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FENNER  **DUNLOP**
CONVEYOR BELTING

MINING



APPLICATIONS:

COAL MINING, COAL PREPARATION AND MORE

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Fenner Dunlop Conveyor Belting for Mining Applications

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MineHaul Supreme is Fenner Dunlop's premium multi-ply underground conveyor belt specifically designed for the heavy duty mining industry. Armed with MSHA 30 CFR part 14 and ARPM Class 1 and 2 CSA M422 type A2 and C Fire Boss cover compound for ultimate fire retardance, MineHaul Supreme delivers unsurpassed conveying performance.	
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LongHaul Supreme conveyor belting is your ideal choice for moderate to severe surface conveying applications. Made with the same fabrics used in our successful MineHaul Supreme products, LongHaul Supreme is available with a variety of surface and non-MSHA underground compounds.	
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We are proud to offer you the toughest, longest lasting conveyor belts!

We make all of our belts in North American Fenner Dunlop factories – we do not import from other manufacturers in Asia or elsewhere. By weaving and treating our own fabric and pressing our own belts, we can ensure the integrity of our conveyor belts by monitoring each step of the production process.

Toughest Conveyor Belts in the World

Fenner Dunlop Conveyor Belting consistently outperforms the competition.

Fenner Dunlop designs and manufactures the toughest conveyor belting for the mining industry. With over 150 years of manufacturing experience, we produce the highest quality fire retardant, straight warp, steel cord, and premium plied belting for all underground and surface applications. As the **inventors** and **pioneers** of fire-resistant conveyor belting, we work closely with government agencies and local mining organizations. Several of our belts are fire retardant and approved/accredited to the appropriate national and international standards that your application demands.

At Fenner Dunlop, we hold quality control in the highest regard. We accomplish this through ensuring the integrity of our conveyor belt manufacturing by monitoring each step of the production process. Focused attention is given to each belting order to ensure that the materials and processes used to produce a belt will assist the end-user in reducing operation costs, maximizing uptime, and improving revenue.

North American Made

We have invested more than \$150MM in our North

American plants, and are proud to have one of the longest press in the world. Each of our 4 ISO 9001 Certified manufacturing facilities delivers measurable, sustainable results in the field, day in and day out. We research, test and develop using our own facilities. Every compound batch is quality tested in the laboratory before it is used in belt production. Every foot of Fenner Dunlop belt undergoes the toughest quality checks throughout the production process.

The best materials

We use only the very best materials in the production of each of our belts. We specially design all our rubber compounds to deliver maximum performance. We are the only manufacturer to use a state-of-the-art fabric treating process to maximize rubber to fabric adhesion, eliminating belt delamination failures. Pair this technology with the advanced production equipment at our three facilities in Ohio and Ontario, that can produce up to 102" steel cord belt and plied rubber belt, and the result is conveyor belting unmatched by any competition.

Environmentally Responsible

By manufacturing long lasting conveyor belting and being mindful of the materials we use, Fenner Dunlop is committed to environmental sustainability.



.people .planet .profit



1861

Company founded by Joseph Henry Fenner in Hull, UK.

1920's

Production of woven transmission belting.

1937

Fenner becomes a public company traded on the London Stock Exchange.

1939

-1945

Wartime production of fire hose and military webbings.

1950

In response to a tragic conveyor belt fire at the Creswell Colliery in 1950, the National Coal Board asked Fenner, because of its expertise in reinforced polymers, to develop a fire resistant belt. That belt and its successor products became, and continue to be, a world standard in underground coal mining.

1960's

Straight warp belt UsFlex Patented.

1961

New Research and Development facility opened in Hull.

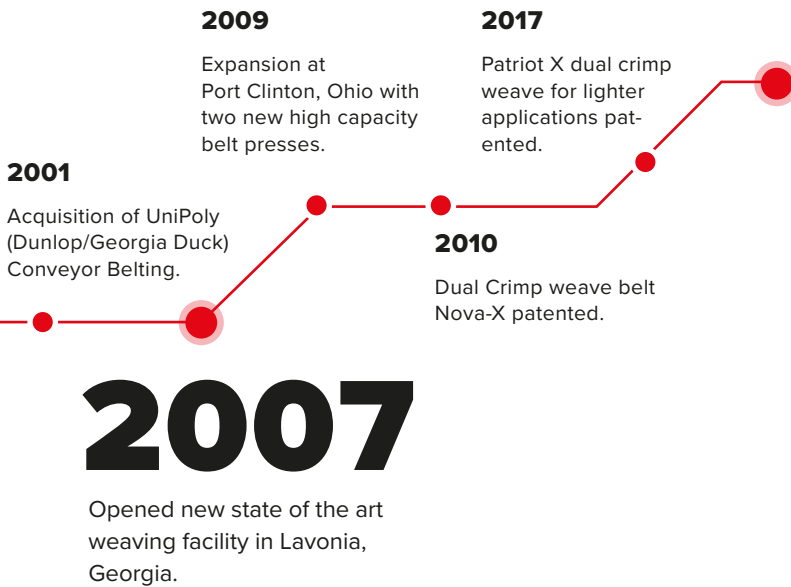
1996

Acquisition of Scandura Conveyor Belting.

