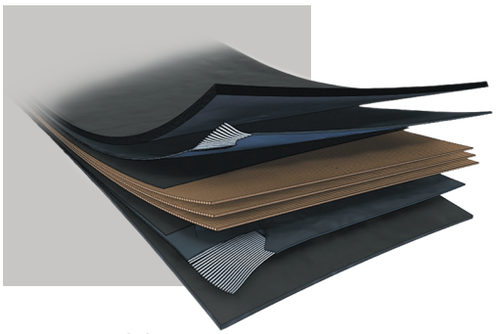
TYPE XE

Used primarily in light to medium duty applications, the cross-stiffening is incorporated into the tensioning ply.



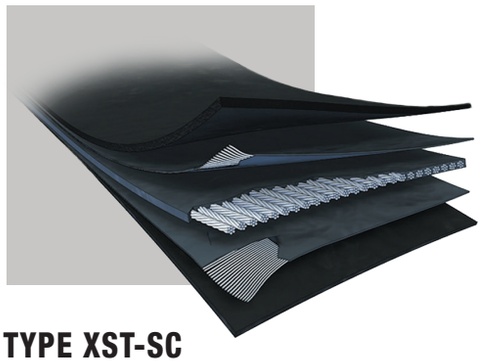
TYPE XE-EP

Used in medium to heavy applications, the cross-stiffening ply is separate from the tensioning plies. In the example shown the belt has 2 cross-stabilizing plies.



TYPE XE-SC

Used where transverse rigidity is critical, this belt incorporates textile tensioning plies with steel cable cross-stiffening layers.



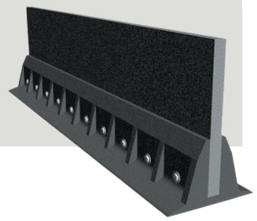
TYPE XST-SC

Used on high vertical lift applications, this belt combines steel cable tensioning with steel cable cross-stiffening members.

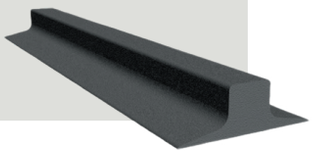
Endurawall

CLEATS (cont.)

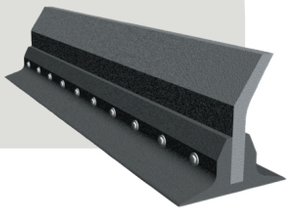
TYPE-TXS



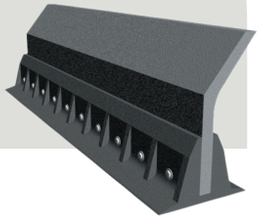
TYPE-TK



TYPE-MBTC



TYPE-TCXS



HEIGHT mm	BASE WIDTH mm	WEIGHT kg/m	MIN PULLEY Ø mm D	TYPICAL SIDEWALL
TYPE-TXS*	TWO PIECE EXTRA HEAVY T-CLEAT			
230	210	17.85	630	HDS-250
250	220	18.60	630	HDS-280
280	230	19.50	800	XHDS-300
360	230	22.50	1000	XHDS-400
TYPE-TK	DRAG OUT CLEAT			
35	110	1.65	100	S-40
40	110	1.80	100	S-60
TYPE-MBTC*	TWO PIECE BUCKET CLEAT			
110	160	7.90	315	HDS-120
140	160	9.25	400	HDS-160
180	160	11.50	500	HDS-200
230	160	13.50	630	HDS-250
250	160	14.60	630	HDS-280
280	160	17.65	800	HDS-300
360	160	19.25	1000	XHDS-400
TYPE-TCXS*	TWO PIECE EXTRA HEAVY BUCKET CLEAT			
230	225	17.95	630	HDS-250
250	225	18.90	630	HDS-280
280	225	22.50	800	XHDS-350
360	225	26.00	1000	XHDS-400

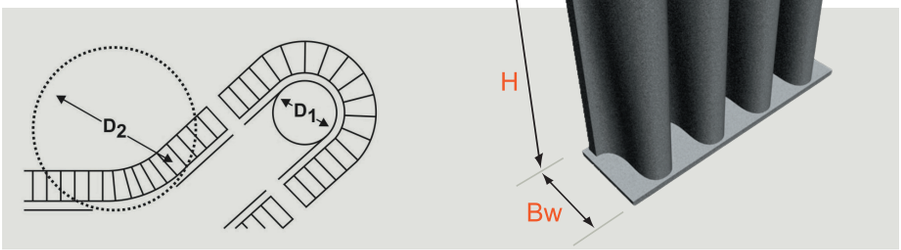
The above are standard heights, non-standard are available, please enquire.

