

DUNTRACS CONVEYOR



CONVEYOR BELTS

Incorporated in the year 2015, Our Conveyor Belts have been in the industry for past seven years, making the company a growing leader specialist of conveyor belts in India. The expert knowledge, experience in product development design, applying latest technology and highest standard of quality control has attained the company maximum Customer Satisfaction. The primary goal of the company is to provide Bulk Material Handling Solutions for various industries and assist in handling the Industrial Processes efficiently.

Implementing cut edge technology and highly qualified skill force has made it possible to fabricate a variety of conveyor belts, industrial belts, complying to IS, DIN, CSA, BS, AS Standards.

The company has a huge product range by association with other market leaders, making it One Stop Solution for its Clients:

- Conveyor Belts, Industrial Belts & Hoses.
- Elevator Chain, Couplings & Gear Boxes.
- Couplings & Gear Boxes.

- Hose Clamps.
- OTR Tyres (Off The Road Tyres)

• INDUSTRIES WE SERVE

Our wide variety of conveyor belts cater to material handling requirements of various industries:

- | | | |
|------------------------------|--------------------|-----------------------------|
| - Chemicals & Petrochemicals | - Mining | - Pharmaceuticals |
| - Food & Beverages | - Nuclear Plants | - Power Generation & Energy |
| - Fertilizers | - Oil & Gas | - Refineries |
| - Hydraulic & Pneumatics | - Paper Industries | - Water Systems |

• TYPES OF CONVEYOR BELTS

DUNTRACS conveyor belting is available in both all-Nylon (NN) and Polyester-Nylon (EP) carcass and can be manufactured in different grades, as stated herein :

Grade **M-24**: Compounded from premium quality natural rubber to provide excellent resistance to cutting gouging, wear and tear and conforms to the maximum abrasion loss value minimum tensile strength specified for Grade M-24 in IS 1891-1994.

Grade **N-17**: Compounded rubber with improves life for moderately abrasive material conforming to the maximum abrasion loss value & minimum tensile strength specified for Grade N-17.

Grade **HR**: Specially compounded rubber capable of withstanding thermal degradation for prolonged periods and recommended for handling material like alumina, ash clinker, foundry sand, etc. at temperatures above 65° C and up to 120° C for fines and 140° C for coarse materials.

Grade **SHR**: Thoroughly proven in the field, this grade has been specially formulated, using selected synthetic and natural rubber, to provide superior heat and abrasion resistance and is recommended for handling material having temperatures over 65° C upto 180° C for coarse and 160° C for fines.

Grade **UHR**: Specially formulated, using selected synthetic rubber to provide superior heat & abrasion resistance and is recommended for handling material like hot cement, clinker, phosphate hot sintered ore having temperatures over 165° C for coarse and over 180° C for fines.

Grade **FR**: The growing demand for fire resistant rubber conveyor belting has been catered by with this grade of cover rubber. Our technologists have developed FR belting to meet as per The Bureau of Indian Standard Specification No. IS: 1891 Part (V) 1993 and The Canadian Standard Association Specification (CSA) No. CAN/CSA-M422-M87 of 1987 Type C.

Grade **OR**: This cover grade with specially blended synthetic compounds is designed to give the best possible resistance to mineral, vegetable and animal oils.

Grade **SAR**: Specially formulated from premium quality natural & synthetic rubber to provide excellent resistance to highly abrasive material against tear and wear and to the maximum abrasion loss value for 90 mm³.

Grade **CMR**: This cover grade with specially blended synthetic compounds provides best possible resistance to different chemicals.

Food Grade (**HYGENIC**): Specially formulated from FDA approved polymers, these food grade belts are available in high abrasion resistant and oil resistant cover grades. They are also called Hygienic Conveyor Belts as they do not stain and odorize the materials to be conveyed and are widely used in the food industries.

TECHNICAL DATA SHEET

Belt Designation		Maximum Recommended working Tension (Vulcanised Splice)	Carcass Thickness	Carcass Weight for M24/N17 Grade Belting (Nominal)	Maximum Belt Width (mm) for Adequate Load Support (Material Density in T/M ³)			Maximum Belt Width (mm) for Adequate Troughing of Empty Belt		
Type	Rating	(kN/m)	(mm)	(Kg/m ²)	Upto 1.0	Upto 1.5	Upto 2.5	20° idlers	30° idlers	45° idlers
General Duty	250/2	25	1.8	2.1	650	600	450	400	400	450
	315/3	31	3.0	3.2	1000	800	650	400	450	500
	400/3	40	3.0	3.4	1050	900	650	500	500	500
	500/3	50	3.3	3.7	1200	1000	800	500	500	500
	630/3	63	3.8	4.2	1200	1000	800	500	500	500
Extra Duty	630/4	70	4.4	5.1	1400	1200	1000	500	500	650
	800/4	90	5.3	5.7	1600	1400	1050	500	500	650
	1000/4	110	5.8	6.5	1800	1400	1200	500	650	800
	1250/4	140	6.8	6.9	1800	1600	1400	650	650	800
	1250/5	140	7.3	8.2	1800	1800	1600	650	800	900
	1400/5	155	8.2	8.8	2000	1800	1800	650	800	900
	1600/5	180	8.7	9.7	2000	2000	1800	800	800	1000
	1800/6	190	10.6	11.8	2000	2000	2000	800	800	1000
Heavy Duty	250/2	25	2.8	3.4	900	650	500	450	450	500
	315/3	31	3.5	4.5	1200	1000	800	500	500	500
	400/3	40	3.8	4.7	1200	1000	800	500	500	600
	500/3	50	4.3	5.0	1400	1200	900	500	500	600
	630/3	63	4.8	3.5	1400	1200	1000	500	500	650
	630/4	70	6.1	7.0	1800	1400	1200	500	650	800
	800/4	90	6.7	7.7	1800	1600	1400	600	800	900

- Should you fail to find a belt suitable for your application from this list of standard constructions, please refer to us for other types of belting available from our comprehensive range but not listed here.
- Load support adequacy is based upon belts between idlers being limited to a maximum of 2% of idler span.
- The above carcass weights pertain to all nylon (NN) fabric belts. For polyester nylon (EP) belts, the weight is higher by 5%.

GENERAL CONVEYOR BELT

This belt construction of all nylon fabric, are specifically designed to withstand maximum impact and wear & tear from material being transported. These belts are suitable for conveying a variety of material (asphalt, crushed stones, ore, grit, sand, coke, hot fertilizers etc.) Several types of carcass using NN/EP fabrics are available with various thickness according to the load conditions.

