

# Conveyor Belt



# Steel Cord Conveyor Belt

DRB has been steadily growing in automotive and industrial rubber product markets after starting out with power transmission and conveyor belt production. We provides high value-added products and services to our customers, leading their diverse industry fields in the world market, based on accumulated experiences and technological capabilities. Over 70 years, DRB has been providing outstanding products and services to Korea's leading automotive, electronic and steel manufacturers who have achieved strong footholds in the world market, and consequently, DRB has formed strong business partnerships with those companies.



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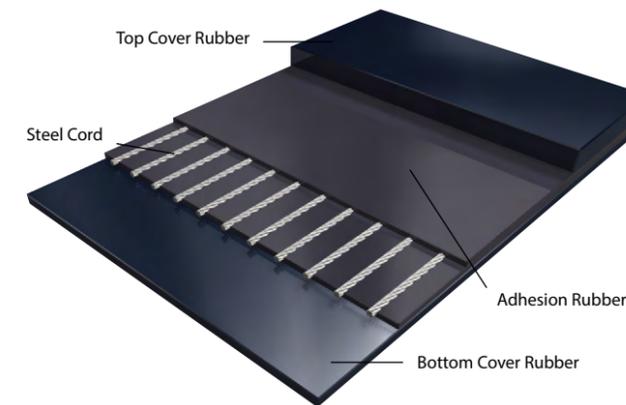
## Features

- It is ideal for long-distance, large-capacity and high tensile strength lines.
- Low elongation allows short take-up strokes.
- Small diameter pulleys may be used.

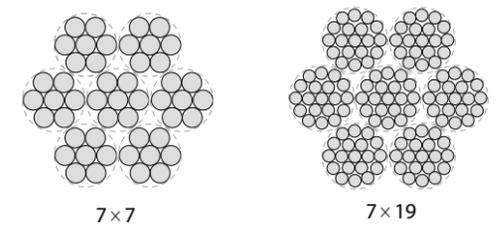
## Take-up Stroke Comparison

Carcass	Take-up Stroke
Steel Cord	Over 0.35
Nylon	Over 2.1
Polyester	Over 1.4

## Belt Structure

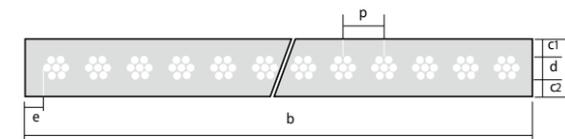


## Cord Structure

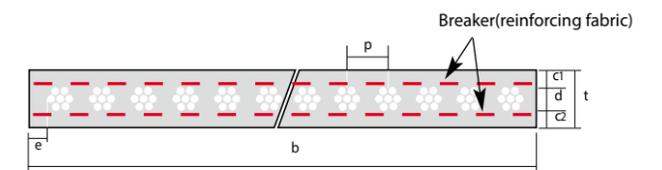


7x7 : Applied to low tension lines  
 7x19 : Applied to high tension lines

## General Structure



b : Belt width  
 c<sub>1</sub> : Top cover rubber thickness  
 c<sub>2</sub> : Bottom cover rubber thickness  
 d : Cord diameter  
 e : Edge rubber width  
 p : Cord pitch  
 t : Total belt thickness

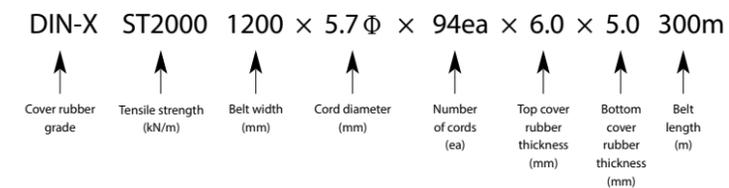


b : Belt width  
 c<sub>1</sub> : Top cover rubber thickness  
 c<sub>2</sub> : Bottom cover rubber thickness  
 d : Cord diameter  
 e : Edge rubber width  
 p : Cord pitch  
 t : Total belt thickness

