



河北安耐胶带有限公司
Hebei Anai Rubber Belt Co., Ltd

E-Mail: Susan@anaibelt.com

Mobile/Whatsapp/wechat :+86 15030159202

Website: www.anaibelt.com

Address: North of Anbo Road, Anguo, Baoding City

Company Profile

Hebei Anai Rubber Belt Co.,Ltd

Is a professional conveyor belt manufacturer from China with an annual output capacity of about 20,000,000m². Established in 1993, we have nearly 30 years experience in research, development and production of conveyor belts,related spare parts and belt repair materials.Products are widely used in mining,steel,coal,cement,coking,ports,electric power,building materials and many other industries.





Rubber Mixing Workshop



Calendering Workshop



Forming Workshop



Vulcanization Workshop

01 Fully Automatic Equipment

02 8 Advanced Production Line

03 Professional Laboratory

04 30 Years R&D Team



Product List

- 01 EP/NN Conveyor Belt
- 02 Heat Resistant Conveyor Belt
- 03 Fire Resistant Conveyor Belt
- 04 Cold Resistant Conveyor Belt
- 05 Acid Alkali Resistant Conveyor Belt
- 06 Oil Resistant Conveyor Belt
- 07 Sidewall Conveyor Belt
- 08 Steel Cord Conveyor Belt
- 09 Patterned Conveyor Belt
- 10 Tubular Conveyor Belt
- 11 Conveyor Spare Parts

EP/NN CONVEYOR BELT

Structure

Carcass: 2-6 rot-resistant plies made of synthetic EP or NN fabric, provide longitudinal strength and shape.

Cover rubber: includes top cover and bottom rubber, which are designed to protect the carcass from abrasion, impact, deterioration, water and other injurious influences.

Features

High tensile strength, good impact resistance, excellent troughability, low elongation, long service life and cost-effective.



Application

Suitable for medium and long distance, heavy load and high speed transportation of materials.

Widly Used in mining, quarries, cement, iron and steel industry, etc.



Parameter

Fabric Material	Fabric Structure		Type	Ply Thickness mm	Tensile Strength (N/mm)					Cover Thickness (mm)		Width mm	Length m
	Warp	Weft			2-ply	3-ply	4-ply	5-ply	6-ply	Top	Bottom		
EP	Polyester	Polyamide	EP/NN 100	0.85	200	300	400	500	600	2-12	1-5	350~2500	≤300
			EP/NN 125	0.9	250	375	500	625	750				
			EP/NN 150	0.9	300	450	600	750	900				
			EP/NN 200	1.1	400	600	800	1000	1200				
			EP/NN 250	1.25	500	750	1000	1250	1500				
			EP/NN 300	1.45	600	900	1200	1500	1800				
			EP/NN 350	1.65	700	1050	1400	1750	2100				
			EP/NN 400	1.75	800	1200	1600	2000	2400				
			EP/NN 500	2.55	1000	1500	2000	2500	3000				

Physical properties of rubber cover

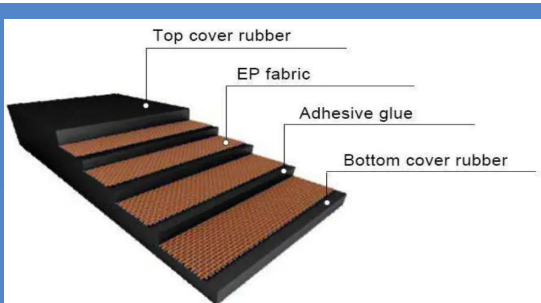
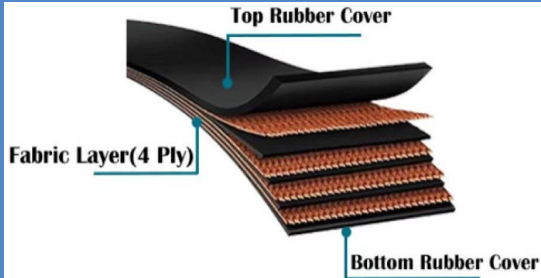
Grade	Tensile Strength /Mpa ≥	Elongation at break /% ≥	Abrasion Loss /mm ³ ≤
H	24	450	120
D	18	400	100
L	15	350	200

Notes: Grade H-used for transporting sharp, abrasive which can damage belts badly. Grade D-used for transporting highly abrasive materials.
Grade L-used for transporting medium-abrasion materials.

Ply adhesion

Item	Ply to ply	Rubber cover to ply	
		Rubber cover thickness ≤1.5mm	Rubber cover thickness >1.5mm
All samples average value/ (N/mm) ≥	4.5	3.2	3.5
All samples min peak value/ (N/mm) ≥	3.9	2.4	2.9

Note: All samples max peak value is not more than 20N/mm.