** Urethane cleat uprights available as an option.*

DID YOU KNOW:

We have created a form to help you gather all the technical information needed to evaluate the type of Endurawall belt you will need. Download it today from: endurancebelting.com/downloads

SIDEWALLS



The greater distance rubber is from the carcass, or stabilizer, the less effective it is for abrasion, cutting or gouging. For that reason, in very thick covers an internal stabilizer with open flow construction is often added.

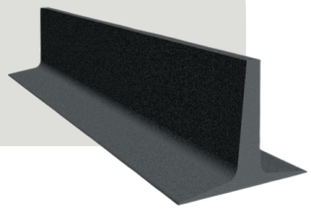
TYPE	H mm	Bw mm	Tw mm	P mm	MIN PULLEY Ø mm D1	MIN PULLEY Ø mm D2	WEIGHT kg/m
S	40	35	30	30	125	200	0.60
S	60	50	45	40	160	250	1.56
S	80	50	45	40	200	350	1.80
S	100	50	45	40	250	400	2.23
S	120	50	45	40	315	500	2.67
HDS	120	75	70	60	315	500	4.01
HDS	160	75	70	60	400	630	4.77
HDS	200	75	70	60	500	800	6.48
HDS	250	75	70	60	630	1000	7.55
HDS	280	75	70	60	800	1200	8.60
HDS	300	75	70	60	800	1200	9.30
XHDS	300	100	90	75	800	1200	12.50
XHDS	400	100	90	75	1000	1600	18.75

All sidewalls are available with or without fabric reinforcement except XHDS which is always fabric reinforced.

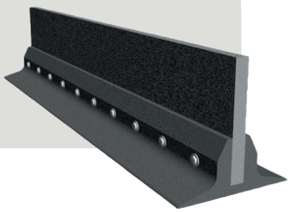
Endurawall

CLEATS

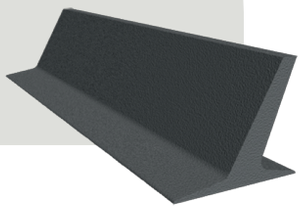
TYPE-T



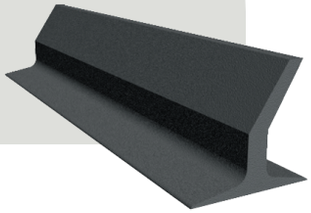
TYPE-MBT



TYPE-C



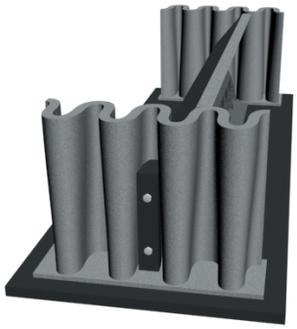
TYPE-TC



HEIGHT mm	BASE WIDTH mm	WEIGHT kg/m	MIN PULLEY Ø mm D	TYPICAL SIDEWALL
TYPE-T	ONE PIECE T-CLEAT			
20	40	0.28	75	S-40
25	40	0.30	75	S-40
35	55	0.55	100	S-40
40	70	0.60	125	S-60
55	80	1.45	125	S-60
75	80	1.80	150	S-80
90	110	2.50	250	S-100
110	110	2.80	315	S-120
140	160	6.60	400	HDS-160
180	160	8.30	500	HDS-200
230	175	10.46	630	HDS-250
TYPE-MBT*	TWO PIECE T-CLEAT			
110	160	7.90	315	HDS-120
140	160	9.25	400	HDS-160
180	160	11.50	500	HDS-200
230	160	13.50	630	HDS-250
250	160	14.60	630	HDS-280
280	160	17.65	800	HDS-300
360	160	19.25	1000	XHDS-400
TYPE-C	ONE PIECE SCOOP CLEAT			
35	55	0.50	100	S-40
55	75	1.50	125	S-60
75	80	2.00	150	S-80
90	110	2.30	275	S-100
110	110	2.50	275	S-120
TYPE-TC	ONE PIECE BUCKET CLEAT			
75	80	1,80	150	S-80
90	110	2,50	275	S-100
110	110	2,80	275	S-120
140	160	6,60	350	HDS-160
180	160	8,30	350	HDS-200
230	175	10,46	450	HDS-250

The above are standard heights, non-standard are available, please enquire.