Top Cover

Designed to protect the carcass from service conditions like oil, heat, abrasion, etc.

Skim Coat

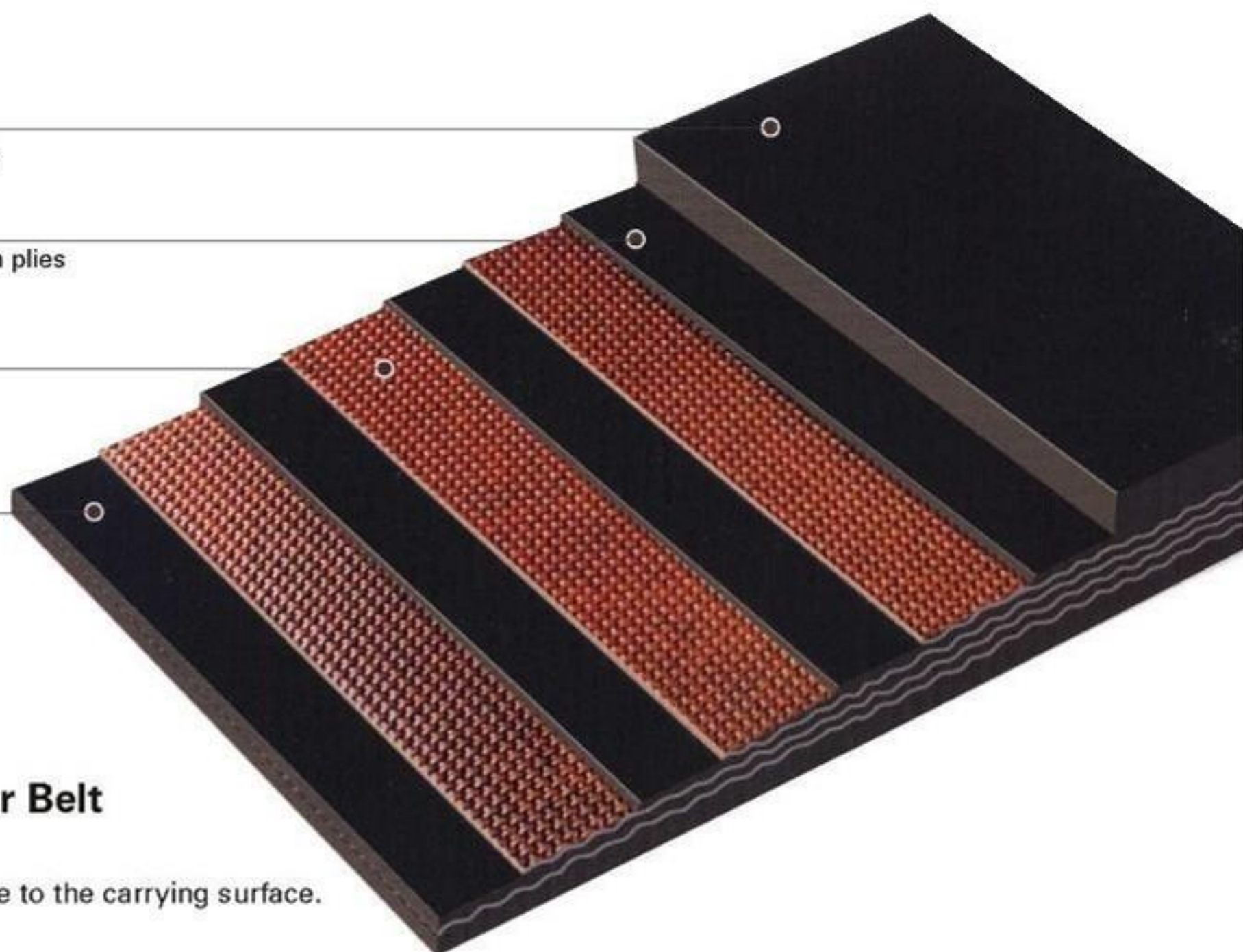
Compounded for excellent adhesion between plies for protecting against ply separation.

Carcass

Extremely low stretch characteristics of fabric and good trough ability.

Bottom Cover

Excellent in abrasion and flexibility, provides wearing surface against pulleys and idlers.



Nylon Fabric (NN) Conveyor Belt

• Special Features

- Exceptionally shock & impact resistance to the carrying surface.
- Superior in fastener holding ability.
- Excellent trough ability and flexibility.
- Smaller pulley available.
- Greatest resistance to water and mildew.

Grade		NN100	NN120	NN150	NN200	NN250	NN300	NN350	NN400	NN500
Min. Tensile Strength	Kg/cm-ply	100	120	150	200	250	300	350	400	500
	lb/in-ply	560	672	840	1,120	1,400	1,680	1,960	2,240	2,800
Working Tension Rating (Vulcanized)	Kg/cm-ply	8.4	10.0	12.5	16.7	20.8	25.0	29.2	33.3	41.7
	lb/in-ply	46.7	56.0	70.0	93.3	116.7	140.0	163.3	186.7	233.3
Approx. Gauge per Ply with skim coat.	mm	0.9	1.2	1.3	1.5	1.5	1.8	2.0	2.2	2.7
	inch	0.035	0.047	0.051	0.059	0.063	0.071	0.079	0.087	0.106

Polyester Fabric (EP) Conveyor Belt

The combination of polyester in warp and nylon in filling provides technically low-stretch and high impact abuse resistance.

• Special Features

- High resistance to tension.
- Low elongation.
- Outstanding stability dimensionally.
- Impact resistance.
- Complete moisture & mildew protection.