Heat Resistant Conveyor Belt

Description

The heat resistance conveyor belt is made of multilayer EP/NN fabric covered with the high temperature or heat resistant rubbers, which are bonded through high temperature vulcanization, it is applicable to conveying of high temperature materials, such as the coke, cement, clinker and hot casting etc.

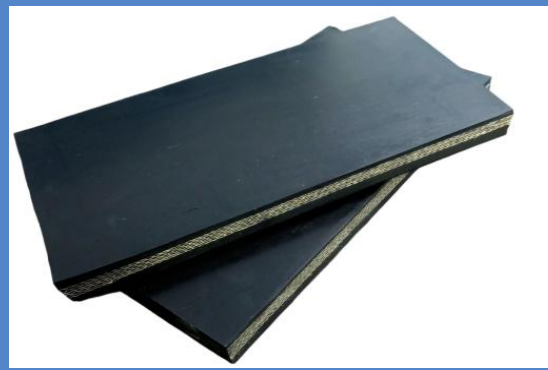
The heat resistant conveyor belt contains four types

Type I : it is able to resist the test temperature of no more than 100°C, the symbol is T1.

Type II : it is able to resist the test temperature of no more than 125°C, the symbol is T2.

Type III : it is able to resist the test temperature of no more than 150°C, the symbol is T3.

Type IV : it is able to resist the test temperature of no more than 180°C, the symbol is T4.

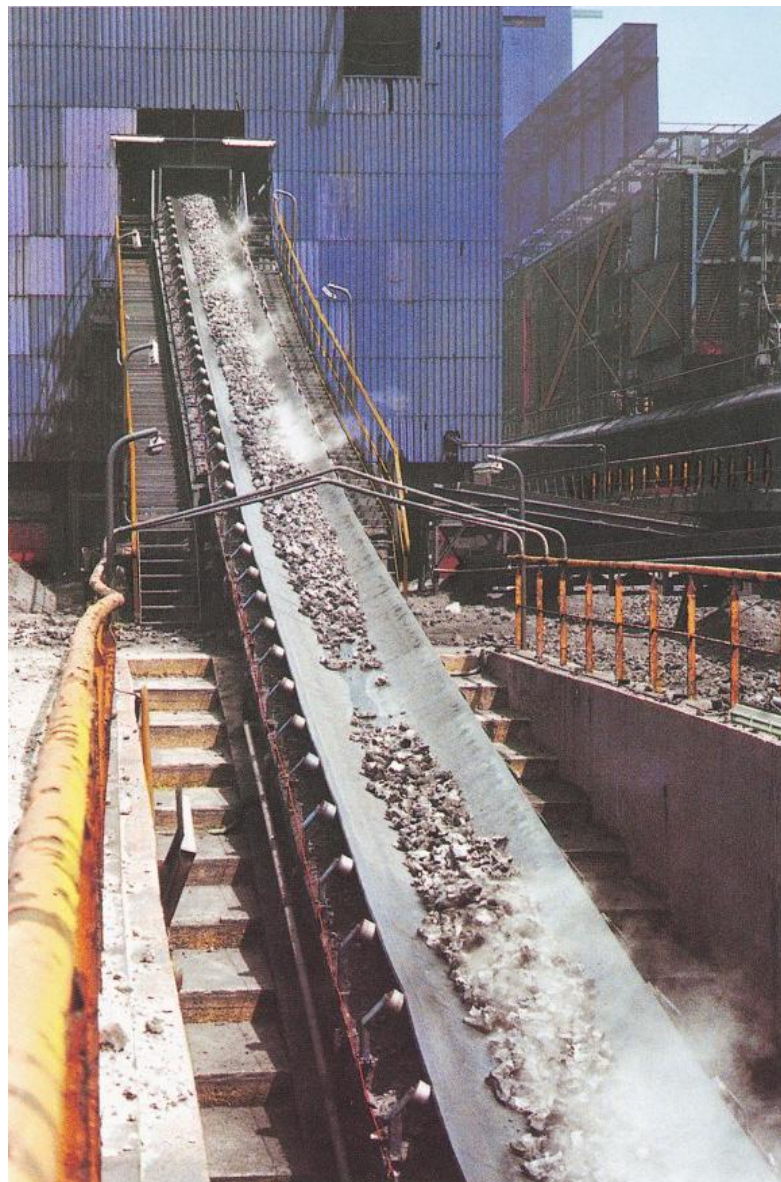


Physical Properties of the rubber cover

Item		type			
		T1	T2	T3	T4
		Allowable variation range			
Hardness	Difference between before and after aging (IRHD)	+20	+20	±20	±20
	Maximum value after aging (IRHD)	85	85	85	85
Tensile strength	Rate of performance change /%	-25	-30	-40	-40
	Minimum value after aging /Mpa	12	10	5	5
Elongation at break	Rate of change after aging /%	-50	-50	-55	-55
	Minimum value after aging /%	200	200	180	180

Ply adhesion

Item	Ply to ply	Rubber cover to ply
All samples average value/ (N/mm) ≥	4.5	3.5
All samples min peak value/ (N/mm) ≥	3.9	2.9
Note: All samples max peak value is not more than 20N/mm.		



