

CONVEYOR BELT

CONVEYORPRO BELT RANGE





1987

THE YEAR TRANSMIN WAS
FOUNDED



ONE RANGE

FROM BELTING & PULLEYS,
TO SCRAPERS & GUARDING



END-TO-END

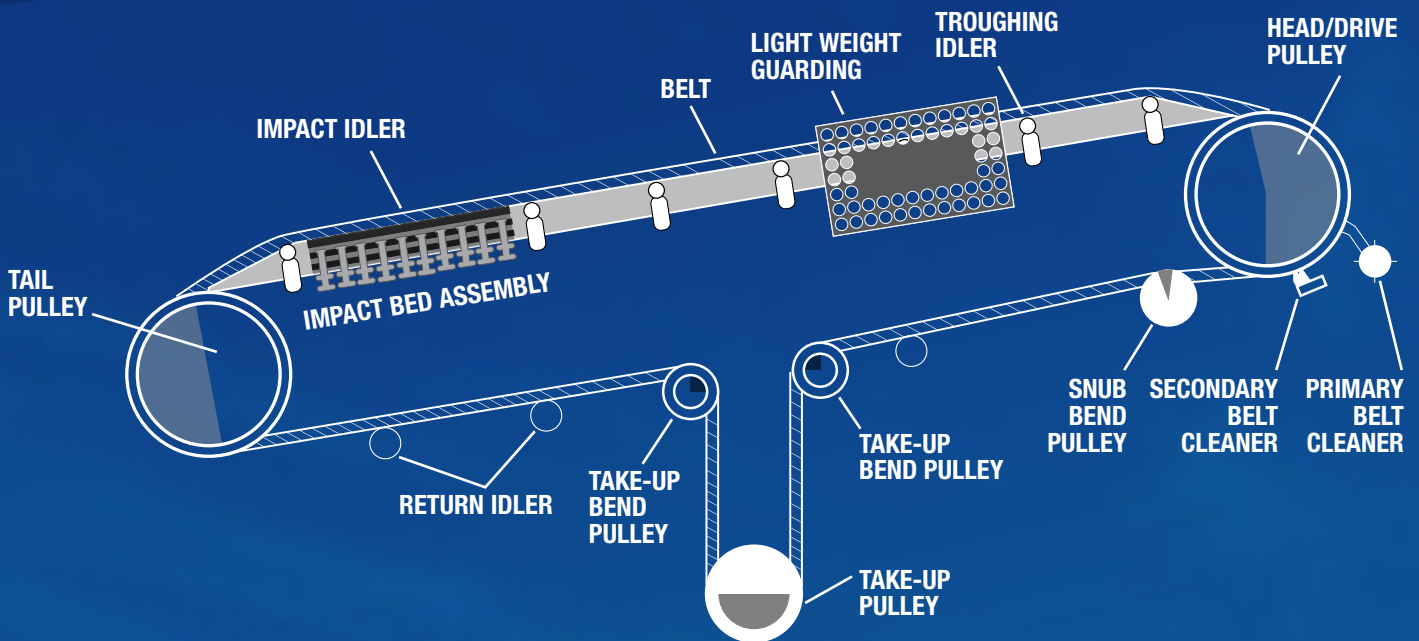
FULL LIFE CYCLE SUPPORT
FROM ENGINEERING TO SERVICE



DECADES OF EXPERTISE. UNMATCHED RELIABILITY. TAILORED FOR YOU.

Meet ConveyorPro, the ultimate conveyor solution from Transmin. Backed by 30 years of trusted industry experience, ConveyorPro brings components, installation, maintenance and engineering expertise together under one roof. From belting and pulleys, to scrapers and guarding, ConveyorPro delivers everything you need to keep operations running smoothly, efficiently and without compromise.

With a strong commitment to safety, reliability and efficiency, ConveyorPro has earned a reputation for high-performance conveyor solutions tailored to each operation. From concept through to ongoing support, ConveyorPro is your trusted partner in end-to-end conveyor performance and innovation.





HARD WEARING. HIGH QUALITY. RELIABLE.