Grade		EP100	EP125	EP150	EP200	EP250	EP300	EP350	EP400	EP500
Min. Tensile Strength	Kg/cm-ply	100	125	150	200	250	300	350	400	500
	lb/in-ply	560	700	850	1,120	1,400	1,680	2,000	2,240	2,800
Working Tension Rating (Vulcanized)	Kg/cm-ply	10.0	12.5	15.0	20.0	25.0	30.0	35.0	40.0	50.0
	lb/in-ply	56.0	70.0	84.0	112.0	140.0	168.0	200.0	224.0	280.0
Approx. Gauge per Ply with skim coat.	mm	0.9	1.2	1.4	1.5	1.9	2.0	2.1	2.4	3.2
	inch	0.035	0.047	0.055	0.059	0.075	0.079	0.083	0.094	0.126

CHEVRON-CLEATED (INCLINE) CONVEYOR

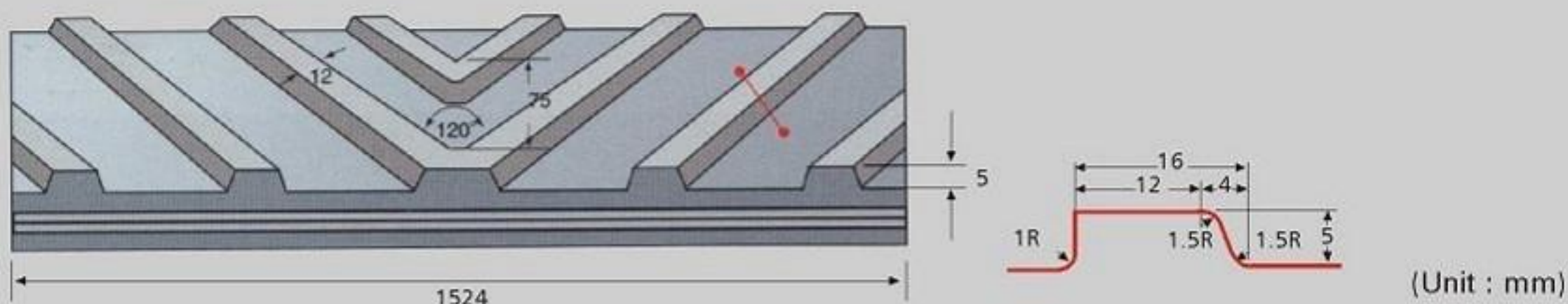
Chevron-Cleated conveyor belts is used to convey wet and/or loose material up steep inclines. The V-shaped chevron cleats prevent or reduce slide back of material (cement, grains, wooden chips, sand, fine coal, grain etc.) These cleats are integrally moulded with the Top Rubber Cover to withstand maximum impact and damage resistance, preventing separation from the base belt.



• Special Features

- High quality fabric with low stretch.
- Cleat angle and pitch are designed for smooth travel over return idlers.
- Carry loose material at angles 17-20° and bagged material at 30-40° incline.
- Wide range of Chevron profile and pattern are available for various industrial applications.

V Cleated Incline Belt



Steep Incline Belt

C15 Type

(Unit : mm)

A Belt width	B Pattern width	C Pitch	
500	250	250	
600	400	250	
650	400	250	
700	500	370	
800	500	370	
900	500	370	

C25 Type

(Unit : mm)

A Belt width	B Pattern width	C Pitch	
600	550	250	
650	550	250	
750	550	250	
800	550	250	
900	800	350	
1000	800	350	
1100	800	350	
1200	800	350	



CORUGATED SIDEWALL CONVEYOR BELT

This belt is specifically designed for conveying high density materials to give optimal load performance. The corrugated sidewalls are designed to ensure maximum flexing without fatigue. The center cleat (also called Rubber Fins) are high abrasion resistance. It provides excellent vertical stability for load retention hence prevents product fall back. It is developed to meet larger capacities with more steep inclined material handling line.

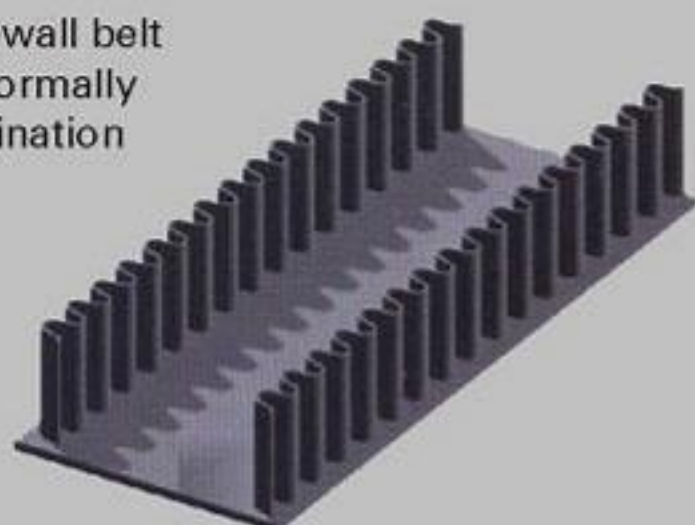


● Special Features

- Maximum utilization of space, with ability to convey material up to 90° inclination.
- Minimal spillage with steep angles and vertical conveying.
- It is optimal for transporting larger material in bigger quantities.

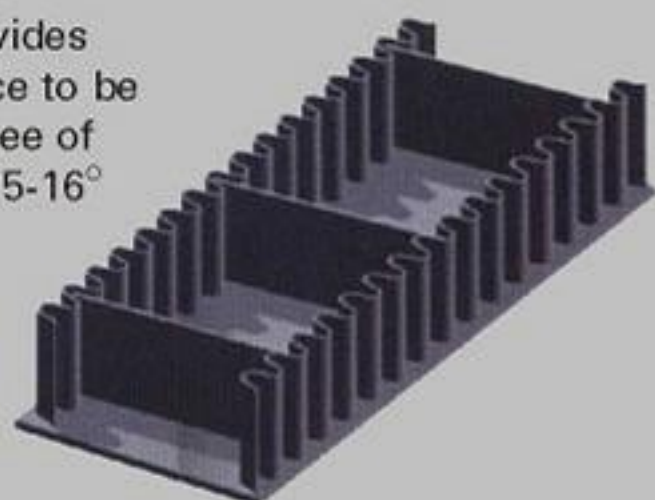
Type I

This type of sidewall belt has no fin and normally used for the inclination within 0-16°