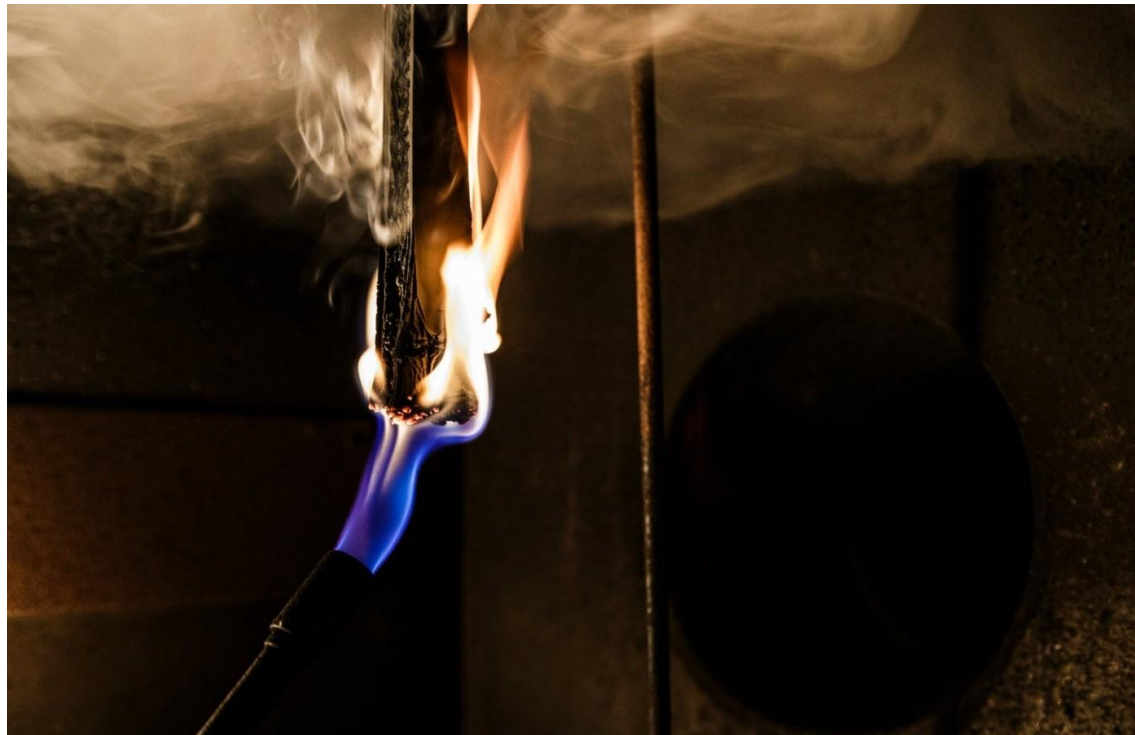
Fire Resistant Conveyor Belt

Description

The fire resistant conveyor belts possess self-extinguishing design and prevent fire from spreading over the entire belt. In order to ensure the flame retardant properties of these fire resistant belts, we conduct various testing according to ISO standards.

Application

Suitable for transporting non-corrosive, not sharp, lump, granular, powdery materials in flammable and explosive environment on the ground. It applies to power plant, coal mine, chemical industries, coal washing/coal cleaning plants, fertilizer plants.



Safety property of Fire Resistant Fabric Conveyor Belt

Item	Fire resistant grade		
	K ₁	K ₂	K ₃
Duration of flame	Total value of flame duration of 3 samples with covers plus 3 samples without covers, not more than 45s. Any single value with covers not more than 15s, any single value without covers not more than 20s.	Total value of flame duration of 6 samples with covers, not more than 45s, any single value not more than 15s.	Average value of flame duration of 3 samples with covers, not more than 60s.
Static conductive properties	$\leq 3 \times 10^8 \Omega$		
Reappearance of flame	not allowed in any sample		

Cold Resistant Conveyor Belt

Cold resistant conveyor belt is specifically engineered to retain its outstanding strength and elasticity, as well as impact strength even down to -50°C. Cold resistant conveyor belts are usually used for conveying materials outdoors in freezing area or conveying materials to cold storage.

Depending on the specifications of the top cover, cold resistant conveyor belts can be classified into three types, including tear resistant type (H), anti-abrasion type (D), and ordinary type (L).