ConveyorPro is a global supplier of high quality conveyor belt, with widths ranging from 300mm to 4m. All our conveyor belt is laboratory tested, assuring our customers, our conveyor belt is not only compliant but will exceed both life cycle and budget expectations.

ConveyorPro supplies to all industries and with a product range from rubber matting to high volume and high tensile conveying belt, ConveyorPro is your sole source supplier for all of your conveying needs, we sell and service all aspects of conveying including design.

BELT TYPES

- ▶ Steel cord
- ▶ Multiplify fabric
- ▶ Bucket elevator
- ▶ Corrugated side wall
- ▶ Fire resistant
- ▶ Chevron
- ▶ Rip stop
- ▶ Heat resistant
- ▶ Chemical resistant

COVER GRADES

COVER GRADES FOR A WIDE RANGE OF CONVEYING REQUIREMENTS

COVERS WITH OPTIMUM PROPERTIES

The ConveyorPro Belt range contains a wide selection of covers for all applications, providing the optimum solution in each case.

All ConveyorPro belting is produced within our Quality Management System. As part of this system, the quality of all belt is verified during manufacture and prior to dispatch by a programme of comprehensive testing.

This testing includes:

- ▶ Dimensional measurements
- ▶ Warp and weft tensile strengths
- ▶ Tear strength
- ▶ Elongation
- ▶ Cover adhesion
- ▶ Small scale safety tests (laboratory flame and electrical resistance)
- ▶ Abrasion resistance

In accordance with:

ISO 282:1992, ISO 18573:2012, ISO:283:2015, ISO 7622-1:2013, ISO 7622-2:2015, ISO 252:2007, ISO 7623:2015, ISO 8094:2013, ISO 251:2012, ISO 7590:2009, ISO 433:1991, ISO 284:2012, ISO 8573:2012, ISO 340:2013



GRADE	STANDARD	ABRASION mm ³ max	BREAKING STRENGTH N/mm ³ min	ELONGATION AT BREAK % min
W	DIN22102	90	18	400
X	DIN22102	120	25	450
Y	DIN22102	150	20	400
Z	DIN22102	250	15	350
V	DIN22102	200	15	350
H	ISO15236	120	24	450
D	ISO15236	100	18	400
L	ISO15236	200	15	350
K	ISO15236	200	15	350
A	AS1332	70	17	400
E	AS1332	-	14	300
F	AS1332	-	14	300
M	AS1332	125	24	450
N	AS1332	200	17	400
S	AS1332	250	14	300
I	RMA	-	17	400
II	RMA	-	14	400
1	ARPM	125	17	400
2	APRM	175	14	400

SPECIALISED ConveyorPro BELT

ProTOUGH

The toughest conveyor belt in the known market.

Benefits of ProTOUGH:

- ▶ ConveyorPro's maximum strength belt ideal for hard-rock mining, quarrying and recycling industries.
- ▶ Made up of hybrid kevlar and steel mesh composite with special grade anti-abrasive, cut and gouge resistant cover, allowing it to withstand high impact rock falls over 3m.
- ▶ Tensile strength exceeds DIN, ISO, US and AS Standards Nominal strength over >500 N/mm.
- ▶ Reduces site labour and downtime repair costs.



ProEDGE

High strength, all-in-one edge strip solution for Transmin LPFs and conventional belt feeders.

Benefits of ProEDGE:

- ▶ Vastly superior strength compared to conventional glued edge strip – up to 700N before signs of fatigue (90N for conventional).
- ▶ All-in-one belt with pre-supplied hot vulcanised edge strip – no need for separate gluing.
- ▶ Reduces site labour and downtime repair costs.
- ▶ Edging minimises spillage and keeps material away from track and componentry.

THICKNESS (mm)	WIDTH (mm)	FABRIC STRENGTH (kgf/cm; N/mm)	COVER RUBBER GRADE
Top cover: ≥6.0mm Bottom cover: ≥2.0mm	800 ~ 2200	300 ~ 2200	Abrasion resistant, impact resistant, general oil resistant, fire resistant, cold resistant



CONVEYOR EP BELT

ConveyorPro EP textile conveyor belts with epoxy plies are robust and are suitable for heavy-duty operations due to their polyester/polyamide ply design. The low elongation tension members enables short take-ups, giving high resistance to penetration damage and optimum adhesion between plies.