**OVER 150 YEARS OF
MANUFACTURING
EXPERTISE**

HISTORY

OF FENNER DUNLOP



2021

Today

Fenner Dunlop delivers measurable, sustainable results in the field day in and day out. We make all of our own carcass materials and specially design our rubber compounds to outperform the competition. We are mindful of the materials for a more robust product and a better environmental footprint.

We are proud of the fact that over the course of our long history, our engineers and technicians have **consistently led the world** in developing and refining conveyor belts that provide **top-class performance combined with the longest possible operational lifetime.**



Fenner Dunlop will help you maximize your uptime by reducing belt damage, premature wear and costly repairs.



TECHNICAL SUPPORT & FIELD SERVICES SUPPORT

At Fenner Dunlop, you get more than just conveyor belts. If you have conveyors where belts need to be replaced at frequent intervals, require constant maintenance, or are performing poorly, Fenner Dunlop's highly experienced engineers can provide advice and practical assistance to help you.

Many factors, such as the conveyor system, materials conveyed, safety measures, and conveying environment, are taken into consideration before an order is placed for a conveyor belt. Fenner Dunlop provides a multitude of services to assist in belt selection, installation, maintenance and belt monitoring throughout the life of the belt.

Services include:

- Belt Wizard® advanced conveyor belt calculation program
- On-site surveys
- Product and Maintenance Training
- Application Engineering
- Technical Support
- Certified Splice Training Program
- Installation, Maintenance and Repair Services
- rEscan® Steel Cord Scanning Service
- EagleEye Advanced Intelligent Belt Monitoring System
- IBelt®
- Birdsi





MineHaul® Supreme

Safe, Flexible & DEPENDABLE!

MineHaul Supreme is Fenner Dunlop's premium multi-ply conveyor belt designed specifically for the demanding nature of the heavy duty underground mining industry.

Manufactured with MSHA 30 CFR part 14 and ARPM Class 1 and 2 CSA M422 type A2 and C certified Fire Boss fire retardant compounds, MineHaul Supreme meets and exceeds MSHA requirements. MineHaul Supreme is designed to safely handle loads in tough mining applications. MineHaul Supreme has a proven history in the mining industry for dependability and performance.

Markets & Applications:

(where compliance with MSHA CFR Title 30, Part 14 is required or desired)



Coal and coal preparation plants

Carcass Style	UNIT	MH 2-400	MH 4-440	MH 2-500	MH 3-500	MH 2-600	MH 3-600
Number of Plies	n	2	4	2	3	2	3
Carcass Gauge	in (mm)	0.182 (4.6)	0.208 (5.3)	0.198 (5.0)	0.183 (4.6)	0.180 (4.6)	0.231 (5.9)
Carcass Weight	lb/in/ft (kg/m ²)	0.083 (4.9)	0.101 (5.9)	0.089 (5.2)	0.080 (4.7)	0.079 (4.6)	0.108 (6.3)
Elastic Modulus	lbf/in (kN/m)	44000 (7700)	55000 (9600)	62000 (10850)	47000 (8200)	63000 (11000)	72000 (12600)
Max Tension Rating	PIW (kN/m)	400 (70)	440 (76)	500 (87)	500 (87)	600 (105)	600 (105)
Troughing/Empty - Min Belt Width							
20 degree idlers	in (mm)	20 (508)	24 (762)	24 (610)	30 (762)	28 (711)	28 (711)
35 degree idlers	in (mm)	30 (762)	30 (914)	30 (762)	36 (914)	30 (762)	30 (762)
45 degree idlers	in (mm)	36 (914)	36 (1067)	36 (914)	42 (1067)	36 (914)	36 (914)
Load Support 41 – 80 lbs/ft ³ (641-1280 kg/m ³)							
20 degree idlers	in (mm)	60 (1524)	72 (1829)	66 (1676)	60 (1524)	72 (1829)	72 (1829)
35 degree idlers	in (mm)	54 (1372)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)
45 degree idlers	in (mm)	48 (1219)	54 (1372)	54 (1372)	54 (1372)	54 (1372)	60 (1372)
Minimum Pulley Diameters							
81 – 100% belt rated tension	in (mm)	20 (510)	22 (560)	20 (510)	20 (510)	20 (510)	24 (610)
61 – 80% belt rated tension	in (mm)	16 (410)	18 (460)	16 (410)	16 (410)	16 (410)	20 (510)
Up to 60% belt rated tension	in (mm)	12 (310)	14 (360)	12 (310)	12 (310)	12 (310)	15 (380)

¹Troughability and Load Support values can be influenced by certain cover gauge and compound combinations used. When in doubt, please contact your FDA representative for selection guidance.

²MineHaul Supreme tension ratings reflect a minimum 10:1 safety factor through 750 PIW (131 N/mm) offerings, and an 8:1 minimum safety factor for the remaining higher tension offerings. With the appropriate fastener selection and installation, 4:1 minimum mechanical fastener safety factors can be achieved.

³Add the appropriate cover gauge to this carcass gauge to obtain the approximate overall belt thickness.

⁴Add the appropriate cover weight to this carcass weight to obtain the approximate overall belt weight.