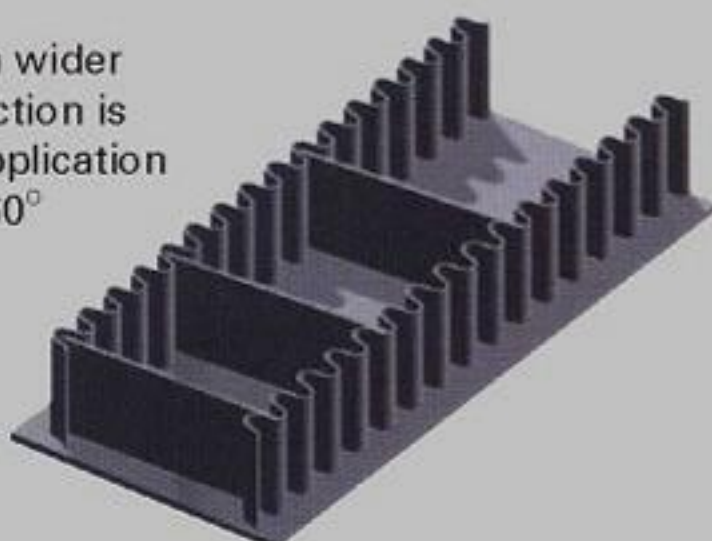
Type II

The cross-fin provides better performance to be used to high degree of inclination up to 15-16°



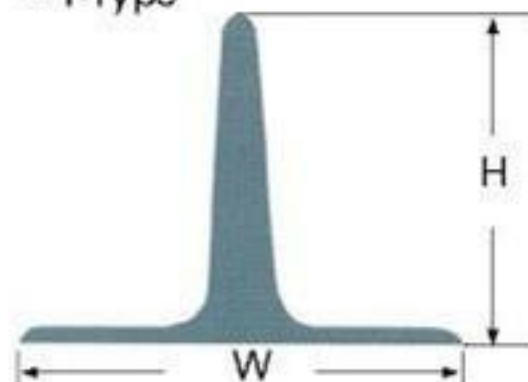
Type III

The cross-fin with wider base belt construction is suitable for the application up to more than 60°

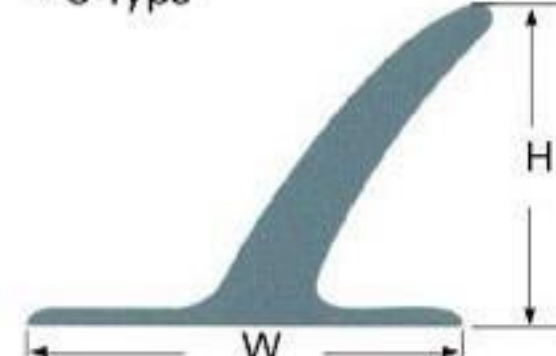


Fin Type

• T-Type



• C-Type



Various Installation

• I-Type



• L-Type



• S-Type



• RL-Type



Cross Rigid Basebelt

In order to give maximum stability in the transverse direction, this basebelt is reinforced with specially designed filament fabrics which provides better return side support, no wear and tear of cleats and cover rubber is available with various compounds like abrasion oil, heat, flame resistance.

ROUGH TOP CONVEYOR BELT

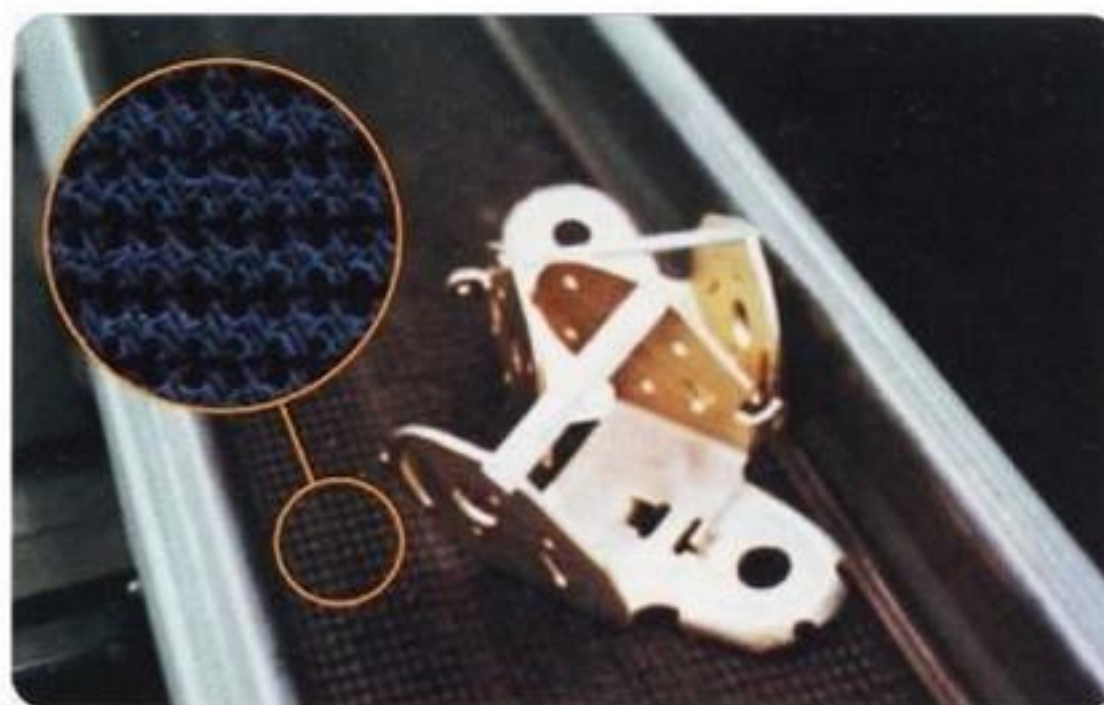
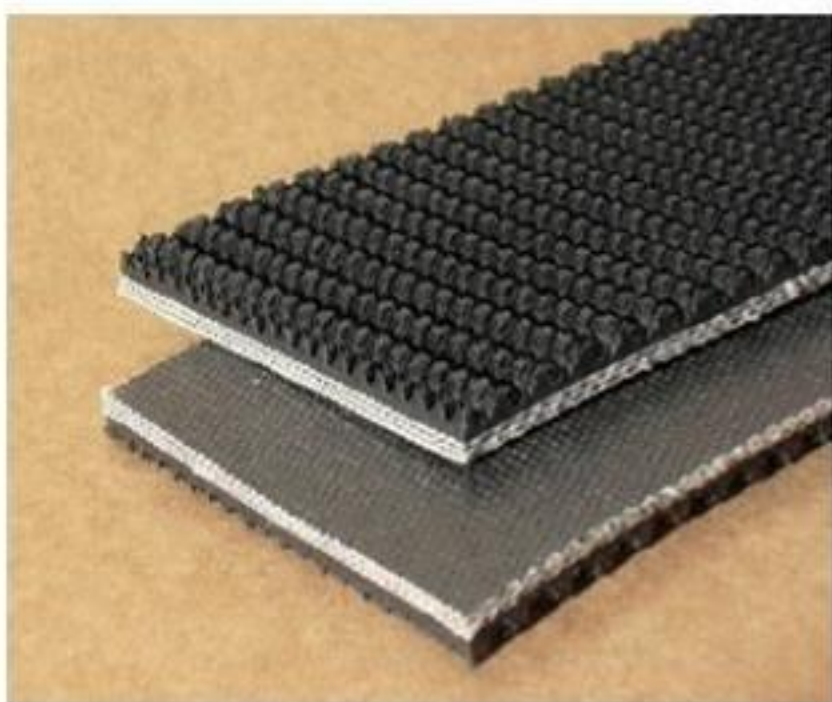
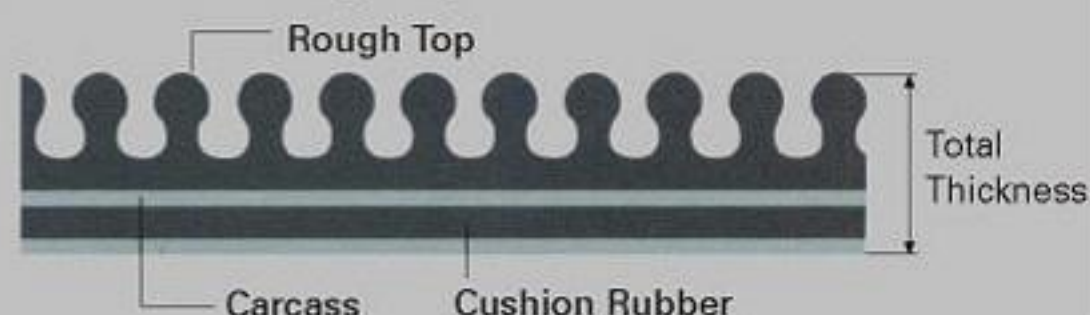
This belt is designed for conveying fragile material (paper, paper bags, glass, carton boxes, packed goods, etc). The Top Rubber Cover has a mesh-like pattern that absorbs any type of vibrations, preventing the material from slipping. Due to the slip resistance surface, it is ideal for steep incline and decline applications.



