



DynaFlight® Conveying Your World

Measures up to your toughest challenge.

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. "Made in North America", DynaFlight is manufactured with an open weave steel cord design to protect against corrosion and to maximize rubber to cord adhesions. These features are necessary to withstand the rigors of heavy duty, bulk material handling.

Ideally suited for high tension/low-stretch applications such as overland conveying systems, DynaFlight can now be armed with MSHA certified Fire Boss® cover compounds for ultimate fire retardance in underground conveying operations. And to protect your steel cord investment even further, Fenner Dunlop offers rip detection and diagnostic belt monitoring systems and services that will detect and alert customers of potential belt damage and failure.

Fenner Dunlop offers a complete DynaFlight product range from 30" to 96" widths with tension capabilities ST500 through ST7000, all custom designed to match your specific needs.

Markets & Applications:

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



Reasons to Count on DynaFlight

- Dynaflight available in MSHA certified Fire Boss® cover compounds for ultimate fire retardance
- Complete product range from 30" - 96" widths with tension capabilities ST500 through ST7000
- Individual cord tensioning, with alternating twist to ensure optimum tracking forces
- Open weave steel cord design protects against corrosion and maximizes rubber to cord adhesions, prolonging the productive life of your conveyor investment
- DynaCord Breaker directs unwanted energy from material impact away from the critical tension bearing cords
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- Fenner Dunlop's Diagnostics Division provides the latest in scanning and monitoring of steel cord belting. Reporting equipment monitors the condition of your belt and provides real time information on damage and wear to your belt and splices
- Fenner Dunlop Conveyor Services provide the largest and most advanced team of field technicians capable of time critical installation and proper splicing of your DynaFlight conveyor belt

DynaFlight Specification Table - "Imperial" and "Metric"

Standard Carcass Styles ¹	Max Tension Rating ²		Elastic Modulus		Cord Pitch		Carcass Weight ⁵		Max. Cord Diameter ⁴		Troughing/Empty ³ Minimum Belt Width						Minimum Pulley Diameter ⁶ % Rated Belt Tension						Splice Step Pattern
	PIW	N/mm	lbs/in	mm	in	mm	lbs/in/ft	kg/m ²	in	mm	20° idlers		35° idlers		45° idlers		81 – 100		61 – 80		up to 60		
											in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
ST500	430	75	206000	36000	0.551	14.0	0.092	5.4	0.118	3.0	24	600	24	600	24	600	16	400	14	350	10	250	1-Step
ST630	535	94	259000	46000	0.433	11.0	0.097	5.7	0.118	3.0	24	600	24	600	24	600	16	400	14	350	10	250	1-Step
ST800	685	120	329000	58000	0.472	12.0	1.164	6.8	0.146	3.7	24	600	24	600	30	750	20	500	16	400	12	300	1-Step
ST1000	860	151	411000	72000	0.472	12.0	1.127	6.6	0.165	4.2	24	600	24	600	30	750	22	550	18	450	14	350	1-Step
ST1250	1070	187	514000	90000	0.551	14.0	1.584	9.3	0.193	4.9	24	600	30	750	36	900	26	650	22	550	16	400	1-Step
ST1400	1195	209	576000	101000	0.551	14.0	1.644	9.6	0.197	5.0	24	600	30	750	36	900	26	650	22	550	16	400	1-Step
ST1600	1370	240	658000	116000	0.591	15.0	1.944	11.4	0.220	5.6	24	600	30	750	36	900	32	800	26	650	20	500	1-Step
ST1800	1535	269	740000	130000	0.531	13.5	2.052	12.0	0.220	5.6	30	750	30	750	36	900	32	800	26	650	20	500	1-Step
ST2000	1720	301	822000	144000	0.472	12.0	2.196	12.8	0.220	5.6	30	750	30	750	36	900	36	900	30	750	22	550	1-Step
ST2250	1920	336	925000	162000	0.433	11.0	2.316	13.6	0.220	5.6	30	750	30	750	36	900	36	900	30	750	22	550	2-Step
ST2500	2140	375	1030000	180000	0.591	15.0	2.724	15.9	0.283	7.2	30	750	30	750	36	900	40	1000	32	800	24	600	2-Step
ST2800	2390	418	1151000	201000	0.531	13.5	2.784	16.3	0.283	7.2	30	750	30	750	36	900	40	1000	32	800	24	600	2-Step
ST3150	2690	471	1295000	227000	0.591	15.0	3.564	20.9	0.319	8.1	30	750	36	900	36	900	46	1150	38	950	28	700	2-Step
ST3500	2985	522	1439000	252000	0.591	15.0	3.912	22.9	0.339	8.6	30	750	36	900	36	900	46	1150	38	950	28	700	2-Step
ST4000	3440	602	1640000	287000	0.591	15.0	4.080	23.9	0.350	8.9	36	900	42	1050	42	1050	54	1350	44	1100	34	850	3-Step
ST4500	3840	672	1850000	324000	0.630	16.0	4.644	27.2	0.382	9.7	36	900	42	1050	42	1050	54	1350	44	1100	34	850	3-Step
ST5000	4280	749	2055000	360000	0.669	17.0	5.160	30.2	0.429	10.9	36	900	48	1200	48	1200	60	1500	48	1200	36	900	3-Step
ST5400	4605	806	2220000	390000	0.669	17.0	5.568	32.6	0.445	11.3	36	900	48	1200	48	1200	60	1500	48	1200	36	900	3-Step

1 For additional DynaFlight constructions, including those of higher tension, please contact your FDA representative.
 2 DynaFlight tension ratings reflect a minimum 6.7:1 safety factor.
 3 Troughability values can be influenced by belt construction. When using Dynacord breaker, another 6" (150 mm) of belt width is required.

4 Add the appropriate cover gauge to the cord diameter value to obtain the approximate overall belt thickness.
 5 Add the appropriate cover weight to this carcass weight to obtain the appropriate overall belt weight.
 6 Pulleys must be straight-faced, engineered class (no crowns) and for several reasons, preferably lagged.