Reasons to Count on MineHaul® Supreme

- MSHA certified Fire Boss cover compounds for ultimate fire retardance
- Meets ARPM Class 1
- Low stretch
- Excellent troughability and load support
- Exceptional mechanical fastener retention
- Resistant to moisture, mildew and acid mine water
- Uses traditional diagonal lapped splice or FDA developed Finger Splice Technology
- Excellent adhesion between the covers and plies assures long service life
- MSHA 30 CFR part 14 and ARPM Class 1 and 2 CSA M422 type A2 and C

MH 3-750	MH 4-800	MH 3-900	MH 4-1000	MH 2-1000	MH 4-1200	MH 5-1250	MH 3-1500	MH 4-2000
3 (6.5)	4 (8.0)	3 (7.2)	4 (8.8)	2 (7.4)	4 (9.8)	5 (11.2)	3 (11.6)	4 (15.7)
0.255 (6.9)	0.316 (9.0)	0.282 (7.8)	0.348 (9.7)	0.290 (7.3)	0.384 (11.0)	0.441 (12.5)	0.455 (12.0)	0.620 (16.8)
72000 (12600)	82000 (14350)	94000 (16450)	90000 (15750)	82000 (14350)	100000 (17500)	98000 (17150)	108000 (18900)	135000 (23600)
750 (130)	800 (138)	900 (150)	1000 (175)	1000 (175)	1200 (200)	1250 (213)	1500 (263)	2000 (350)
30 (762)	30 (762)	330 (8382)	36 (914)	42 (1067)	36 (914)	42 (1067)	42 (1067)	54 (1372)
36 (914)	36 (914)	36 (914)	42 (1067)	48 (1219)	42 (1067)	48 (1219)	48 (1219)	60 (1524)
42 (1067)	42 (1067)	42 (1067)	48 (1219)	54 (1372)	48 (1219)	54 (1372)	54 (1372)	66 (1676)
72 (1829)	84 (2134)	84 (2134)	84 (2134)	60 (1524)	84 (2134)	84 (2134)	84 (2134)	102 (2591)
66 (1676)	84 (2134)	72 (1829)	84 (2134)	54 (1372)	84 (2134)	84 (2134)	84 (2134)	102 (2591)
66 (1676)	72 (1829)	66 (1676)	72 (1829)	48 (1219)	72 (1829)	84 (2134)	84 (2134)	96 (2438)
28 (710)	30 (760)	30 (760)	36 (910)	32 (810)	40 (1020)	42 (1070)	42 (1070)	48 (1220)
23 (580)	24 (610)	24 (610)	30 (760)	26 (660)	32 (810)	36 (910)	36 (910)	42 (1070)
17 (430)	20 (510)	18 (460)	22 (560)	20 (510)	24 (610)	30 (760)	30 (760)	36 (910)

For a complete listing of available MineHaul products and specifications, please contact your FDA representative.



LongHaul® Supreme

Mine Duty Surface Belt with endurance!

LongHaul Supreme utilizes the same Fenner Dunlop developed fabrics as our successful MineHaul Supreme products, with the added flexibility of offering multiple compounds to meet a wide variety of surface and non-explosive underground atmospheres including compounds which meet ARPM FR Class 2 requirements.

Markets & Applications:



Coal preparation plants



Aboveground coal handling

Carcass Style	UNIT	LH 2-400	LH 4-440	LH 2-500	LH 3-500	LH 2-600	LH 3-600
Number of Plies	n	2	4	2	3	2	3
Carcass Gauge ³	in (mm)	0.182 (4.7)	0.208 (6.2)	0.198 (5.2)	0.183 (6.0)	0.180 (4.6)	0.231 (6.2)
Carcass Weight ⁴	lb/in/ft (kg/m ²)	0.081 (5.6)	0.105 (6.9)	0.089 (5.9)	0.103 (5.9)	0.079 (5.6)	0.106 (6.3)
Elastic Modulus	lbf/in (kN/m)	44000 (7700)	55000 (9600)	62000 (10850)	47000 (8200)	63000 (11000)	72000 (12600)
Max Tension Rating ²	PIW (kN/m)	400 (70)	440 (76)	500 (87)	500 (87)	600 (105)	600 (105)
Troughing/Empty ¹ - Min Belt Width							
20 degree idlers	in (mm)	20 (508)	24 (762)	24 (610)	30 (762)	28 (711)	28 (711)
35 degree idlers	in (mm)	30 (762)	30 (914)	30 (762)	36 (914)	30 (762)	30 (762)
45 degree idlers	in (mm)	36 (914)	36 (1067)	36 (914)	42 (1067)	36 (914)	36 (914)
Load Support ¹ 41 – 80 lbs/ft ³ (641-1280 kg/m ³)							
20 degree idlers	in (mm)	60 (1524)	72 (1829)	66 (1676)	60 (1524)	72 (1829)	72 (1829)
35 degree idlers	in (mm)	54 (1372)	60 (1524)	60 (1524)	60 (1524)	60 (1524)	60 (1524)
45 degree idlers	in (mm)	48 (1219)	54 (1372)	54 (1372)	54 (1372)	54 (1372)	60 (1372)
Minimum Pulley Diameters							
81 – 100% belt rated tension	in (mm)	20 (510)	22 (560)	20 (510)	20 (510)	20 (510)	24 (610)
61 – 80% belt rated tension	in (mm)	16 (410)	18 (460)	16 (410)	16 (410)	16 (410)	20 (510)
Up to 60% belt rated tension	in (mm)	12 (310)	14 (360)	12 (310)	12 (310)	12 (310)	15 (380)

¹Troughability and Load Support values can be influenced by certain cover gauge and compound combinations used. When in doubt, please contact your FDA representative for selection guidance.