## Breaker(reinforcing fabric)

- prevents length-wise tearing by foreign substances or sharp objects
- prevents broken steel cord from protruding through cover rubber
- provides high withdrawal strength (in stationary tests)
- reduces risks for belt breakage by impact

## Belt Marking Protocol



## Steel Cord Conveyor Belt

### Product Information

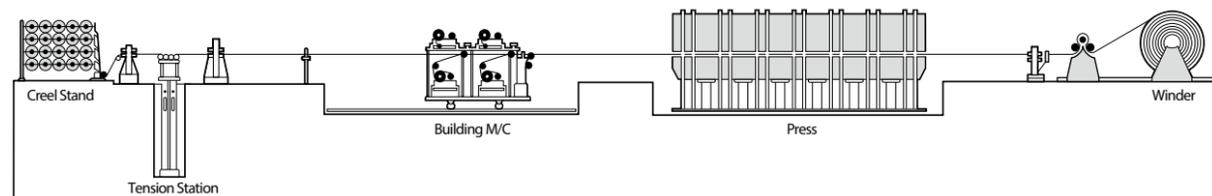
Products	Application groups
(1) Belt tensile strength: ST500~ST5000(kN/m)	(1) General Purpose
(2) Belt width: 600~2200mm	(2) Abrasion Resistance
(3) Minimum length: 100m	(3) Heat Resistance
	(4) Oil Resistance
	(5) Fire Resistance

### Standard Specifications

Specification	Cord diameter(mm)	Cord pitch(mm)	Cord structure	Minimum pulley diameter(mm)		
				Drive/Head	Takeup/Tail	Snub/Bend
ST-500	2.5	10	7×7	600	500	350
ST-630	2.7	10	7×7	600	500	350
ST-800	3.1	10	7×7	650	500	400
ST-900	3.3	10	7×7	700	550	450
ST-1000	3.6	12	7×7	700	550	450
ST-1250	4.0	12	7×7	850	700	500
ST-1400	4.3	12	7×7	950	750	550
ST-1600	4.7	12	7×7	1000	800	600
ST-1800	5.0	12	7×7	1200	950	700
ST-2000	5.2	12	7×7	1200	950	700
ST-2500	6.8	15	7×19	1500	1200	900
ST-2800	7.2	15	7×19	1550	1250	950
ST-3000	7.4	15	7×19	1700	1350	1000
ST-4000	8.6	15	7×19	1850	1400	1050
ST-5000	9.6	15	7×19	2100	1700	1250

Note : Please contact your representative as specifications other than the above are available.

### Production Process



## Multi-Ply Conveyor Belt

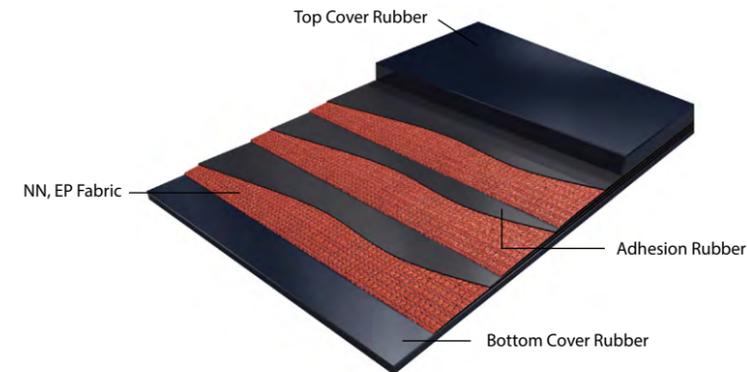
### Features



### Material Quality

- Nylon (NN)
- Highly flexible.
  - Highly resistant against impact.
  - Highly bendable.
- Polyester (EP)
- Less elongation.
  - Less deformed by heat.
  - Less affected by moisture.