According to different cold resistance, it can be divided into two types: C1 and C2. C1-working temperature: -45~+45; C2-working temperature: -50~ +45.



Physical properties of the rubber cover

Item		Grade		
		H	D	L
Tensile strength /Mpa		Not less than		
Elongation /%		Not less than		
Abrasion loss /mm ³ ≤		Not more than		
Aging test 70°C×168h	Change ratio of tensile strength	±25	±25	±25
	The elongation rate of change	±25	±25	±25
Cold resistance	Change ratio of tensile strength	C1 (-45°C)		±20
		C2 (-50°C)		±25
	The elongation rate of change	C1 (-45°C)		±20
		C2 (-50°C)		±30

Note: C1-working temperature: -45°C~+45°C. C2-working temperature: -50°C~+45°C.



Acid-Alkali Resistant Conveyor Belt

Acid-Alkali resistant conveyor belt, (i.e. Chemical resistant conveyor belt) is suitable for such acid-alkali working conditions as paper mill, phosphate fertilizer, sea salt industries, cement Industries.

Items		Standard
		Allowable variation range
Hardness	Before aging	60^{+10}_{-5}
	Difference between before and after aging	20
	Maximum value after aging	85
Tensile strength	Minimum value before aging /MPa	15
	Rate of change after aging /%	-25
	Minimum value after aging /MPa	12
Elongation at break	Minimum value before aging /%	400
	Rate of change after aging /%	-50
	Minimum value after aging /%	200
Abrasion	Before aging /mm ³ ≤	200

Acid-alkali resistant properties of rubber cover					
Class	Soak liquid	Concentration	Soak conditions(°C×h)	Change rate of properties before and after soaking	
				Volume expansion rate	Change rate of tensile strength
A1	Hydrochloric acid (HCl)	18%	50°C×96h	≤+10%	≥-10%
A2	Sulfuric acid(H ₂ SO ₄)	50%	50°C×96h	≤+10%	≥-10%
A3	Sodium hydroxide(NaOH)	48%	50°C×96h	≤+10%	≥-10%

Oil Resistant Conveyor Belt

Oil resistant conveyor belt, a range specially designed for conveying of oily/greasy products or products impregnated with hydrocarbons, vegetable or animal fats, mineral oils, solvents, diluted acids, etc., in a temperature range between -15 and +100. The special material characteristics of this product group enable it to transport materials containing oil and grease such as vegetable fats, mineral oils and solvents. Negative effects such as swelling of the rubber are minimized by use.

Physical properties of rubber cover

Grade	Tensile Strength/Mpa $\geq$	Breaking Elongation/% $\geq$	Abrasion Loss/mm ³ $\leq$
LO	≥ 14.0	≥ 350	≤ 200
DO	≥ 16.0	≥ 350	≤ 160

Note : LO-used in general oily working conditions.DO-used in high abrasion & oily working conditions.

Oil resistant properties of rubber cover

Serial number	Test conditions of soak liquid			Volume change rate/% $\leq$	
	Oil number in GB/T1690-2010	Soak temperature/°C	Soak time/h	LO	DO
1	IRM902 standard oil	70 $\pm$ 2	70+0/-1	+20	-5
2	IRM903 standard oil	70 $\pm$ 2	72+0/-1	+50	+5
3	IRM903 standard oil	100 $\pm$ 2	22 $\pm$ 0.25	+50	+5

Note : You only need to choose one of the above three methods.



Application

- Metal processing industry
- Iron and steel industry
- Recycling industry
- Car industry
- Chemical industry
- Coated fertilizers
- Grain silos

Corrugated Sidewall Conveyor Belt

Structure

Corrugated Sidewall conveyor belts consist of a base belt, corrugated sidewalls and cleats.

Sidewalls and cleats are hot vulcanized to the base belt to guarantee adhesion and durability.

It is the most efficient and reliable system for steep angle or vertical conveying bulk material.