• Special Features

- Cushioning effect absorbs vibration and reduces slippage.
- Usable at the angle of 25-35 degrees, depending on goods to be carried.
- Reinforced synthetic fabrics provide high strength and flexibility.

Structure of Rough Top



COAL FEEDER CONVEYOR BELT

Coal Feeder Belts (also called Gravimetric Feeder Belts) are used for coal burning applications by power stations, cogeneration plants etc. The Flanges and V-guide is integrally moulded on the rubber covers giving the base belt maximum strength.

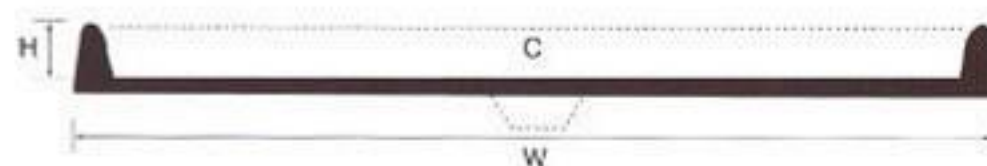
The v-guide tracking strip fits in to the groove of the pulley, hence reducing tracking problems



• Special Features

- V guide strip reduces tracking problems.
- These belts are designed to keep belts running consistently in proper alignment
- Flanged pattern prevents coal powder or lumps from spilling over edges during transportation.

• Cross-Section View



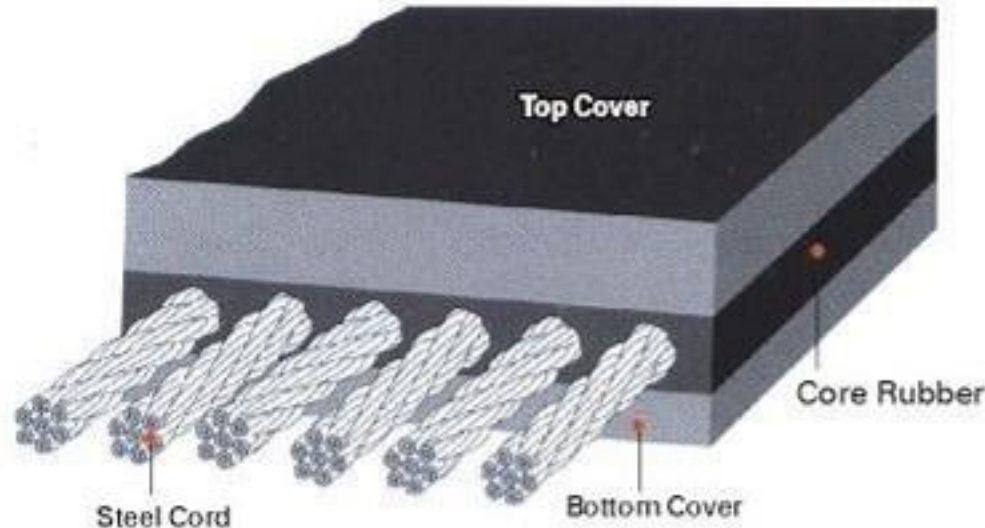
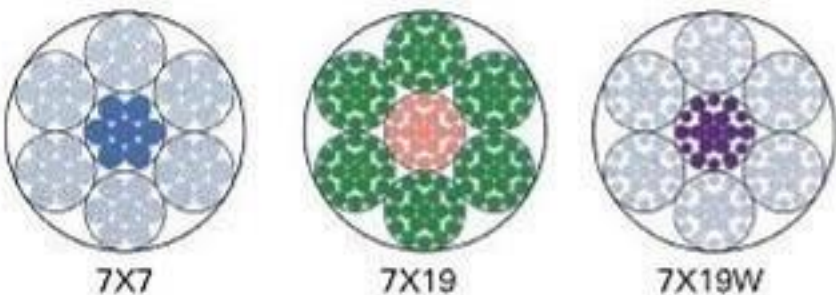