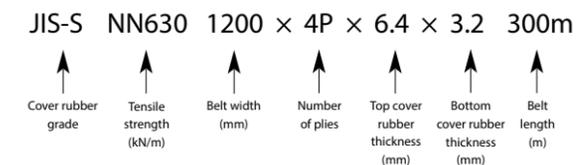
### Belt Structure



### Product Information

Products	Application groups
(1) Belt Tensile Strength : 100~3150(kN/m)	(1) General Purpose (7) Anti-Static
(2) Belt width : 300~2200mm	(2) Abrasion Resistance (8) Color
(3) Minimum length : 50m	(3) Heat Resistance
	(4) Oil Resistance
	(5) Fire Resistance
	(6) Chemical Resistance

### Belt Marking Protocol



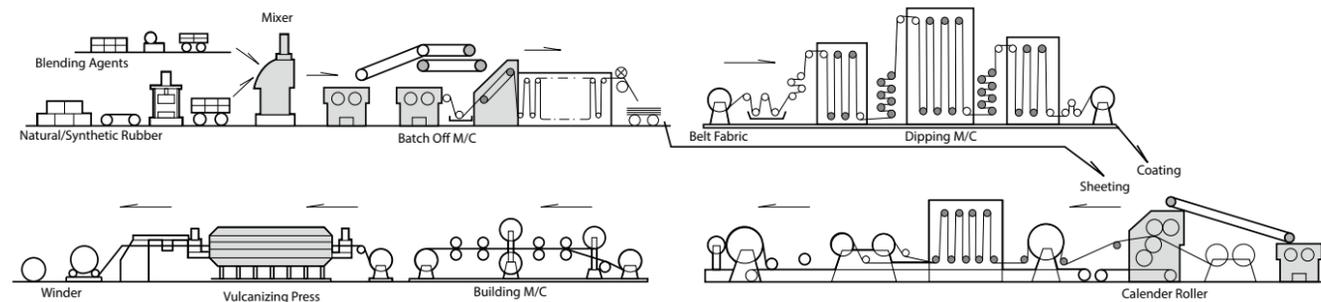
## Multi-Ply Conveyor Belt

### Standard Specifications

Belt strength (kN/m)	Belt specifications				Belt width (mm/inch)														
	Plies	Carcass type	Cover rubber(mm)		300	400	500	600	700	800	900	1000	1050	1200	1400	1600	1800	2000	2200
			Top rubber	Bottom rubber	12	16	20	24	28	32	36	40	42	48	56	64	72	80	88
160	2	NN, EP	3.2	1.6															
250	2~3	NN, EP	3.2	1.6															
315	2~4	NN, EP	4.8	1.6															
400	2~4	NN, EP	4.8	1.6															
500	2~4	NN, EP	4.8	1.6															
630	3~5	NN, EP	4.8	1.6															
800	3~6	NN, EP	4.8	2.4															
1000	4~6	NN, EP	4.8	2.4															
1250	4~6	NN, EP	4.8	2.4															
1500	5~6	NN, EP	6.4	3.2															
2000	5~6	NN, EP	6.4	3.2															

Note : Please contact your representative as specifications other than the above are available.