² LongHaul Supreme tension ratings reflect a minimum 10:1 safety factor through 750 PIW (131 N/mm) offerings, and an 8:1 minimum safety factor for the remaining higher tension offerings. With the appropriate fastener selection and installation, 4:1 minimum mechanical fastener safety factors can be achieved.

³ Add the appropriate cover gauge to this carcass gauge to obtain the approximate overall belt thickness.

⁴ Add the appropriate cover weight to this carcass weight to obtain the approximate overall belt weight.

Reasons to Count on LongHaul® Supreme

- Low stretch
- Excellent troughability and load support
- Exceptional mechanical fastener retention
- Resistant to moisture and mildew
- Uses traditional lapped splice or Fenner Dunlop developed Finger Splice Technology
- Excellent adhesion between the covers and plies assures long service life

LH 3-750	LH 4-800	LH 3-900	LH 4-1000	LH 2-1000	LH 4-1200	LH 5-1250	LH 3-1500	LH 4-2000
3	4	3	4	2	4	5	3	4
0.255 (6.9)	0.316 (8.7)	0.282 (7.8)	0.348 (9.7)	0.290 (7.3)	0.384 (11.0)	0.441 (12.5)	0.455 (12.0)	0.620 (16.8)
0.118 (7.6)	0.149 (10.1)	0.133 (8.7)	0.166 (10.8)	0.125 (7.9)	0.187 (12.2)	0.213 (13.9)	0.205 (13.1)	0.286 (17.5)
72000 (12600)	82000 (14350)	94000 (16450)	90000 (15750)	82000 (14350)	100000 (17500)	98000 (17150)	108000 (18900)	135000 (23600)
750 (130)	800 (138)	900 (150)	1000 (175)	1000 (175)	1200 (200)	1250 (213)	1500 (263)	2000 (350)
30 (762)	30 (762)	30 (762)	36 (914)	42 (1067)	36 (914)	42 (1067)	42 (1067)	54 (1372)
36 (914)	36 (914)	36 (914)	42 (1067)	48 (1219)	42 (1067)	48 (1219)	48 (1219)	60 (1524)
42 (1067)	42 (1067)	42 (1067)	48 (1219)	54 (1372)	48 (1219)	54 (1372)	54 (1372)	66 (1676)
72 (1829)	84 (2134)	84 (2134)	84 (2134)	60 (1524)	84 (2134)	84 (2134)	84 (2134)	102 (2591)
66 (1676)	84 (2134)	72 (1829)	84 (2134)	54 (1372)	84 (2134)	84 (2134)	84 (2134)	102 (2591)
66 (1676)	72 (1829)	66 (1676)	72 (1829)	48 (1219)	72 (1829)	84 (2134)	84 (2134)	96 (2438)
28 (710)	30 (760)	30 (760)	36 (910)	32 (810)	40 (1020)	42 (1070)	42 (1070)	48 (1220)
23 (580)	24 (610)	24 (610)	30 (760)	26 (660)	32 (810)	36 (910)	36 (910)	42 (1070)
17 (430)	20 (510)	18 (460)	22 (560)	20 (510)	24 (610)	30 (760)	30 (760)	36 (910)

For a complete listing of available LongHaul products and specifications, please contact your FDA representative.

X SERIES X SERIES® GROUP MEMBER

MineFlex® and MineSupreme®

TOUGH, RELIABLE, PROVEN!

Reasons to Count on MineFlex®

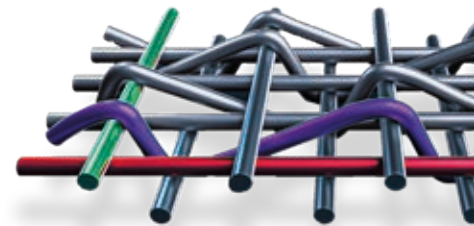
- MineFlex offers MSHA, CSA M422 type A2 and C certified Fire Boss cover compounds for ultimate fire retardance
- Superior troughability, tracking and load support
- Unsurpassed impact resistance up to 3 times greater than traditional plied belting
- Up to 3 times more longitudinal rip resistance than standard reduced ply constructions.
- Greater flexibility than plied belts
- Available in single or dual unit carcass constructions
- Superior adhesions giving longer product life in difficult applications
- Resistant to moisture, mildew and acid mine water
- State-of-the-art Fenner Dunlop developed Finger Splice Technology prolongs splice life and decreases unplanned belt maintenance

MineFlex® STRONG – Fire Boss® SAFE.

MineFlex combines a unique Fenner Dunlop developed straight-warp carcass with specially compounded MSHA 30 CFR part 14 and ARPM Class 1 and 2 CSA M422 type A2 and C certified Fire Boss covers for underground mining applications. You can expect fire retardant properties which meet and exceed MSHA and CSA requirements coupled with un-surpassed resistance to impact, puncture, rip and tear.



Revolutionary high strength fibers in our top of the line straight warp carcass



For a complete listing of available MineFlex products and specifications please contact your FDA representative.