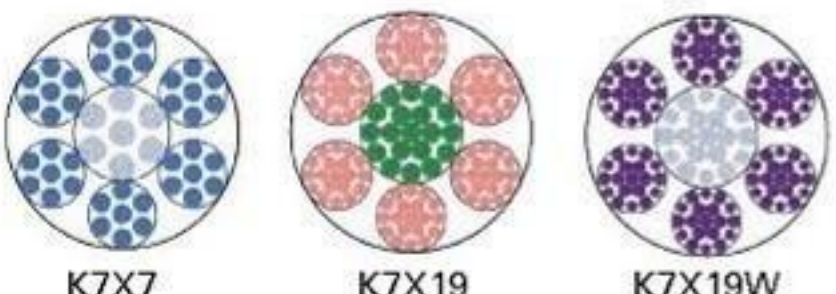
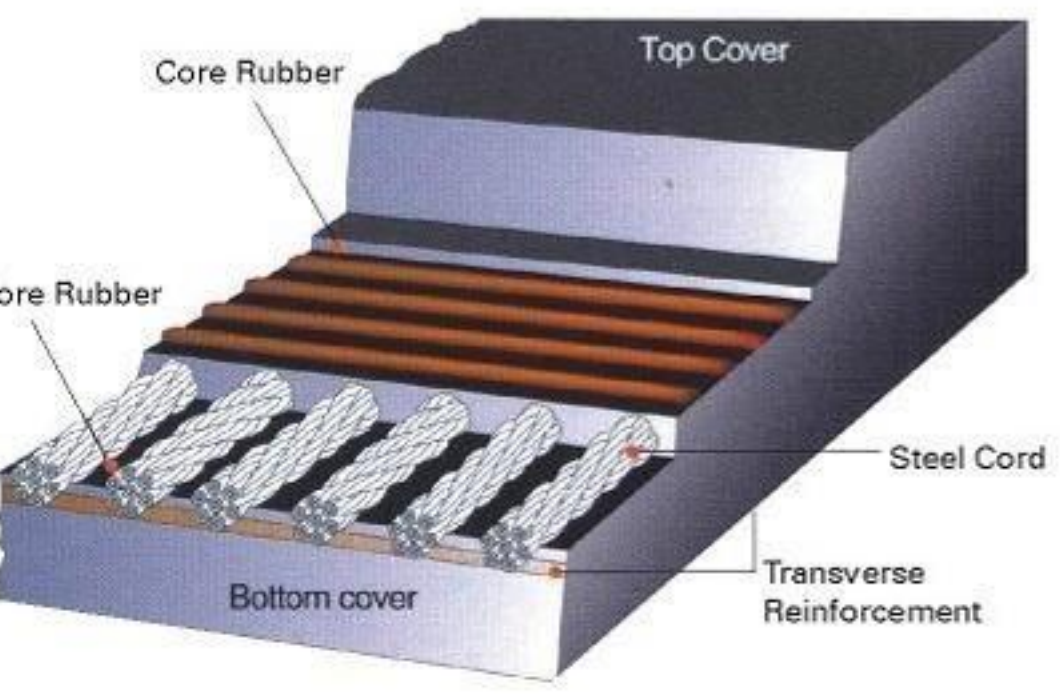
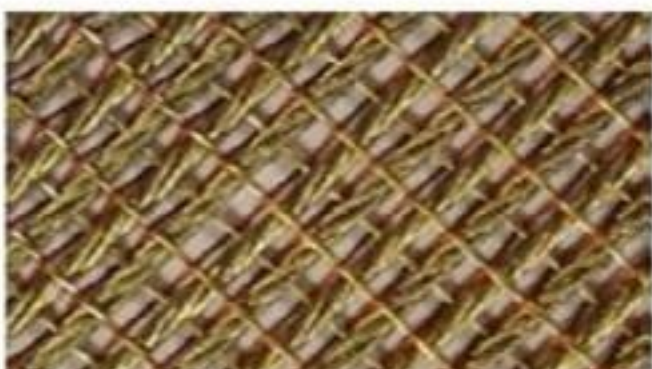
• Feeding System



STEEL CORD CONVEYOR BELT

Steel Cord belts has a wide range of application, however they are specially designed for BUCKET ELEVATORS. Its construction enables them for heavy duty industrial applications with long center distances, requiring straight running and reliability.

The carcass consists of low elongation & high elasticity steel cords in the length and cross rigid cables in the width, all embedded in a solid rubber mass that cannot delaminate.

General Construction Type	Structure	Feature
 <p>Top Cover</p> <p>Core Rubber</p> <p>Steel Cord</p> <p>Bottom Cover</p> <p>Sketch of General Construction Type</p>  <p>7X7 7X19 7X19W</p>	<p>Belt reinforcement consists of galvanized steel cord and core rubber which possesses superior adhesive property. Belt body comprises the reinforcement covered with to and bottom layer of rubber. Steel cord is composed of a left and right twisting wire, arranged evenly and longitudinally in the belt.</p>	<p>With large tensile strength, long service life, small elongation, excellent troughability and superior flexing resistance, the belt is suitable for conveying materials over long distances with large loads and at high speeds.</p>
<p>Steel cord penetrated with core rubber</p>  <p>Sketch of New Construction Type</p>  <p>K7X7 K7X19 K7X19W</p>	<p>Each strand of steel wire has enough room for the core rubber to penetrate. This strengthens greatly the bonding strength between the rubber and steel core. Since the anticorrosive resistance to steel cord is good, the mutual shearing of strands and twisting of strand wire can be relaxed. The service life of belt can be prolonged, because dynamic fatigue resistance is excellent.</p>	<p>Feature</p>
Transverse Reinforcement	Structure	Feature
 <p>Top Cover</p> <p>Core Rubber</p> <p>Core Rubber</p> <p>Steel Cord</p> <p>Transverse Reinforcement</p> <p>Bottom cover</p>	<p>On both side or one side, the transverse reinforcement (steel cord, steel wire cord, fiber cord or textile fabric) is laid out.</p> 	<p>Good impact resistance and excellent property for reducing tear by external force increase belt life, rip resistance, cord protection.</p>