### Production Processes



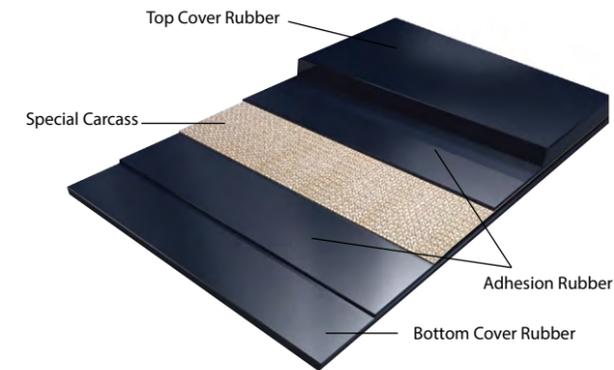
## Mono-Ply Conveyor Belt

### Features

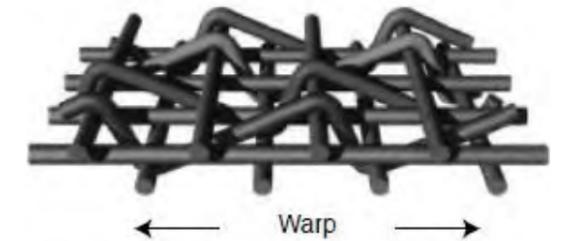


- One-ply carcass provides over 2000kN/m tension.
- Low elongation allows short take-up strokes.
- Single layer carcass structure provides optimum troughing.
- Single layer carcass structure provides high bendability, allowing small-diameter pulleys.
- High bendability, impact-resistance and thin carcass allow thick cover rubber layers, extending belt life span.

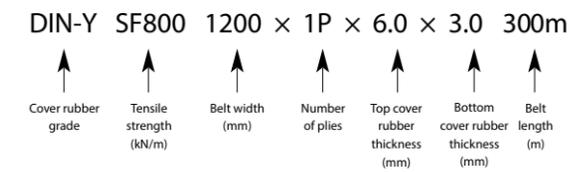
### Belt Structure



### Carcass Structure



### Belt Marking Protocol



### Standard Specifications

Specification	Carcass thickness	Cover rubber		Minimum pulley diameter(mm)		
		Top rubber	Bottom rubber	Drive/Head	Takeup/Tail	Snub/Bend
SF-400	2.27	5	3	400	350	300
SF-500	2.32	5	3	400	350	300
SF-800	3.2	5	3	450	400	350
SF-1000	3.9	6	3	500	450	350
SF-1250	4.3	6	3	550	500	400
SF-1600	5.1	6	4	650	550	450
SF-1800	5.5	8	4	750	650	550

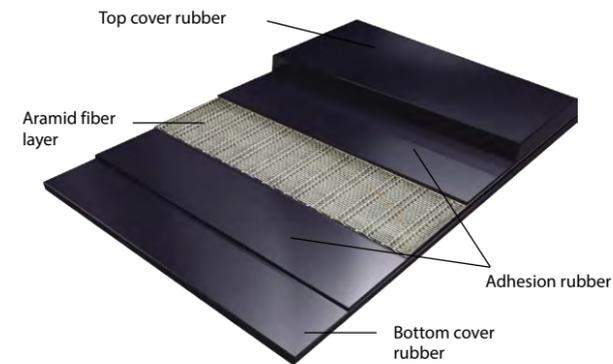
Note: Please consult us your representative for specifications other than the above.

## Aramid Conveyor Belt

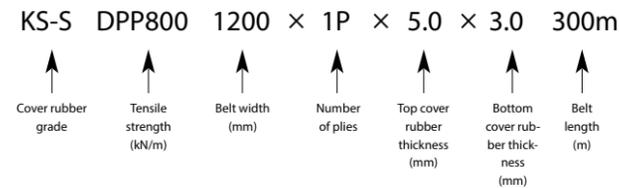
### Features

- Carcass contains an aramid ply, making this conveyor belt ideal for long, large-capacity and high-tensile strength lines.
- Straight-warp construction of carcass offers excellent impact resistance, abrasion resistance and flexibility.
- Belt is thinner and lighter than steel-cord conveyor belts but just as strong, thus requiring less power.
- Lower elongation allows for shorter take-up strokes, making this conveyor belt better for transporting goods in high-temperature environments than previous fabric conveyor belts.