Carcass Style	UNIT	MF S5	MF D5	MF D6	MF D8	MF D10	MF D12	MF D15	MF D18	MF D20
Number of Plies	n	1	2	2	2	2	2	2	2	2
Carcass Gauge ³	in (mm)	0.175 (4.4)	0.244 (6.2)	0.278 (7.1)	0.320 (8.1)	0.340 (8.6)	0.388 (9.9)	0.446 (11.3)	0.468 (11.9)	0.468 (11.9)
Carcass Weight ⁴	lb/in/ft (kg/m ²)	0.056 (3.3)	0.103 (6.0)	0.114 (6.7)	0.130 (7.6)	0.141 (8.3)	0.162 (9.5)	0.193 (11.3)	0.211 (12.4)	0.211 (12.4)
Elastic Modulus	lbf/in (kN/m)	45000 (7900)	50000 (8800)	60000 (10500)	65000 (11400)	70000 (12300)	85000 (14900)	90000 (15800)	150000 (26300)	213000 (37300)
Max Tension Rating ²	PIW (kN/m)	550 (95)	550 (95)	660 (115)	800 (140)	1000 (175)	1250 (219)	1500 (263)	1800 (315)	2000 (280)
Troughing/Empty ¹ - Min Belt Width										
20 degree idlers	in (mm)	24 (610)	24 (610)	24 (610)	30 (762)	30 (762)	30 (762)	30 (762)	36 (914)	36 (914)
35 degree idlers	in (mm)	30 (762)	30 (762)	30 (762)	36 (914)	36 (914)	36 (914)	36 (914)	42 (1067)	42 (1067)
45 degree idlers	in (mm)	36 (914)	36 (914)	36 (914)	42 (1067)	42 (1067)	42 (1067)	42 (1067)	48 (1219)	48 (1219)
Load Support ¹ 41 – 80 lbs/ft ³ (641-1280 kg/m ³)										
20 degree idlers	in (mm)	72 (1829)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	96 (2438)	96 (2438)
35 degree idlers	in (mm)	66 (1676)	72 (1829)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	96 (2438)	96 (2438)
45 degree idlers	in (mm)	60 (1524)	72 (1829)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	96 (2438)	96 (2438)
Minimum Pulley Diameters										
81 – 100% belt rated tension	in (mm)	20 (508)	24 (610)	30 (762)	36 (914)	36 (914)	36 (914)	36 (914)	42 (1067)	42 (1067)
61 – 80% belt rated tension	in (mm)	16 (406)	20 (508)	24 (610)	24 (610)	30 (762)	30 (762)	30 (762)	36 (914)	36 (914)
Up to 60% belt rated tension	in (mm)	12 (305)	15 (381)	18 (457)	20 (508)	22 (559)	24 (610)	24 (610)	30 (762)	30 (762)

¹ Troughability and Load Support values can be influenced by certain cover gauge and compound combinations used. When in doubt, please contact your FDA representative for selection guidance.

³ Add the appropriate cover gauge to this carcass gauge to obtain the approximate overall belt thickness.

² MineFlex tensions reflect a minimum 10:1 safety factor through the 116 n/mm rated offerings, and an 8:1 minimum safety factor for the remaining higher tension offerings. With the appropriate fastener selection and installation, 4:1 minimum mechanical fastener safety factors can be achieved.

⁴ Add the appropriate cover weight to this carcass weight to obtain the appropriate overall belt weight.

SERIES X SERIES® GROUP MEMBER

LongFlex®

— Maximize Your Investment

LongFlex utilizes the same unique fabric construction of our very successful MineFlex® product, with cover compounds designed to handle demanding surface and underground applications.