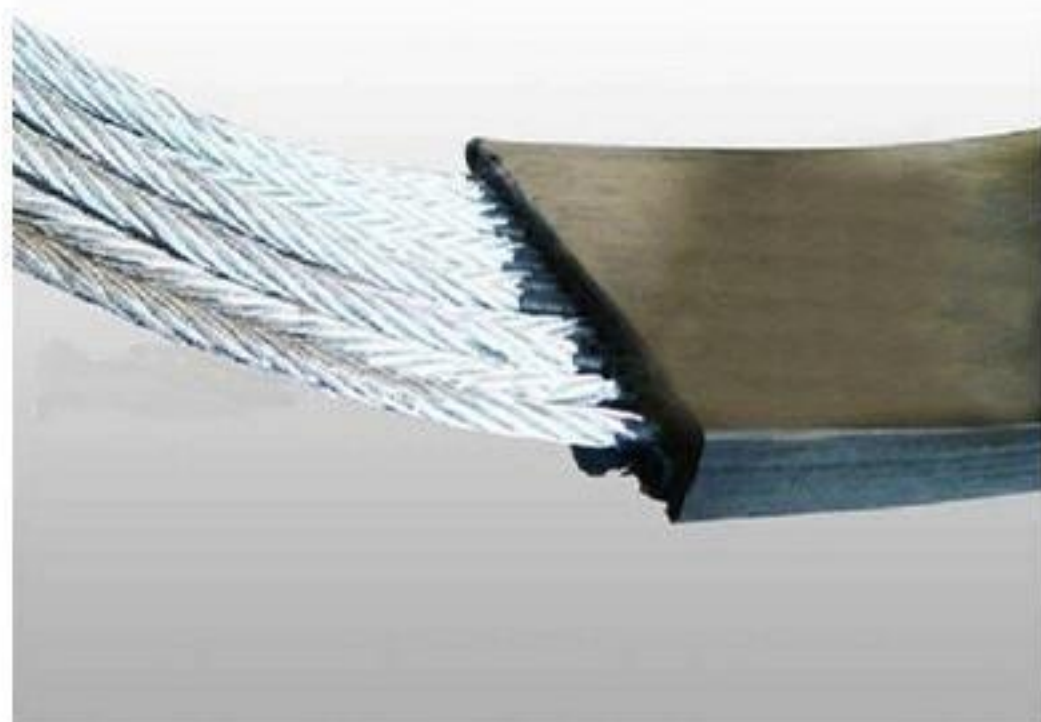
BELT CONSTRUCTION & TECHNICAL INFORMATION

The Belt when loaded with very hot materials, the inner core of the belt seldom reaches temperatures as high as the temperature of the product carried. This is because the belt can hardly cool down in the return part as the ambient temperature in the elevator casing often approaches the product temperature. Hence the Rubber compound qualities commonly used in manufacturing these heat resistant belts are BUTYL, EPDM and EPM.

Steel Cord Elevator Belts are available in normal & high temperature resistant qualities and offer maximum life in most arduous applications.

• Type of Steel Cord Qualities

T60	A very good abrasion resistance quality, based on SBR rubber for use at ambient temperature of 60°C.
T100	A heat resistance quality, suitable for product temperature up to 90°C-100 °C and short peaks up to 120°C
T130	A heat resistance quality, based on EPDM rubber, suitable for product temperature up to 130°C and short peaks up to 150°C
T150	A heat resistance quality, based on EPDM rubber, suitable for product temperature up to 150°C and short peaks up to 180°C



• Applications in Different Industries

- Cement Manufacturing Units
- Foundries
- Power Plants (Fly Ash Elevators)
- Concrete Mixing Plants
- Fertilizer Plants

• Advantages of Steel Cords in Belt Length:

- Low permanent elongation, max. 0.35%
- Unique elastic elongation 0.15%
- Allows maximum rubber penetration
- High shock resistant and compression behavior

• Advantages of Cross Rigid Cords in Belt Width:

- Acts as a barrier to ripping and tearing.
- Increases bucket bolt holding ability.
- Very close cross rigid pattern and dense weft construction, it has excellent straight running abilities.



Specifications

Belt type	ST 500	ST 630	ST 800	ST 1000	ST 1250	ST 1400	ST 1600	ST 1800	ST 2000	ST 2250	ST 2500	ST 2800	ST 3150	ST 3500	ST 4000	ST 4500	ST 5000	ST 5400
Tensile strength (N/mm)	500	630	800	1000	1250	1400	1600	1800	2000	2250	2500	2800	3150	3500	4000	4500	5000	5400
Max. Dia. of Cord (mm)	2.8	3.0	3.5	4.0	4.5	4.5	5.0	5.0	6.0	6.3	7.2	7.6	8.1	8.6	9.2	10.1	10.6	11.5
Min. Breaking Strength of Cord (KN/Cord)	5.6	7.0	8.9	13.2	16.5	18.5	21.1	23.7	26.4	29.6	41.7	46.7	52.5	58.4	66.7	80.4	89.3	103.9
Weight of Cord(g/m)	30.7	34.7	47.8	64.0	79.8	79.8	97.3	97.3	137.0	155.0	196.0	221.0	253.0	280.0	316.0	385.0	414.0	496.0
Pitch(mm)	10.0	10.0	10.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	15.0	16.0	16.0	17.0
Max. Working Strength of Belt (N/mm)	72	90	115	145	180	200	230	260	290	320	360	400	450	500	580	640	720	770
Min. Thickness of Cover (mm)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.5	5.5	6.0	6.5	7.0	7.5	8.0
Min. Pulley Diameter (mm)	Head & Drive	600	600	650	750	850	950	1000	1200	1200	1400	1500	1550	1700	1800	1850	2000	2400
	Tail & Take-up	500	500	500	550	700	750	800	950	950	1200	1200	1250	1350	1400	1400	1600	1900
	Bend & Snubs	350	350	400	450	500	510	600	700	700	800	900	950	1000	1050	1050	1200	1400

PVC/PU CONVEYOR BELT

These belts are specially designed with polyester fabrics, which is very flexible, tear resistance and low stretch. They are also resistant to food acids, fats, alkalines, chemical, oil. PVC / PU beltings are most common elevator belting used in the feed and grain industries. These belts comes in various patterns like integrally Moulded Ribs, Cleats and Side walls, Rough Top belts, etc and in different colors like White, Green, Black, etc.



● Special Features

- Robust
- Longitudinally flexible
- Low noise during operation
- Light weight with low overall thickness
- Low elongation
- Small drum diameters
- Easy to maintain
- Simple method / convenient to put into machinery
- Small take-up ranges

● Applications

PVC/PU conveyor belts are available for the various application in all industries.