** Urethane cleat uprights available as an option.*

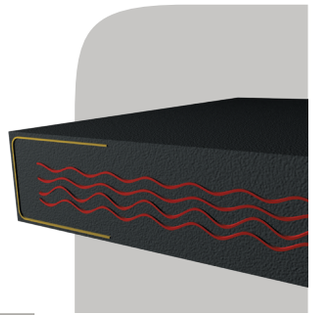


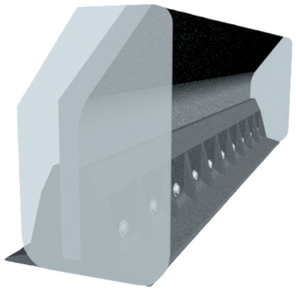
INSTALLATION HARDWARE

All required installation hardware is provided with the belt including fasteners, washers and sidewall support fittings.

ARMOR-EDGE

Available as an option, Armor-Edge is a fabric breaker that wraps around the outer edges of the belt. It is designed to provide extra protection against damage and ply delamination caused by belt off-tracking issues.



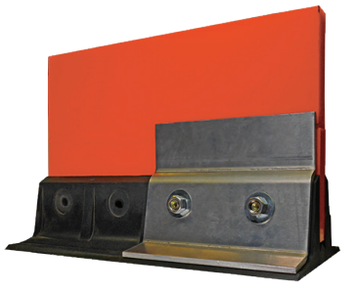


SIDE BLINKERS

Available as an option in either plastic or metal, side blinkers are placed between the wall and cleat. This installation will minimize the amount of material catching in between the corrugations and the cleat, therefore reducing carryback and spillage.
Particularly useful in applications where the material is small and free-flowing.

ALUMINUM CLEAT SUPPORTS

Available as an option for all cleat heights and types used where extreme resistance to backward bending is required.



COVER GRADES

Base belts, sidewalls and cleats can be manufactured using a rubber grade specific to your application requirements, These cover grades include (but are not limited to) high abrasion resistant, oil resistant, flame resistant (MSHA, CSA-C, etc.), heat resistant and chemical resistant. Our technical staff will assist you in selecting the correct grade to suit your needs.

ENDURALIFT
Elevator Service

FOR YOUR BULK PROCESSING NEEDS

Offered in both textile and steelcarass designs, the Enduralift line of belting is designed to keep your critical bulk processing elevator running.

Markets

Hardrock Mining, Chemical Industry, Grain, Recycling, Port Operations.

ENDURALIFT CFW (ENDURAPLY CARCASS)

A plied polyester warp belt with a special double cord offset weave and an extra high strength weft for increased bolt holding. Stretch is kept to a minimum by utilizing high modulus polyester and adjusted safety factors.

ENDURALIFT SW (ENDURALOK CARCASS)

Is a straight warp polyester belt (no crimp) combined with a very heavy duty nylon two layer straight cord weft. This belt has very low stretch and excellent bolt holding characteristics, which make it an excellent elevator belt.

ENDURALIFT MC (ENDURACORD CARCASS)

Is a straight warp medium elastic, small diameter steelcord belt with a double layer MC Series transverse steelcord “PLUS” breaker. This crown friendly carcass offers the ultimate in low stretch with the ability to wrap the smallest pulley diameters and exhibits the maximum in bolt holding capabilities to the highest rated tensions. EC series also available where extremely low stretch is required.

AVAILABLE COVERS

Typical cover compounds, Abrasion, Heat, Flame and Oil are available with any style of Enduralift belts.

DID YOU KNOW:

CFW and SW can be special ordered with a transverse steelcord PLUS breaker to further increase bolt holding and mechanical joint strength.

ENDURAPIPE

FOR CLOSED CONVEYOR MATERIAL HANDLING APPLICATIONS

Pipe belting has been designed to isolate conveyed material from the outside elements and to avoid the discharge of material into the environment. Secondary benefits of pipe belts are the ability to shorten transportation paths by using tighter curves and permit steeper incline angles. Endurance Belting has developed reliable solutions to provide a trouble-free product with an excellent lifespan.