ConveyorPro EP belt with cut edges or rubber edges is resistant to rotting. It is easy to mold and guarantees high operational reliability and durability, even with a small pulley diameters.

The use of modern textiles and state-of-the-art production technologies ensures that the ConveyorPro EP belt retains its belt alignment over a long service of life.

FLEXIBLE DIMENSIONS FOR INDIVIDUAL REQUIREMENTS

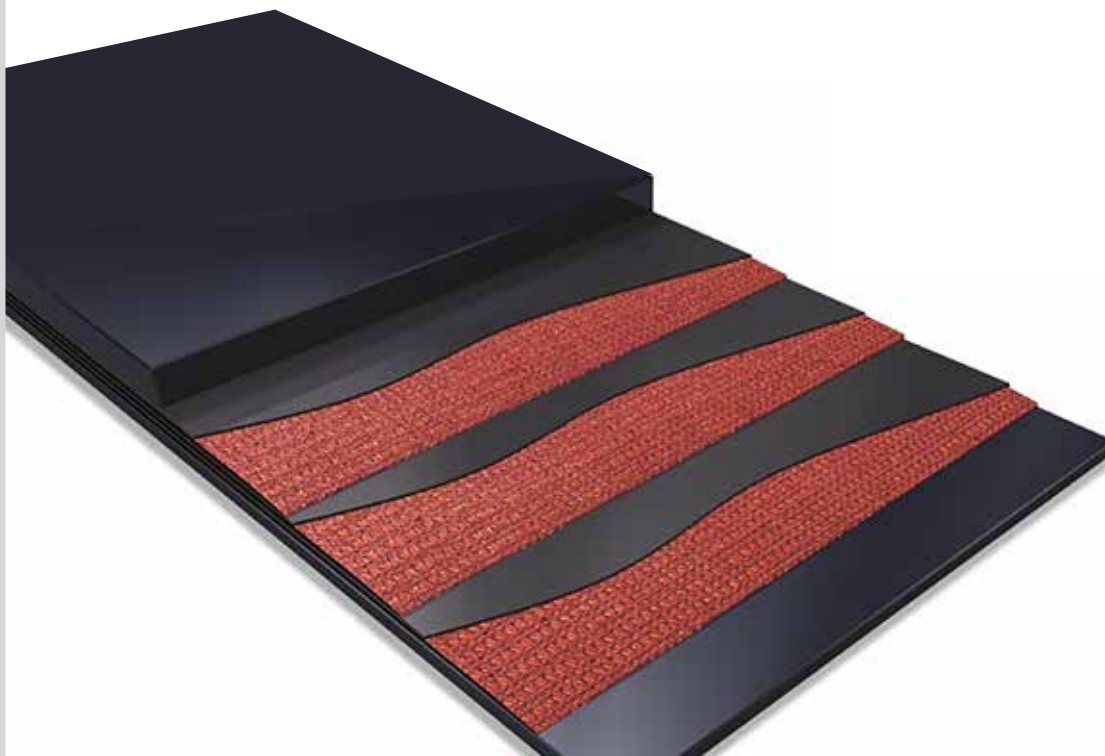
- ▶ ConveyorPro EP is available in standard widths up to 3200mm and (with longitudinal seams) in super-widths up to 6000mm, depending on belt thickness and length. Cover thicknesses can be selected according to the intended use.

WEIGHT

- ▶ To determine the approximate weight of the belt, add the carcass weight and about 1.1kg/m² per mm of cover.

		CARCASS THICKNESS mm	CARCASS WEIGHT kg/m ²	RECOMMENDED MIN PULLEY DIAMETER (DRIVE) mm
2 PLY BELTS	315/2	1.9	2.5	200
ConveyorPro EP	400/2	2.3	2.8	250
	500/2	2.9	3.0	315
	630/2	3.3	4.1	400
	800/2	4.0	4.6	500
3 PLY BELTS	500/3	3.0	3.6	400
ConveyorPro EP	630/3	3.6	4.1	500
	800/3	4.5	4.4	500
	1000/3	5.1	6.1	630
	1250/3	6.2	6.8	800
4 PLY BELTS	630/4	4.1	4.7	500
ConveyorPro EP	800/4	4.9	5.4	630
	1000/4	6.1	5.8	800
	1250/4	7.0	8.0	800
	1600/4	8.5	9.0	1000
5 PLY BELTS	800/5	5.2	5.9	630
ConveyorPro EP	1000/5	6.2	6.7	800
	1250/5	7.7	7.2	1000
	1600/5	8.8	10.0	1000
	2000/5	10.7	11.2	1250

Other types available on request.