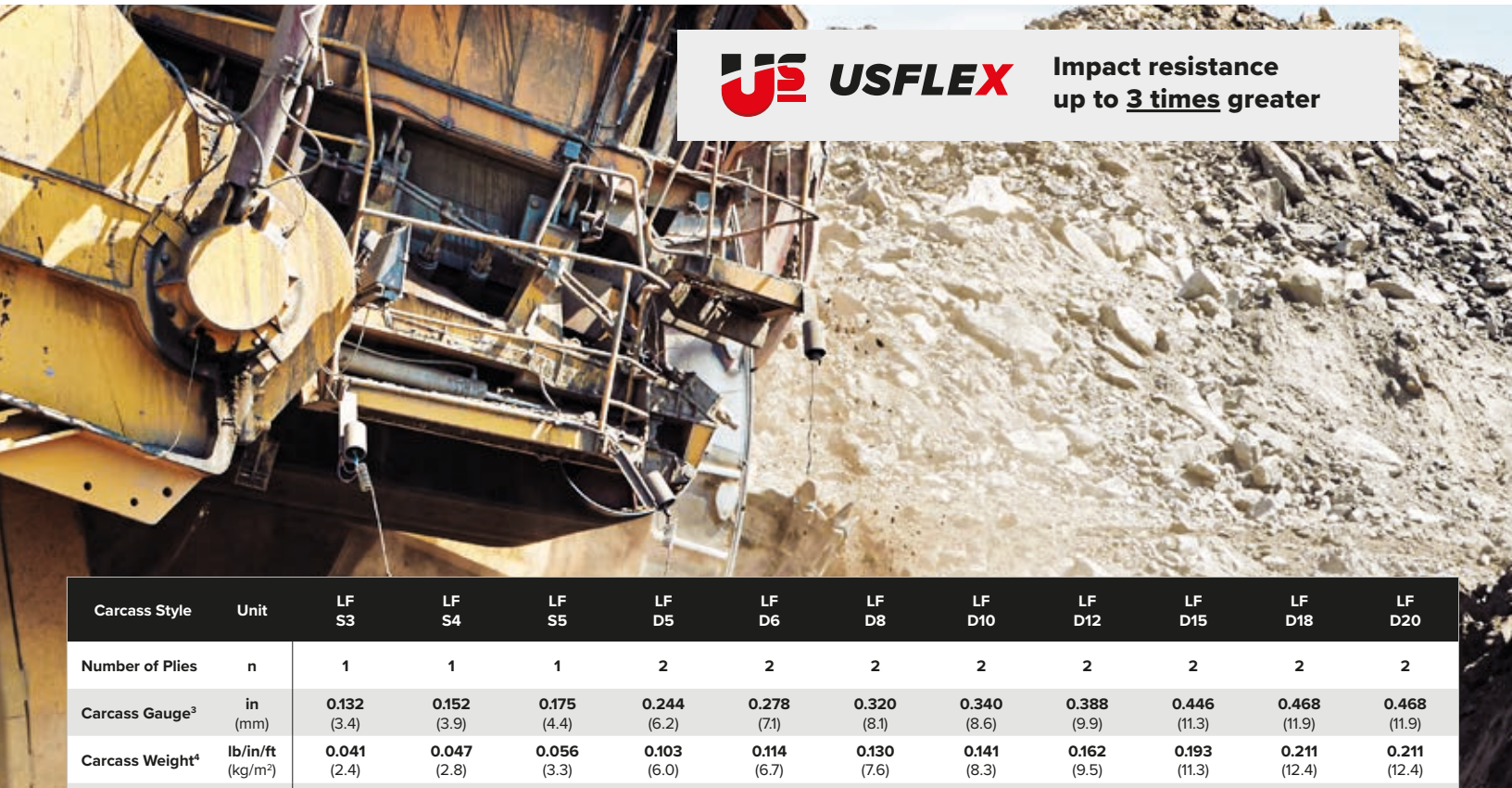
Reasons to Count on LongFlex®

- Superior troughability, tracking and load support
- Compared to standard plied constructions, LongFlex offers:
 - Up to 3 times greater impact resistance
 - Greater flexibility
- Superior adhesions result in longer product life in difficult applications
- Available in single or dual unit carcass weaves
- Resistant to moisture, mildew and acid mine water
- State-of-the-art FDA developed Finger Splice Technology prolongs splice life and decreases unplanned belt maintenance

Markets & Applications:

- Aboveground coal handling
- Overland/transfers
- Loadouts
- Coal preparation





USFLEX

Impact resistance
up to **3 times** greater

Carcass Style	Unit	LF S3	LF S4	LF S5	LF D5	LF D6	LF D8	LF D10	LF D12	LF D15	LF D18	LF D20
Number of Plies	n	1	1	1	2	2	2	2	2	2	2	2
Carcass Gauge ³	in (mm)	0.132 (3.4)	0.152 (3.9)	0.175 (4.4)	0.244 (6.2)	0.278 (7.1)	0.320 (8.1)	0.340 (8.6)	0.388 (9.9)	0.446 (11.3)	0.468 (11.9)	0.468 (11.9)
Carcass Weight ⁴	lb/in/ft (kg/m ²)	0.041 (2.4)	0.047 (2.8)	0.056 (3.3)	0.103 (6.0)	0.114 (6.7)	0.130 (7.6)	0.141 (8.3)	0.162 (9.5)	0.193 (11.3)	0.211 (12.4)	0.211 (12.4)
Elastic Modulus	lb/in (kN/m)	40000 (7000)	40000 (7000)	45000 (7900)	50000 (8800)	60000 (10500)	65000 (11400)	70000 (12300)	85000 (14900)	90000 (15800)	150000 (26300)	213000 (37300)
Max Tension Rating ²	PIW (kN/m)	330 (57)	400 (70)	550 (95)	550 (95)	660 (115)	800 (140)	1000 (175)	1250 (219)	1500 (263)	1800 (315)	2000 (280)
Troughing/Empty - Min Belt Width												
20 degree idlers	in (mm)	20 (508)	30 (762)	24 (610)	24 (610)	24 (610)	30 (762)	30 (762)	30 (762)	30 (762)	36 (914)	36 (914)
35 degree idlers	in (mm)	24 (610)	36 (914)	30 (762)	30 (762)	30 (762)	36 (914)	36 (914)	36 (914)	36 (914)	42 (1067)	42 (1067)
45 degree idlers	in (mm)	30 (762)	42 (1067)	36 (914)	36 (914)	36 (914)	42 (1067)	42 (1067)	42 (1067)	42 (1067)	48 (1219)	48 (1219)
Load Support ¹ 41 – 80 lbs/ft ³ (641-1280 kg/m ³)												
20 degree idlers	in (mm)	66 (1676)	72 (1829)	72 (1829)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	96 (2438)	96 (2438)
35 degree idlers	in (mm)	54 (1372)	60 (1524)	66 (1676)	72 (1829)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	96 (2438)	96 (2438)
45 degree idlers	in (mm)	48 (1219)	54 (1372)	60 (1524)	72 (1829)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	84 (2134)	96 (2438)	96 (2438)
Minimum Pulley Diameters												
81 – 100% belt rated tension	in (mm)	14 (356)	16 (410)	20 (508)	24 (610)	30 (762)	36 (914)	36 (914)	36 (914)	36 (914)	42 (1067)	42 (1067)
61 – 80% belt rated tension	in (mm)	12 (305)	13 (330)	16 (406)	20 (508)	24 (610)	24 (610)	30 (762)	30 (762)	30 (762)	36 (914)	36 (914)
Up to 60% belt rated tension	in (mm)	9 (229)	10 (250)	12 (305)	15 (381)	18 (457)	20 (508)	22 (559)	24 (610)	24 (610)	30 (762)	30 (762)