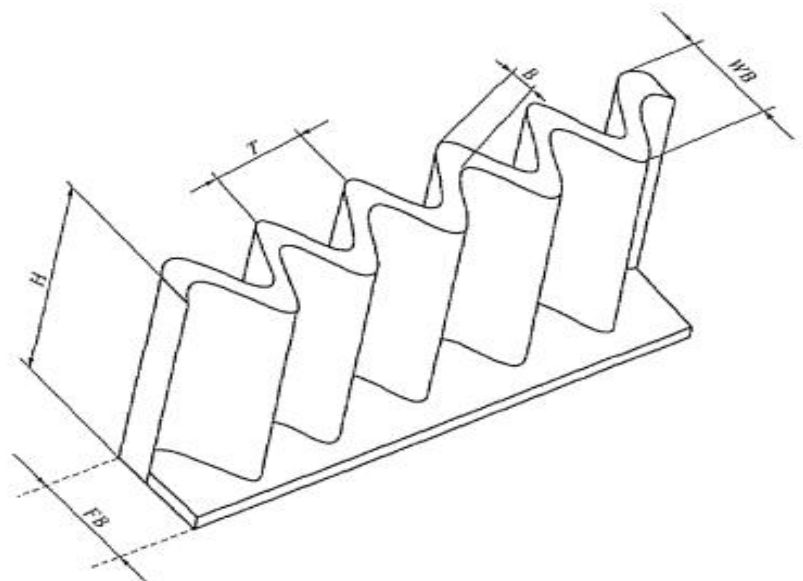
Advantages

- No Transfer Points from the feed hopper to the discharge point
- Higher handling capacity
- No material spillage
- Minimum maintenance
- Maximum space utilisation
- Low Power Requirement

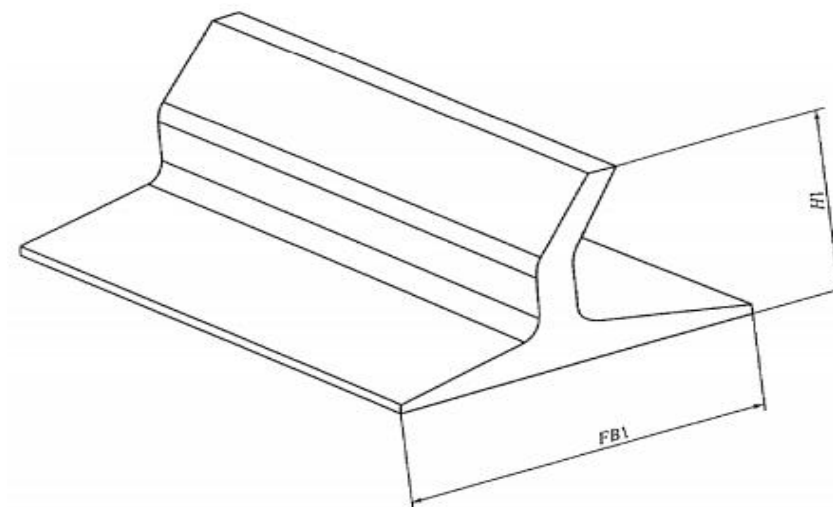
Applications

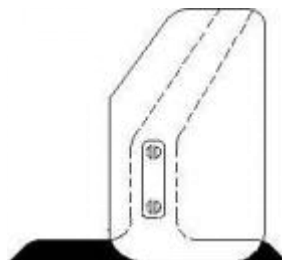
- Steel plants
- Foundries
- Power plants
- Recycling and waste industries
- Mining
- Batching plants
- Tunneling
- Sand, gravel and stone quarries

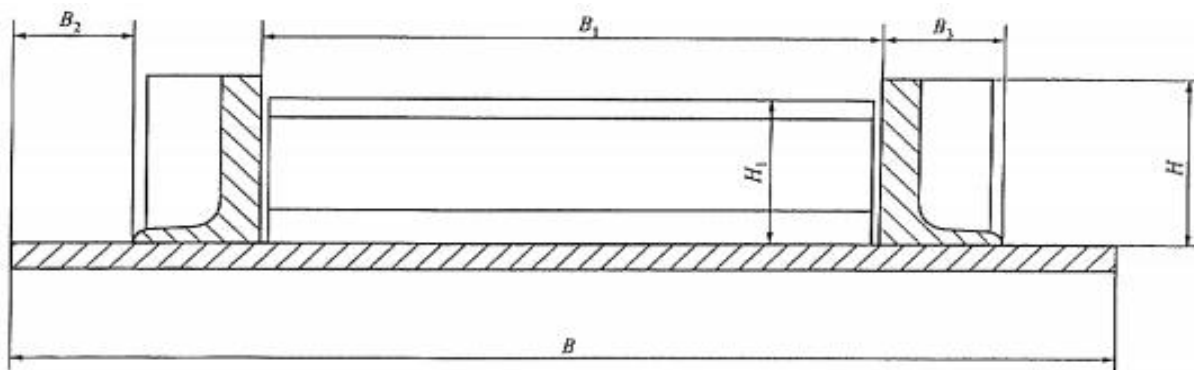




H mm	FB mm	WB mm	T mm	Min Pulley Dia. mm	Weight Kg/m
60	50	44	42	160	1.45
80	50	44	42	200	1.96
100	50	44	42	250	2.37
120	50	44	42	315	3.1
160	75	66	63	400	4.25
200	75	66	63	500	5.26
240	75	66	63	630	6.32
300	100	88	84	800	11.2