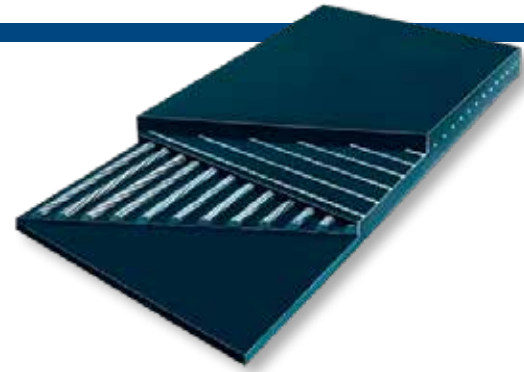
CONVEYOR ST BELT

CONVEYOR BELTS FOR TOUGHEST TRANSPORT DEMANDS

ConveyorPro ST conveyor belts have a layer of high strength steel cords, that are aligned next to one another in a spaced panar arrangement and are embedded in rubber.

Thanks to their structure, the belts boast high impact resistance, even in the case of large-lump materials dropped from a

considerable height. ConveyorPro ST belt also exhibit good troughability. Special inserts can be added to the cover stock for extra enhancement of impact behavior. Available in a range of tensile grades from ST 500 to ST 10,000.



FLEXIBLE DIMENSIONS FOR INDIVIDUAL REQUIREMENTS

- ▶ ConveyorPro ST is available in standard widths up to 3200mm.
- ▶ Cover thicknesses can be selected according to the intended use.

TYPE	RATED BREAK STRENGTH N/mm	CORD DIAMETER mm	CORD PITCH mm	LENGTH l ¹ mm	NO. OF STEPS	BELT SPLICE		REFERENCE ELONGATION AT 10% OF MINIMUM BREAKING STRENGTH %	WEIGHT OF BELT CORE ⁴	MINIMUM COVER GAUGE
						BELT WIDTH FOR 30° TROUGH AT LEAST ³	DIAMETER OF THE DRIVE PULLEY, AT LEAST			
ST 500	500	2.8	14	500	1	400	50	0.1-0.3	5.3	4
ST 630	630	2.8	11	550	1				6.1	4
ST 800	800	3.2	12	600	1				6.9	4
ST 1000	1000	3.7	12	600	1				8.4	4
ST 1120	1120	3.7	11	650	1	500	630		8.8	4
ST 1250	1250	4.5	14	650	1				10.3	4
ST 1400	1400	4.5	14	1000	2	650	800		10.3	4
ST 1600	1600	5.1	15	750	1				11.9	4
ST 1800	1800	5.1	13.5	1150	2				12.5	4
ST 2000	2000	5.1	12	1150	2				13.3	4
ST 2250	2250	5.1	11	1150	2	800	1000	13.7	4	
ST 2500	2500	6.7	15	1350	2			19.1	5	
ST 2800	2800	6.7	13.5	1450	2	1000	1250	20.3	5	
ST 3150	3150	7.6	15	1650	2			21.0	5.5	
ST 3500	3500	8.1	15	2350	3			23.1	6	
ST 4000	4000	8.7	15	2650	3			25.9	6.5	
ST 4500	4500	9.3	16	2800	3	1200	1400	29.0	7	
ST 5000	5000	10.4	17	4050	4			31.2	7.5	
ST 5400	5400	10.8	17	4450	4	1200	1600	32.9	8	
ST 6000	6000	10.8	16.5	²	²			34.3	8	
ST 6300	6300	12.3	20	²	²	1200	1800	36.7	9	
ST 6600	6600	12.3	19	²	²			38.1	10	
ST 7100	7100	13.2	20	²	²	2500	2250	42.3	10	
ST 7500	7500	13.2	19	²	²			42.3	10	
ST 10000	10000	14.1	19.2	²	²	²	²	20	10	

* Other types on request

¹ With skive. 0.3 x additional belt width. ² To be determined as per requirements. ³ With cover thicknesses normally used.