For a complete listing of available LongFlex products and specifications please contact your FDA representative.

¹Troughability and Load Support values can be influenced by certain cover gauge and compound combinations used. When in doubt, please contact your FDA representative for selection guidance.

³Add the appropriate cover gauge to this carcass gauge to obtain the approximate overall belt thickness.

² LongFlex tensions reflect a minimum 10:1 safety factor through the 116 N/mm rated offerings, and an 8:1 minimum safety factor for the remaining higher tension offerings. With the appropriate fastener selection and installation, 4:1 minimum mechanical fastener safety factors can be achieved.

⁴Add the appropriate cover weight to this carcass weight to obtain the appropriate overall belt weight.

DynaFlight®

Measures up to **your** **toughest** challenge.



Perfect solution for slope belts in
deep mines and open-pit mines

STEELCORD BELTING

DynaFlight®

Conveying Your World

DynaFlight Steel Cord belting is the result of more than a century of innovation, engineering expertise, state-of-the-art manufacturing equipment and quality assurance.

Like all Fenner Dunlop conveyor belting, DynaFlight® belting is Made in North America. Fenner Dunlop has invested more than \$100 million in the US including the newest technology in 102" steel cord production equipment.

Markets & Applications:

- Coal mining
- Overland conveyance
- Slope belts in deep mines, open-pit mines
- Refuse belts
- Stacker/reclaimers, unit train loadouts

Reasons to count on DynaFlight™

Wide product range

Complete product range from 30" - 102" widths with tension capabilities ST500 through ST8500

Product design

Individual cord tensioning, with alternating twist to ensure optimum tracking forces

Product design

Open weave steel cord design protects against corrosion and maximizes rubber to cord adhesions, prolonging the productive life of your conveyor investment

Product quality

DynaCord and DynaFlex breakers direct unwanted energy from material impact away from the critical tension bearing cords

EagleEye®, rEscan®, and Rip Ranger®

Fenner Dunlop's Diagnostics Division provides the latest in scanning and monitoring of steel cord belting.

Services

Fenner Dunlop Conveyor Services provide most advanced team of field technicians capable critical installation and proper splicing of your DynaFlight conveyor belt





DynaFlight®

SPECIFICATION TABLE

Standard Carcass Styles	UNIT	ST500	ST630	ST800	ST1000	ST1250	ST1400	ST1600	ST1800
Max Tension Rating ¹	PIW (N/mm)	430 (75)	535 (94)	685 (120)	860 (151)	1070 (187)	1195 (209)	1370 (240)	1535 (269)
Elastic Modulus	lbs/in (mm)	506000 (36000)	259000 (46000)	329000 (58000)	411000 (72000)	514000 (90000)	576000 (101000)	658000 (116000)	740000 (130000)
Troughing/Empty ² - Min Belt Width									
20 degree idlers	in (mm)	24 (600)	24 (600)	24 (600)	24 (600)	24 (600)	24 (600)	24 (600)	30 (750)
35 degree idlers	in (mm)	24 (600)	24 (600)	24 (600)	24 (600)	30 (750)	30 (750)	30 (750)	30 (750)
45 degree idlers	in (mm)	24 (600)	24 (600)	30 (750)	30 (750)	36 (900)	36 (900)	36 (900)	36 (900)
Minimum Pulley Diameter ³									
81 – 100% belt rated tension	in (mm)	16 (400)	16 (400)	20 (500)	22 (550)	26 (650)	26 (650)	32 (800)	32 (800)
61 – 80% belt rated tension	in (mm)	14 (350)	14 (350)	16 (400)	18 (450)	22 (550)	22 (550)	26 (650)	26 (650)
Up to 60% belt rated tension	in (mm)	10 (250)	10 (250)	12 (300)	14 (350)	16 (400)	16 (400)	20 (500)	20 (500)
Splice Step Pattern	n	1-Step	1-Step	1-Step	1-Step	1-Step	1-Step	1-Step	1-Step

¹ DynaFlight tension ratings reflect a minimum 6.7:1 safety factor.

² Troughability values can be influenced by certain cover gauge and compound combinations used. When using a DynaCord Breaker, another 6" (150mm) of belt width is required.

³ Pulleys must be straight-faced, engineered class (no crowns) and for several reasons, preferably lagged.