- Food handling
- Wood industry
- Corrugated box board
- Textile industry
- Metal sheet industry
- Package handling
- Distribution center
- Fish/fruit industry
- Paper Industry

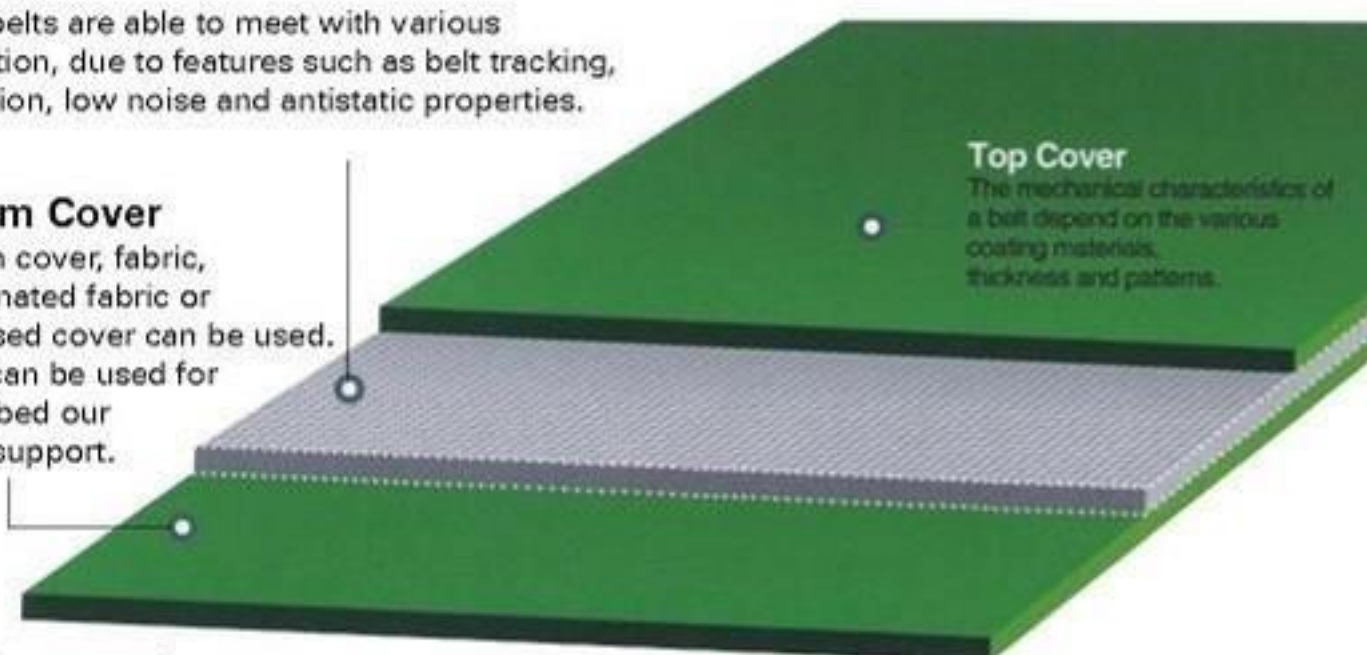
● Structure

Carcass

These belts are able to meet with various application, due to features such as belt tracking, elongation, low noise and antistatic properties.

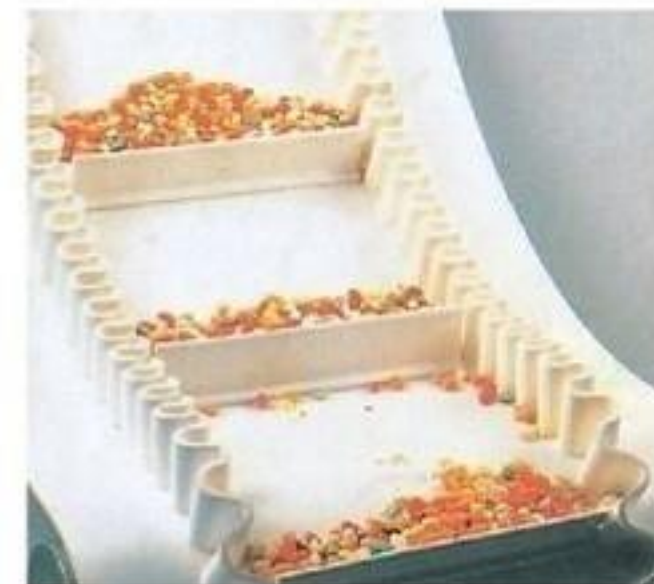
Bottom Cover

Smooth cover, fabric, impregnated fabric or embossed cover can be used. These can be used for sliding bed or rolling support.



FDA Approved

These belts are proper for conveying foodstuffs with resistance to animals and vegetable oils and fats which can meet with FDA standards.



Inclined conveying : Belts with embossed top covers for inclined or declined conveyors. The conveying angles that can be used here depend on the type of goods, the top face coating and external influences such as dust, moisture etc. Duntracs supplies belts with patterns for inclined conveying.

Patterns for inclined conveying

Duntracs has developed and optimised a variety of surface textures for various applications. With patterned belts, an angle of incline of up to 30° can be achieved without profiles.



CONVEYOR ACCESSORIES & SPARES

A full range of troughing idlers, rollers & belt pulleys are available to suit 20°, 35° & 45° trough frames. We utilize advanced sealing technology preventing ingress of contaminants and providing low rolling resistance, suitable for high-speed belt conveyors.

• Idlers & Rollers

TROUGHING IDLERS



Generally available with side rollers inclined at 20° or 30°, idlers with 45° troughing angles or others, used for conveying Bulk Material.

IMPACT IDLERS



Impact Idlers protect the belt by absorbing impact at loading point. Generally they are 20° or 30° trough, however idlers with 45° or other troughing angles can also be utilized based on the application & inclination.

SELF ALIGNING IDLERS



These idlers automatically train the belt and protect belt edges from damage caused by misalignment. The standard types are available with 20° or 30° troughing.

RETURN IDLERS



The standard Return Idlers include single roller with end brackets. However certain application would also utilize two inclined roller type, also available.

FLAT IMPACT IDLERS



Flat Impact Idlers absorb impacts at transfer points, protecting the belt.

SELF ALIGNING IDLERS



These idlers are used where the material is wet or sticky and tend to cling to the belt, hence avoiding corrosion to the belt.

TRAINING IDLERS



It protects the belt edges from damage caused by misalignment and automatically trains the belt.

PULLEY LAGGING



Pulley Lagging eliminates belt slippage. The diamond groove pattern splits the water and deflects it in to the grooves away from the pulley, hence increasing pulley life. Plain rubber pulley lagging also available.

• Belts Fasteners





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