⁴ Belt weight: Add product of cover gauge (carrying side plus bottom side) and density.

FRAS BELT



FIRE RESISTANT AND ANTI-STATIC CONVEYOR BELTS

ConveyorPro provides a range of fire resistant and anti-static (FRAS) conveyor belts.

ConveyorPro FRAS conveyor belting has rubber covers that provide good tear, cut, impact and abrasion resistance and is also fire retardant.

The belt is available in a complete range of multiply strengths and also available as ConveyorPro ST.

ConveyorPro FRAS conveyor belting has been developed in accordance with:

- ▶ Flame test - ISO 340:2013 test method
- ▶ Electrical conductivity of the belt surface - ISO 284:2012 test method
- ▶ Fire propagation test - EN 12881-1 test method

APPLICATIONS

- ▶ Mines, steel mills (blast furnace), coal, people-movers, grain and petroleum terminals, and hazardous (flammable) materials conveyance.

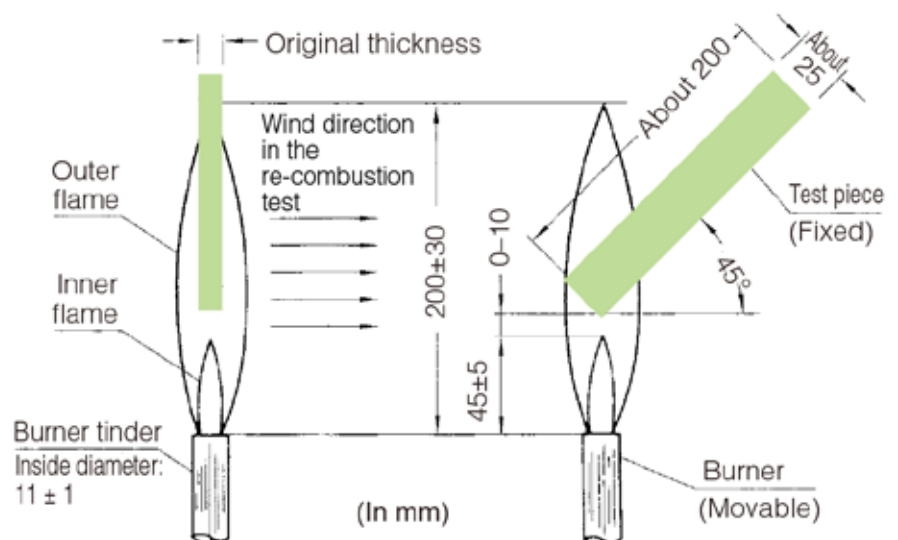
BURN DURATION TEST

- ▶ Adjust the burner to obtain an inner flame length of 45 ± 5 mm and an outer flame length of 200 ± 30 mm. Tilt the test piece at 45 degrees, and set it so that the lowermost end of the test piece comes to a position 0 – 10mm from the uppermost end of the inner flame. After exposing the test piece to the flame for 45 seconds, remove the flame, and measure the time the test piece continues to burn.

RE-COMBUSTION TEST

- ▶ After removing the flame in the burn duration test, wait 60 ± 10 seconds, and use a blower to expose the test piece to a wind speed of 1.5m/second in the direction shown at right to examine the re-combustibility of the fire.

Note: Adjust wind speed in advance using a portable anemometer.



STANDARDS	MINIMUM TENSILE STRENGTH	MINIMUM ELONGATION (%)	ABRASION
DIN S Grade	17	350	180
DIN K Grade	17	400	200

SIDEWALL BELT



STEEP ANGLE CONVEYING NEEDS

ConveyorPro sidewall range of steep angle and high lift conveying belts, are produced from a high elasticity, high strength rubber compound, that offers excellent flexibility. The use of diagonal fabric for the reinforcement within the sidewalls ensures maximum elongation of the fabric at the flexing points as well as increasing tensile strength and also increasing the life of the sidewall.