Markets

Cement, Power Plants, Hard Rock, Ash, Fertilizer, Wood Chips, Gypsum, Pet Coke.

Applications

Mainlines, Overland Belts, Pit Belts, Slope Belts.

Advantages

- Protects conveyed material from elements
- Keeps environment clean and eliminates carry back dropping
- Able to handle vertical and horizontal curves very efficiently
- Can reduce costs by allowing conveyor to take a more direct path



Endurapipe

CARCASS REINFORCEMENTS

WARP

New reinforcements now offer better solutions for sag prevention for the industry as a whole.
Endurance Belting offers Polyester, Nylon, Aramid and a number of steelcord options (ST, M-Series & E-Series).

WEFT

Sophisticated testing equipment gauges the right amount of outward opening pressure required for each belt to ensure minimal overlap sag and still close effectively when handling product.
Transverse stabilization is developed by using carcass design that is very low in fatigue, even over long periods of time thereby reducing belt change over longer periods.

AS BREAKERS

Endurapipe AS is a second-generation solution technologically developed to correct the challenges and shortcomings with pipe twisting and overlap sag. Utilizing years of experience in the use of methods for induced internal tracking allows Endurance Belting to design our pipe belt to conform to the path of the bottom idler roller thus ensuring better trackability.

ELASTICITY

Elasticity is an important factor in considering the belt design. Greater stretch improves the belts ability to accommodate tighter curves and allows shorter transitions but requires additional takeup.

DID YOU KNOW:

Carcass selection has the great impact on stretch.

NN allow 4.0%, **EP** allow 2.0%,
M-Series allow 0.6%, **ST** allow 0.3%,
E-Series allow 0.3%.

COVER COMPOUNDS

Special cover compounds each designed individually for the two covers provides the excellent resistance to material being carried on the inside and excellent ozone resistance on the exterior.
Covers can also be supplied with special profiled surfaces for increased incline capability if desired.