ST2000	ST2250	ST2500	ST2800	ST3150	ST3500	ST4000	ST4500	ST5000	ST5400
1720 (301)	1920 (336)	2140 (375)	2390 (418)	2690 (471)	2985 (522)	3440 (602)	3840 (672)	4280 (749)	4605 (806)
822000 (144000)	925000 (162000)	103000 (180000)	1151000 (201000)	1295000 (227000)	1439000 (252000)	1640000 (870000)	1850000 (324000)	2055000 (360000)	2220000 (390000)
30 (750)	30 (750)	30 (750)	30 (750)	30 (750)	30 (750)	36 (900)	36 (900)	36 (900)	36 (900)
30 (750)	30 (750)	30 (750)	30 (750)	36 (900)	36 (900)	42 (1050)	42 (1050)	48 (1200)	48 (1200)
36 (900)	36 (900)	36 (900)	36 (900)	36 (900)	36 (900)	42 (1050)	42 (1050)	48 (1200)	48 (1200)
36 (900)	36 (900)	40 (1000)	40 (1000)	46 (1150)	46 (1150)	54 (1350)	54 (1350)	60 (1500)	60 (1500)
30 (750)	30 (750)	32 (800)	32 (800)	38 (950)	38 (950)	44 (1100)	44 (1100)	48 (1200)	48 (1200)
22 (550)	22 (550)	24 (600)	24 (600)	28 (700)	28 (700)	34 (850)	34 (850)	36 (900)	36 (900)
1-Step	2-Step	2-Step	2-Step	2-Step	2-Step	3-Step	3-Step	3-Step	3-Step

For additional DynaFlight constructions, including those of higher tension, please contact your FDA representative.



FENNER DUNLOP COVER COMPOUNDS

While the actual construction and physical properties of the carcass are very important, it is the combination of the carcass with the physical strength and durability of the cover compounds that ultimately determines the operational lifetime of a conveyor belt and thus, its cost-effectiveness.

OUR COVER COMPOUNDS EXCEED
ARPM STANDARDS



Fire Retardant Covers

FIREBOSS® AR

- Fire retardant abrasion resistant MSHA compound that meets U.S. Mine Safety and Health Administration requirements per MSHA title 30, part 14.
- Increased resistance to abrasion and cover wear.
- Meets ARPM-FR Class 1
- Ideal when an increased fire retardant level is desirable
- For underground coal mining applications
- UV and ozone protection for above ground applications

FIRE BOSS® SAR

- Fire retardant abrasion resistant MSHA compound that meets U.S. Mine Safety and Health Administration requirements per MSHA title 30, part 14.
- Excellent resistance to abrasion and cover wear
- Meets ARPM-FR Class 1
- Ideal when an increased fire retardant level is desirable
- For underground coal mining applications
- UV and ozone protection for above ground applications





MINING-FAR/FFAR

- Fire retardant abrasion resistant compound that meets ARPM-FR Class 2
- Excellent abrasion resistant cover compound for mining applications not requiring MSHA Part 14 certification
- For underground, non-coal mining applications not requiring MSHA Part 14 certification

MINING-FFSAR

- Fire retardant abrasion resistant compound that meets ARPM-FR Class 2
- Superior abrasion resistant cover compound for mining applications not requiring MSHA Part 14 certification
- For surface and underground applications not requiring MSHA Part 14 certification
- Excellent abrasion and cover wear characteristics

FIREBOSS CSA-A2

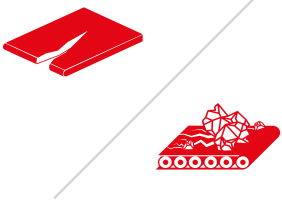
- Meets Canadian standards association M422- M87 current specification for Grade A2 Ideal when an increased fire retardant level is desirable.
- For underground Coal Mining Applications.

FIRE BOSS® CSA-OR

- Fire retardant cover compound with greater abrasion resistance for mining applications
- Meets Canadian Standards Association M422
- M87 Current specification for Grade C
- For Surface applications

FIRE BOSS® CSA-C AR

- Fire retardant cover compound with greater abrasion resistance for mining and industrial applications
- Meets Canadian Standards Association M422 – M87 current specification for Grade C
- For surface applications



General Service Covers

CUT/GOUGE/ABRASION

PLATINUM®

ARPM GRADE I

- Excellent endurance against heavy, continuous abrasion
- Excellent resistance to cutting and gouging
- Cost effective upgrade from Grade II products
- Recommended for very aggressive abrasion applications, such as Run-of-Mine materials and coal mine refuse

GRANITE®

ARPM GRADE II

- Excellent where heavy, continuous abrasion is the primary concern
- Good resistance to cutting and gouging
- Recommended for most abrasive material handling applications, such as Run-of-Mine and sized coal, and coal mine refuse

TITANIUM®

ARPM GRADE I

- Excellent resistance to cut gouge and abrasion applications.
- Recommended for applications requiring superior resistance to abrasion and wear
- Provides increased service life without increasing cover thickness
- Performs well in high impact applications

ZR FAMILY

ARPM GRADE II

- Offers absolute best resistance to heavy, continuous abrasion
- Excellent resistance to abrasion





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TOUGHEST CONDITIONS**

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Tough Applications

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