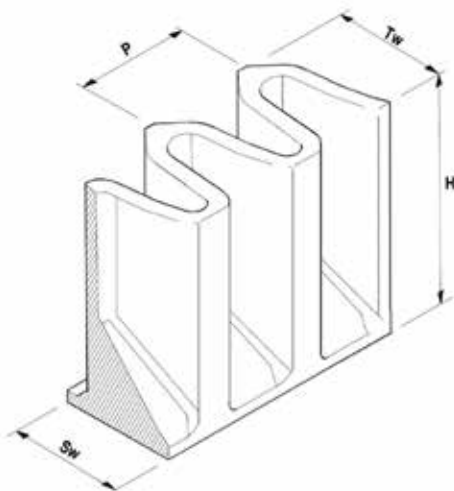
The assembly lines for complete belts have also received new investments for maximum quality standards and higher productivity. The computer controlled roughening machine can precisely roughen the base belt automatically and to an exact depth, which is important in ensuring maximum bond strengths.

ConveyorPro sidewall is available in four basic product groups:

- ▶ **Type S**
Standard construction in heights from 40mm to 120mm.
- ▶ **Type SR**
Standard construction but with diagonal fabric reinforcement.
- ▶ **Type HDSR**
Heavy duty construction including fabric reinforcement as standard in heights from 120mm to 300mm. The fabric reinforcement is of the diagonal type ensuring maximum flexibility with high vertical stability.
- ▶ **TypeXHDSR**
Heavy duty special design including fabric reinforcement as a standard in heights from 300mm to 630mm.

RUBBER QUALITIES

- ▶ Black standard.
- ▶ High abrasion resistant.
- ▶ Back oil and fat resistant.
- ▶ Heat resistant to 100°C.
- ▶ High heat resistant to 130°C.
- ▶ Flame retardant.



TYPE	H	Sw	Tw	P	MIN PULLEY DIAMETER mm	WEIGHT kg/m
S*	40	35	30	30	125	0.60
	60	50	45	40	160	1.80
	80	50	45	40	200	1.80
	120	50	45	40	250	2.23
HDSR	120	75	70	60	315	2.67
	160	75	70	60	400	4.77
	200	75	70	60	500	6.48
	250	75	70	60	630	7.55
	280	75	70	60	800	8.60
	300	75	70	60	800	9.30
XHDSR	300	100	90	75	800	12.50
	400	100	90	75	1000	18.75

* Denotes available with or without fabric reinforcement.

STEEP ANGLE CONVEYING NEEDS









All ConveyorPro sidewall cleats have been specifically design to give optimum performance. The shape of the “C” and “TC” types have been created to offer best conveying capacities along with excellent self-cleaning properties.

The cleats are of the extruded type for the smaller profiles. Larger cleats are molded to give the best shape retention, even when conveying high density materials. Cleats are available in either 2.5m for molded and 3m/5m lengths for extruded profiles.



CONVEYORPRO SIDEWALL BLINKERS

Side blinkers can be fitted in between the cross cleats profile and the sidewall to make a seal. Side blinkers are used when the material is particularly free flowing.

CLEAT TYPE	HEIGHT mm	BASE WEIGHT mm	WEIGHT kg/m	MIN PULLEY DIAMETER mm	PRODUCTION LENGTH m
Type C 	35	55	0.50	100	3/5
	55	75	1.50	125	3/5
	75	80	2.00	150	3/5
	90	110	2.30	250	3/5
	110	110	2.50	315	3/5
Type TC 	75	80	1.80	150	3/5
	90	110	2.50	250	3/5
	110	110	2.80	315	3/5
	140	160	6.60	400	2.5
	180	160	8.30	500	2.5
Type MBTC 	230	175	10.46	630	2.5
	110	160	7.90	315	3
	140	160	9.25	400	3
	180	160	11.50	500	3
	230	160	13.50	630	3
	250	160	14.60	630	3
Type TC-XS 	280	160	17.65	800	3
	360	160	19.25	1000	3
	230	225	17.95	630	2.5
	250	225	18.90	630	2.5
	280	225	22.50	800	2.5
Type TK 	360	230	26.00	1000	2.5
	35	110	1.65	100	3/5
	40	110	1.80	100	3/5
	20	40	0.28	75	3/5
	25	40	0.3	75	3/5
	35	55	0.55	100	3/5
Type T 	40	70	0.60	125	3/5
	55	80	1.45	125	3/5
	75	80	1.80	150	3/5
	90	110	2.50	250	3/5
	110	110	2.80	315	3/5
	140	160	6.60	400	2.5
Type MBT 	180	160	8.30	500	2.5
	230	175	10.46	630	2.5
	110	160	7.90	315	3
	140	160	9.25	400	3
	180	160	11.50	500	3
	230	160	13.50	630	3
Type T-XS 	250	160	14.60	630	3
	280	160	17.65	800	3
	360	160	19.25	1000	3
	230	210	17.85	630	2.5
	250	220	18.60	630	2.5
	280	230	19.50	800	2.5
	360	230	22.50	1000	2.5