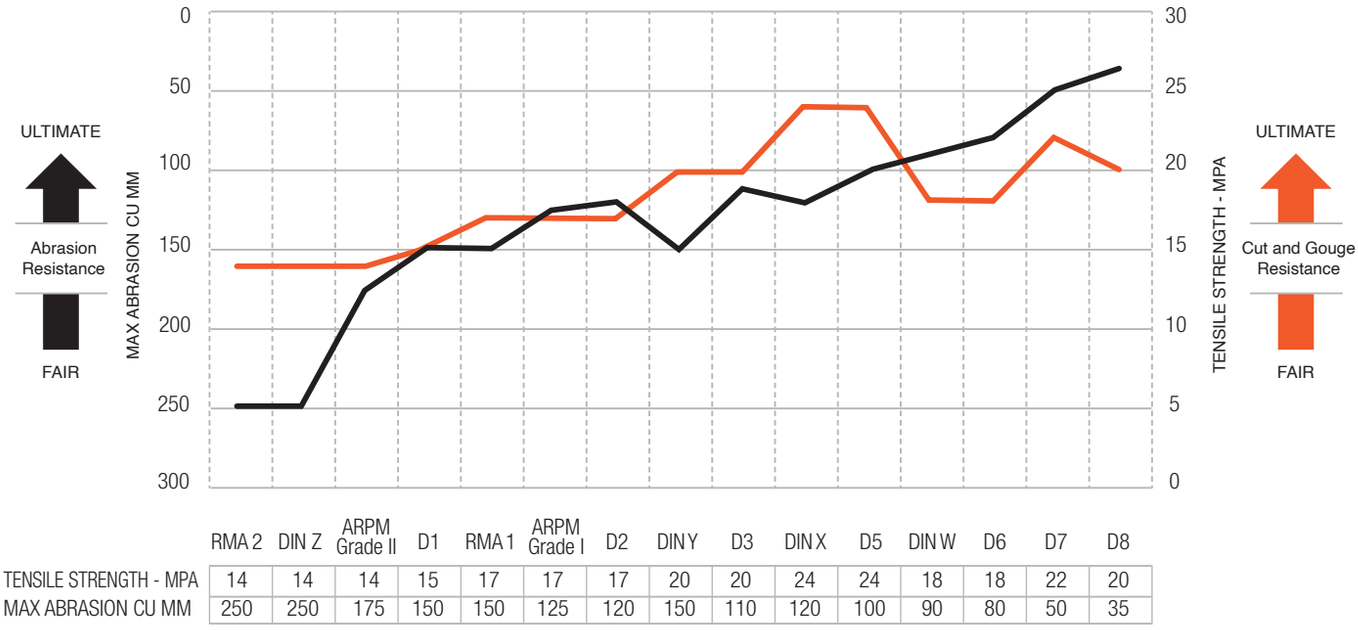
Endurapipe Specifications

Diameter mm (approx.)	Diameter inches (approx.)	Belt Width mm	Belt Width inches	Carcass Options
150	6	600	23.6	EP, NN
200	8	780	30.7	EP, NN
250	10	1000	39.4	EP, NN, M
300	12	1100	43.3	EP, NN, ST, M
350	14	1300	51.2	EP, NN, ST, M
400	16	1600	63.0	EP, NN, ST, M
500	20	1900	74.8	EP, ST, M
600	24	2250	88.6	ST, M

COVERS

Endurance has the cover compounds to protect your belts carcass no matter the operating environment.

GENERAL ABRASION COVERS



	RMA 2	DIN Z	ARPM Grade II	D1	RMA 1	ARPM Grade I	D2	DIN Y	D3	DIN X	D5	DIN W	D6	D7	D8
TENSILE STRENGTH - MPA	14	14	14	15	17	17	17	20	20	24	24	18	18	22	20
MAX ABRASION CU MM	250	250	175	150	150	125	120	150	110	120	100	90	80	50	35

Standard Compound	Operating Temperature	Density 1 mm kg/m²
RMA 2	-30°C to +80°C	1.15
DIN Z	-30°C to +80°C	1.20
ARPM Grade II	-30°C to +80°C	1.15
Endurance D1	-30°C to +80°C	1.15
RMA 1	-40°C to +80°C	1.15
ARPM Grade I	-40°C to +80°C	1.15
Endurance D2	-40°C to +80°C	1.15
DIN Y	-40°C to +80°C	1.13

Standard Compound	Operating Temperature	Density 1 mm kg/m²
Endurance D3	-40°C to +80°C	1.13
DIN X	-45°C to +70°C	1.10
Endurance D5	-45°C to +70°C	1.10
DIN W	-45°C to +70°C	1.12
Endurance D6	-45°C to +70°C	1.12
Endurance D7	-45°C to +70°C	1.10
Endurance D8	-45°C to +70°C	1.10

SPECIALTY COVERS

Standard Compound	Max Abrasion cu mm	Tensile Strength Mpa	Operating Temperature	Density 1 mm kg/m²	Special Characteristic
LRR	NA	18	-45°C to +70°C	1.12	Low rolling resistance back cover
ED6	90	17	-45°C to +70°C	1.12	Abrasion and acid Resistance
DIN R	150	17	-60°C to +60°C	1.11	Extra low temp operating
UV	150	17	-45°C to +125°C	1.13	Ultimate Ozone resistance
UVX	175	17	-60°C to +160°C	1.07	Ulitimate Ozone resistance

Covers

ENDURAFLAME - FLAME RESISTANT COVERS

Compounds	Standards	Coverage	Small Scale Flame ISO 340	Static ISO 284	Drum Friction EN 1554	Propagation	Density 1mm kg/m²	Characteristics
JK	DIN K/S	International	Yes	Yes	No	No	1.24	Above ground, hard rock underground except coal or phosphate
JA	DIN-EN 14973 Class - A	International	Yes	Yes	Yes	Yes	1.43	General use, only hazard being limited access and means of escape
JB1	DIN-EN 14973 Class - B1	International	Yes	Yes	Yes	Yes	1.42	As class A plus potentially flammable atmosphere. No secondary devices
JB2	DIN-EN 14973 Class - B2	International	Yes	Yes	Yes	Yes	1.42	As class A plus potentially flammable atmosphere. With secondary devices
JC1	DIN-EN 14973 Class - C1	International	Yes	Yes	Yes	Yes	1.42	As class B1 plus combustible dust or material conveyed. No secondary devices
JC2	DIN-EN 14973 Class - C2	International	Yes	Yes	Yes	Yes	1.42	As class B1 plus combustible dust or material conveyed and additional fuel sources. With secondary devices
JCC	CSA - C	Canada	Yes	Yes	Yes	No	1.35	Above ground, hard rock underground
JCB	CSA - B	Canada	Yes	Yes	Yes	Yes	1.35	Underground for hard rock and salt
JCA	CSA - A2	Canada	Yes	Yes	Yes	Yes	1.35	Explosive environment
JMC	MSHA -14	USA	No	No	No	Yes	1.30	Explosive environment
JMA	MSHA - 18 (2G)	USA	No	No	No	Yes	1.27	Above ground, hard rock underground
JGM	DIN K + MOR	International	Yes	Yes	No	No	1.27	Grain service, wheat, barley
JGS	DIN K + SOR	International	Yes	Yes	No	No	1.27	Grain service, soya bean, canola
JGF	DIN K + SOR + Heat	International	Yes	Yes	No	No	1.27	Petroleum coke with elevated heat