Type	H ₁ mm	FB ₁ mm	Weight Kg/m
	70	75	1.3
	87	75	1.83
	105	110	2.42
	140	110	3.31
	175	180	5.5
	215	180	7.3-7.7
TC type	270	180	12.75



B — Base belt width
 B₁ — Cleat width
 B₂ — Free space
 B₃ — The wave bottom width
 H — Sidewall height
 H₁ — Cleat height

Base belt width B	Sidewall height H	Cleat height H ₁	Effective band width B ₁	The wave bottom width B ₃	Free space B ₂	Type of cleat
300	40	35	180	25	35	TC
	60	55	120	50	40	
	80	75				
400	60	55	180	50	60	TC
	80	75				
	100	90				
500	80	75	250	50	75	TC
	100	90				
	120	110				
650	100	90	350	50	100	TC
	120	110				
	160	140	300	75		
800	120	110	460	50	120	TC
	160	140	410	75		
	200	180				
1000	160	140	550	75	150	TC
	200	180				
	240	220				
1200	160	140	690	75	180	TC
	200	180				
	240	220				
	300	260	640	100		



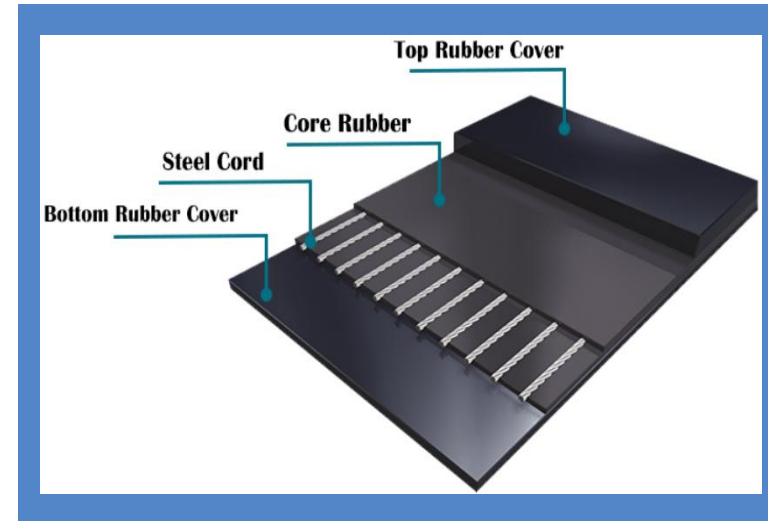
ST Steel Cord Conveyor Belt

Structure

Steel Cord:The Cord is made of specially developed High Carbon Steel.During manufacturer of Belt, these cords are held longitudinally in a single layer under pre-determined tension to ensure proper alignment. The Cords are Zinc coated to ensure superior bonding between Cord and Rubber as well as to protect the same against corrosion.

Cover Rubber:The Cover Rubber which acts as the protective for the Steel Cords is specially developed with high Tensile Strength, high Elongation at Break, maximum resistance to tear propagation and low Abrasion loss.

Core Rubber:The Core Rubber ensures permanent Bond between Rubber and Cord through the Bonding process.



Features

- High tensile strength with heavy load
- Low work elongation
- Strong resistance to aging
- Excellent trough ability
- Long lifespan

Application

Suitable for high strength,long distance,and heavy load transportation of materials.

Widely used in coal mines, mines, ports,metallurgy, electricity, chemical industries, etc.





Belt type	ST 630	ST 800	ST 1000	ST 1250	ST 1600	ST 2000	ST 2500	ST 2800	ST 3150	ST 3500	ST 4000	ST 4500	ST 5000	ST 5400
Min. tensile strength (N/mm)	630	800	1000	1250	1600	2000	2500	2800	3150	3500	4000	4500	5000	5400
Max. diameter of steel cord (mm)	3.0	3.5	4.0	4.5	5.0	6.0	7.2	7.2	8.1	8.6	8.9	9.7	10.9	11.3
Min. breaking force of steel cord (kN)	7.0	8.9	12.9	16.1	20.6	25.6	40.0	39.6	50.5	56.0	63.5	76.3	91.0	98.2
Steel cord pitch (mm)	10.0	10.0	12.0	12.0	12.0	12.0	15.0	13.5	15.0	15.0	15.0	16.0	17.0	17.0
Min. Top/Bottom cover thickness (mm)	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.5	6.0	6.5	7.0	7.5	8.0
Belt width	Number of steel cord													
650	60	60	51	51	51	52	41	46	41	41	41	39	36	N/A
800	75	75	63	63	63	63	50	57	50	50	51	48	45	45
1000	95	95	79	79	79	79	64	71	64	64	64	59	55	55
1200	113	113	94	94	94	94	76	85	76	77	77	71	66	66
1400	133	133	111	111	111	111	89	99	89	90	90	84	78	78
1600	151	151	126	126	126	126	101	114	101	104	104	96	90	90
1800	171	171	143	143	143	143	114	128	114	117	117	109	102	102
2000	191	191	159	159	159	159	128	143	128	130	130	121	113	113
2200	211	211	176	176	176	176	141	158	141	144	144	134	125	125