The above are standard heights. Non-standard heights are available on request.

SIDEWALL BELT

STEEP ANGLE CONVEYING NEEDS

The ConveyorPro sidewall range of cross-stabilised base belts are available in the following configurations:

▶ Type XE

This belt incorporates the cross-stabilising ply in the tensioning ply, mainly used for medium duty applications.

▶ Type XE+2


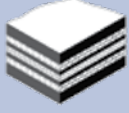
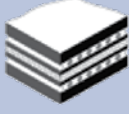

The cross-stabilising ply and tensioning plies are separate. In this case the belt has 2 cross-stabilising piles, application areas are medium to heavy.

▶ Type XE-SC+2

This belt incorporates textile tensioning plies with steel cord cross-stabilising members. The high lateral stiffness means the belt can be used in application areas where rigidity is an important factor, ie. high lifts heights and wide belts.

▶ Type XST+SC

This belt incorporates steelcord tensioning with steelcord cross-stabilising members. High tensile strengths can be achieved making the belt ideal for high vertical lift applications.

BASE BELT TYPE	STRENGTH N/mm	COVER THICKNESS mm	WEIGHT kg/m	MIN PULLEY DIAMETER mm
Type XE 	250/2	2:2	9.40	200
	400/3	4:2	13.50	315
	500/3	4:2	13.75	400
	630/4	4:2	15.20	500
	800/5	4:2	16.85	630
Type XE+2 	400/3+2	4:2	12.10	315
	500/3+2	4:2	12.60	400
	630/4+2	4:2	14.40	500
	800/5+2	4:2	16.10	630
	1000/5+2	4:2	17.80	800
Type XE-SC+2 	1250/5+2	4:2	18.25	1000
	315/2+2	4:2	13.70	315
	400/3+2	4:2	14.50	315
	500/3+2	4:2	15.20	400
	630/4+2	4:2	16.70	500
Type XST-SC* 	800/5+2	4:2	18.00	630
	1000/5+2	4:2	19.50	800
	1250/5+2	4:2	21.40	1000
	1600	8:8	Please enquire	1250
	2000	8:8		1250
2500	8:8	1400		
3150	8:8	1400		
3500	8:8	1600		
	4500	8:8	1600	

Belt weight will be decided by the final belt design which is dependant on the application. The above are standard heights, non-standard are available on request, please enquire.

BELT COMPOSITION

- ▶ X= Cross-stabilised construction.
- ▶ E= Polyester Tension+2 = Number of separate cross stabilising plies.
- ▶ SC= Steel cord cross-stabilised.
- ▶ XST-SC= Steel cord.

COVER THICKNESS

Above are standard constructions. Belts can be supplied with non-standard covers on request.

BELT STRENGTH

Above are standard items. Other requests are available on special order.

Note:

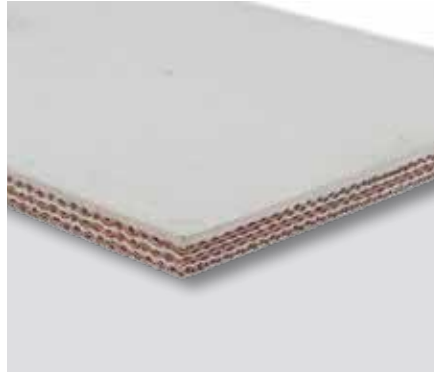
Pulley diameters shown are for normal quality, and standard cover thickness. Please enquire for recommended diameters on belts with special quality covers or different tensile ratings as these may require larger diameters.