Endurance compounds meet the above standards. Certification available upon request at time of order

ENDURATHERM - HEAT RESISTANT COVERS

COVER GRADE	Base Elastomer	Surface Temp.	Material Temp. Fines (Max.)	Material Temp. Lumpy (Max.)	Elevator Service	Anti Cracking	Oil Resistance	Flame Resistance	Max Abrasion cu mm DIN 53516 / ISO4649	Hot Spliceability
TEA	SBR	120°C / 250°F	120°C / 250°F	175°C / 350°F	80°C / 175°F	Good	No	No	150	Excellent
TEB	CIIR	150°C / 300°F	150°C / 300°F	200°C / 400°F	130°C / 266°F	Very good	No	No	180	Excellent
TEC	EPDM	200°C / 400°F	200°C / 400°F	350°C / 660°F	150°C / 300°F	Very good	No	No	200	Good
TEM	EPM	200°C / 400°F	200°C / 400°F	400°C / 750°F	150°C / 300°F	Excellent	No	No	150	Very good
TEX	EPR	200°C / 400°F	200°C / 400°F	400°C / 750°F	150°C / 300°F	Superior	No	No	110	Excellent
TEJ	EPDM	150°C / 300°F	180°C / 350°F	250°C / 480°F	150°C / 300°F	Very good	No	YES (ISO-340)	200	Good
TJX	EPR	180°C / 350°F	200°C / 400°F	400°C / 750°F	150°C / 300°F	Excellent	No	YES (ISO-340)	120	Excellent
TEG	NBR	130°C / 266°F	150°C / 300°F	150°C / 300°F	NR	Fair	Yes	No	220	Good

TEG must have oil present in material handled to resist cracking at elevated temperatures.
Note: Most TEC, TEM and TEX compounds have excellent cold temperature operating ability.

OIL RESISTANT COVERS

Compound	Elastomer	Min Temp		Density 1mm kg/m²	Characteristic
		F	C		
GL	SBR / NBR	-40°	-40°	1.10	LOR - Light Oil resistance
GMF	SBR / NBR	-40°	-40°	1.10	MOR-LT - Moderate Oil resistance, low temp
GM	SBR / NBR	-22°	-30°	1.18	MOR - Medium oil resistance - Industrial
G	NBR	-14°	-10°	1.18	SOR - Severe Oil resistance
GRF	NBR	-60°	-51°	1.17	Extreme Low temp, oil sands compound

Note: Oil resistant compounds left dormant in extreme cold can seriously impede startup. Continued operation is recommended under extreme cold conditions.







SPLICE MATERIALS

ENDURANCE HAS THE SPLICE KITS THAT MATCHES THE SPECIFICATIONS OF YOUR BELT.

The single biggest risk to any conveyor system is the splice area of the belt. If the splice is not done properly the chances of failure increase. This is why it is always best to use OEM grade splice material when you can.

The advantages of using Endurance splice kits with your Endurance Belting is that you always know the rubber compounds used in the skims, gums and cover rubber match the specifications of your belt.