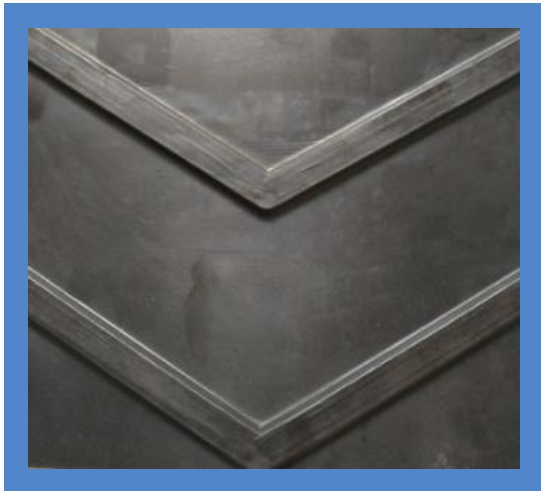
Patterned Conveyor Belt

Structure

Patterned conveyor belt is composed of base belt and patterns. Patterns are moulded and vulcanised in one continuous production process together with the base belt. This creates a single, homogeneous belt structure that is far stronger than belts that have the patterns attached separately. Another key advantage is that this integral strength allows the use of smaller pulley diameters. With the pattern shape of Open V, Closed V, Y Type, U Type. The type and height of the pattern is different, and can be designed according to the actual needs of the customer.

Application

Suitable for conveying powder, granular, small pieces of materials, and packaging bag materials at the angle of 40°. It is widely used in coal mine, electric power, chemical industry, grain and other industries.





Parameters

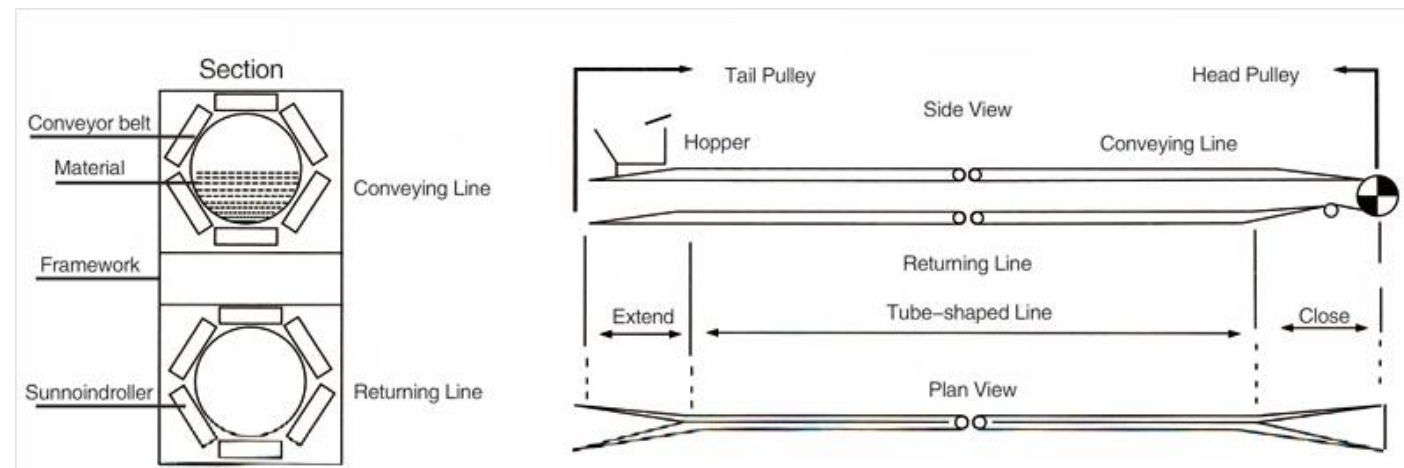
Belt width	300mm-1600mm
Pattern height	5、 10、 15、 20、 25、 30 (mm)
Pattern pitch	125、 200、 250、 330、 400、 500 (mm)
Note:the pattern shape can be designed according to user needs.	

Tubular Conveyor Belt

Tubular conveyor belt is used to support pipe belt conveyor. The tubular shape is formed in the whole or part of transportation with the help of external force. We use high strength canvas or steel cord as belt carcass, and high strength, high abrasion resistant rubber as covers. When the belt is running, it transform plain shape into U shape, and finally into tubular shape, so as to achieve closed transportation.

Features:

1. Enclosed conveying of materials, protecting both the materials and the environment.
2. Steep angled conveying, the conveying angle can reach 30 degrees usually.
3. Conveying line can be arranged according to the curve of space.