SPECIALTY BELTS



CHEVRON CONVEYOR BELT

This belt's distinct pattern (cleat) allows conveying of materials at angles up to 40°, with high slip resistance. Cleat patterns available: Open-V, Close-V, L-Type, Multi-V. Variable cleat pitch and pattern height and pitch can be designed according to requirements.



FOOD GRADE BELT

Manufactured from FDA approved polyurethane to give an excellent contact surface for raw, cooked and frozen foodstuffs. Available with textured nonstick or high-grip surfaces with minimal belt stretching.



BUCKET ELEVATOR BELT

Fitted with the buckets themselves (also available from Transmin), are used to convey material from horizontal to vertical and is widely used in construction, quarrying, agriculture and other light industry.

Due to their carcass construction they are known for their high wear-rate and have a proven long service life.



HEAT RESISTANT CONVEYOR BELT

Adopting either an SBBR or EPDM belt layer, a special high temperature resistant canvas as the carcass material, which solves the issue of fabric shrinkage and deformation problems under high temperature environments, but also crucially avoiding the problem of rubber saturation and poor adhesion.



TUBE BELT

Presenting all the advantages of conventional belt conveyors while also providing the benefits of a fully enclosed system, allowing for inclined conveying up to 30°. A more flexible system able to negotiate tight curves and limited space with no requirement for transfer construction points. Enclosed tube conveyor system also provides protection from the weather or conversely protection for the environment if the materials conveyed are hazardous.



Case Study:

**ENHANCING
CONVEYOR BELT
DURABILITY IN
CHALLENGING
ENVIRONMENTS**



Location:
Newman, Western Australia

Operation Type:
Iron Ore

Year:
2023



The problem:

In today's mining industry, operational efficiency is essential, particularly for clients contending with high-abrasion environments. One client encountered substantial difficulties with their conveyor belts when processing abrasive, sharp, moisture-laden ore bodies. The standard belts they were using proved inefficient, frequently needing extensive repairs or full replacements within just a month of installation.

This persistent issue not only disrupted their operations but also led to substantial financial losses due to downtime. The client recognised the urgent need for a solution that would enhance the performance and longevity of their belts, thus minimising both repair frequency and costs associated with unexpected failures.

The solution:

Transmin ConveyorPro effectively tackled this issue by thoroughly reviewing conveyor calculations to ensure the optimal belt selection for different applications. Their analysis revealed that, although the initial belt choices were adequate, further enhancements could be made by adjusting the belt properties to better match the operating conditions.

As a result, Transmin ConveyorPro recommended the ProTOUGH MA grade belt, a specialised belt designed to withstand harsh environments and deliver a durable solution for challenging conditions.

Proven performance over time:

The installation of the ProTOUGH belt took place approximately one year ago, and the results have been commendable. This innovative belt has demonstrated remarkable resilience and efficiency, making it a valuable asset to the operation.

Client feedback:

“With the continuing success of the ProTOUGH belts we've installed, we are eager to explore options for our other belts that have been experiencing premature failures on both the top and bottom covers.”

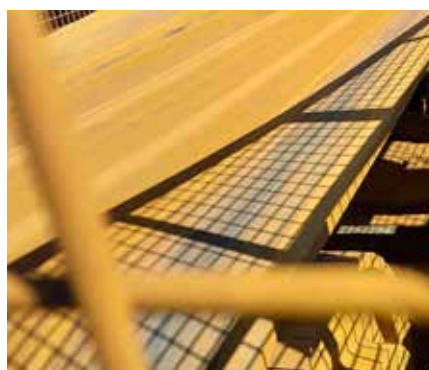
This feedback underscores the importance of not only selecting the right belt but also continually assessing and improving belt performance to mitigate failure rates and enhance operational efficiency.



STANDARD CONVEYOR BELT



AFTER INSTALLATION ProTOUGH CONVEYOR BELT





AUSTRALIA

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