Advantages

- Complete Steelcord and Textile splice kits include OEM skims, cover rubber and OEM cements
- Hot vulcanization and cold bonding materials available
- Splice instructions from DIN designs
- Tools and vulcanization presses available
- Unique non-hazardous material shipments available for easy and fast supply



TECHNICAL INFORMATION

STEELCORD BELTING TRANSITIONS

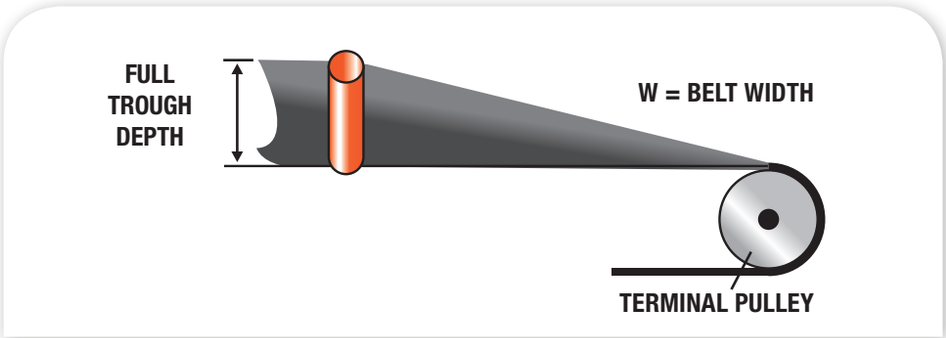
Minimum Transition Distances

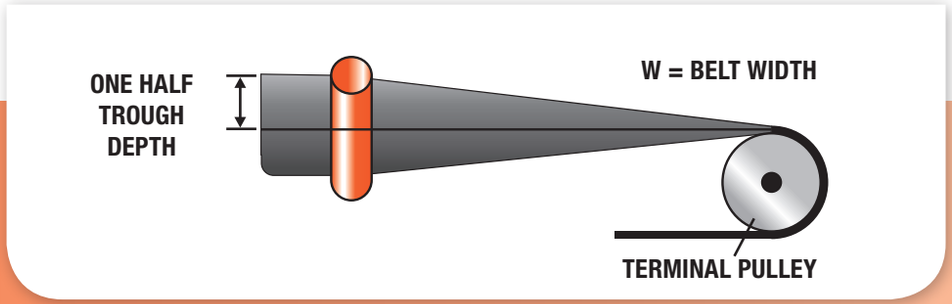
	Full Trough			Half Trough		
% of Tension Rating	20 degree	35 degree	45 degree	20 degree	35 degree	45 degree
90%+	4.0xBW	6.8xBW	8.0xBW	2.0xBW	3.4xBW	4.0xBW
60 - 90%	3.2xBW	5.2xBW	6.4xBW	1.6xBW	2.6xBW	3.2xBW
0-59%	2.8xBW	3.6xBW	4.4xBW	1.0xBW	1.8xBW	2.3xBW
BW = Belt Width	Used at head and tail			Used at head only		

TEXTILE BELTING TRANSITIONS

Minimum Transition Distances

	Full Trough			Half Trough		
% of Tension Rating	20 degree	35 degree	45 degree	20 degree	35 degree	45 degree
90%+	1.8xBW	3.2xBW	4.0xBW	0.9xBW	1.6xBW	2.0xBW
60 - 90%	1.6xBW	2.4xBW	3.2xBW	0.8xBW	1.3xBW	1.6xBW
0-59%	1.2xBW	1.8xBW	2.4xBW	0.6xBW	1.0xBW	1.2xBW
BW = Belt Width	Used at head and tail			Used at head only		





PACKAGING

STANDARD ROLL

Steel core with 115mm x 115mm square core opening for use on winder or stand.

BENEFIT: Can be customized upon request (I.E. larger or smaller square cut out to suite your need.)





ELLIPTICAL ROLL

BENEFIT: 30% more belt per roll while still fitting in a standard container.

GOOD TO KNOW: consideration needs to be taken on the space needed to unwind the elliptical rolls.





Packaging

CASSETTE

One continuous length of belting supplied in two joined spools.

BENEFIT: 100% more belt per roll while still having the potential to fit in a standard container. Enjoy longer lengths and reduce number of site splices.

GOOD TO KNOW: This belt must be rewound completely to reveal the belt end before it can be strung on to a system.



STEEL PALLETS

Standard, Elliptical and Cassette packaging can be mounted on a steel pallet.

BENEFIT: Makes the rolls easier to handle, less likely to be damaged and makes for easy storage of the belting.





OCTAGONAL STEEL REEL PACKAGING

BENEFIT: Belting is protected during handling and allows for easy storage. This packaging can be customized to meet your needs.

DID YOU KNOW:

Endurance Belting can supply all types of packaging. If you do not see the packaging you're looking for please ask your sales representative.

ENDURANCE
BELTING

www.endurancebelting.com
email: sales@endurancebelting.com

Distributed by:

EB20240906E