Belt width & corresponding pipe diameter (unit: mm)

Belt width	360	600	800	1000	1100	1300	1600	1850	2250	2450	2900	3100
Pipe diameter	100	150	200	250	300	350	400	500	600	700	800	850

Cover properties	Tensile strength	Breaking elongation	Abrasion loss	Anti ozone	Change rate of tensile strength & breaking elongation after hot air ageing,%
D	18.0	400	90	No crack	-25~+25
H	24.0	450	120	No crack	-25~+25
T1、T2	10.0	300	200	-	-45~+45
a. Anti ozone testing conditions: concentration $(50\pm5)\times 10^{-8}$ (volume fraction), temperature $(40\pm2)^{\circ}\text{C}$, elongation $(40\pm2)\%$, time 96h.b. Hot air ageing testing conditions: D, H type belt $70^{\circ}\text{C}\times 168\text{h}$; T1 type belt $100^{\circ}\text{C}\times 168\text{h}$; T2 type belt $125^{\circ}\text{C}\times 168\text{h}$.					
Note: D—high abrasion working conditions; H—high tear working conditions; T1—Heat resistance 100°C working conditions; T2—Heat resistance 125°C working conditions.					

Conveyor Spare Parts



Drum



Roller&Support



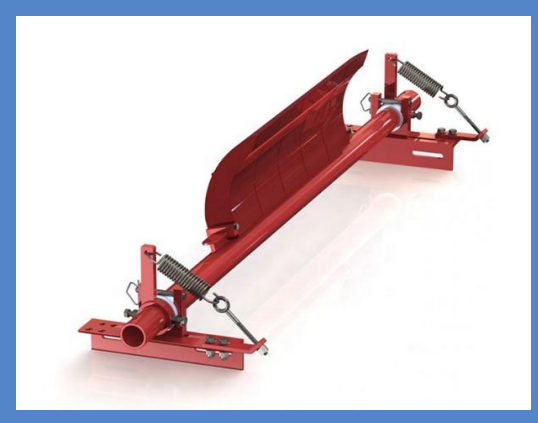
Impact roller



Spiral idler



Motor



Belt scraper



Impact bed

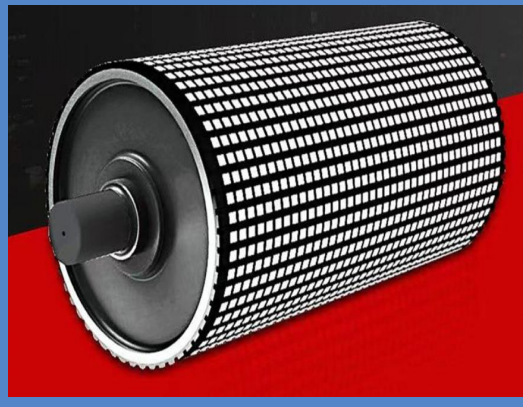


Impact bar

Conveyor Spare Parts



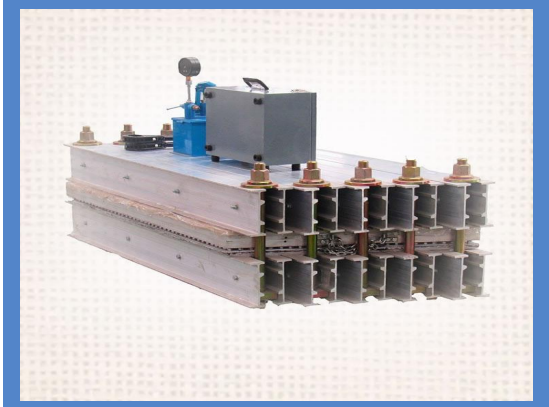
Diamond lagging rubber sheet



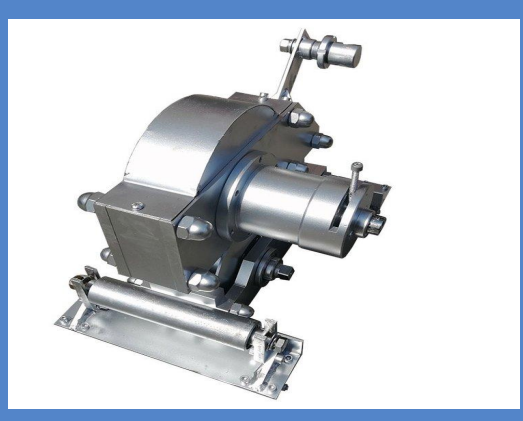
Ceramic lagging rubber sheet



Conveyor belt repair strip



Vulcanizing Machine



Steel cord cutting machines



Steel cord belt stripper



Belt fastener



Hammer type punching machine