### Belt Structure



### Belt Marking Protocol



### Standard Specifications

Specifications	Cover Rubber Thickness (mm)		Minimum Pulley Diameter (mm)		
	Top Cover	Bottom Cover	Drive/Head	Take-up/Tail	Snub/Bend
DPP800	6	2	600	450	350
DPP1000	6	2	600	450	350
DPP1250	6	2	650	500	400
DPP1500	8	3	700	550	450
DPP1800	8	3	750	550	500
DPP2000	8	3	750	550	500

Note: Please contact us for any specifications not included in the above table.

## Less-Ply Conveyor Belt

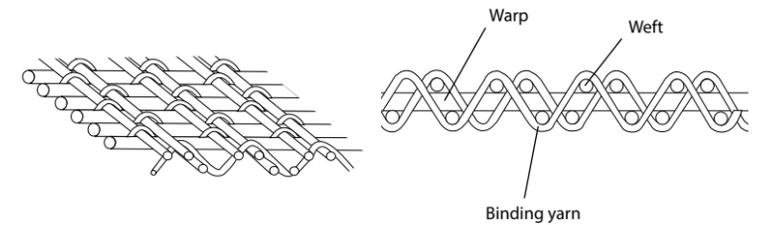
### Features

- Straight warp ply carcass structure allows designs to provide higher tension than ordinary multi-ply belts.
- Provides high bendability and impact resistance.
- Belts can be easily joined.

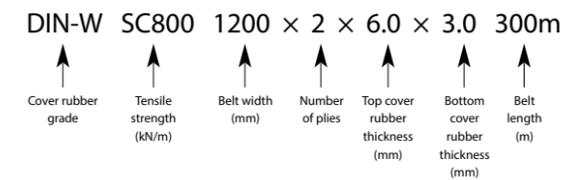
### Belt Structure



### Carcass Structure



### Belt Marking Protocol



### Standard Specifications

Specifications	Cover rubber(mm)		Minimum pulley diameter(mm)		
	Top rubber	Bottom rubber	Drive/Head	Take-up/Tail	Snub/Bend
SC-400	5	2	350	300	250
SC-600	5	2	400	350	300
SC-800	6	3	450	400	350
SC-1000	6	3	500	450	400
SC-1200	6	3	550	500	400
SC-1600	8	4	700	600	500
SC-1800	8	4	850	750	650
SC-2000	8	4	900	800	700

Note: Please consult us your representative for specifications other than the above.

## General, Abrasion Resistant Conveyor Belt

### JIS

Standard		JIS-P	JIS-G	JIS-S	JIS-A	JIS-L	JIS-D	JIS-H	
Tensile test	Before Aging	Tensile Strength (MPa)	>8	>14	>18	>14	>15	>18	>24
		Elongation(%)	>300	>400	>450	>400	>350	>400	>450
	After Aging	Change rate of TS(%)	±40	±30	±25	±25	±25	±25	±25
		Change rate of EL(%)	±40	±30	±25	±25	±25	±25	±25
Abrasion test (mm)		<400	<250	<200	<150	<200	<100	<120	

### DIN

Standard		DIN-W	DIN-X	DIN-Y	DIN-Z	
Tensile test	Before Aging	Tensile Strength (MPa)	>18	>25	>20	>15
		Elongation(%)	>400	>450	>400	>350
	After Aging	Change rate of TS(%)	±25	±25	±25	±25
		Change rate of EL(%)	±25	±25	±25	±25
Abrasion test (mm)		<90	<120	<150	<250	

### AS

Standard		AS-A	AS-E	AS-F	AS-M	AS-N	AS-S	
Tensile test	Before Aging	Tensile Strength (MPa)	17	14	14	24	17	14
		Elongation(%)	400	300	300	450	400	300
	After Aging	Change rate of TS(%)	±20	±20	±20	±20	±20	±20
		Change rate of EL(%)	±30	±30	±30	±30	±30	±30
Abrasion test (mm)		70	-	-	125	200	250	

### ISO

Standard		ISO-H	ISO-D	ISO-L	
Tensile test	Before Aging	Tensile Strength (MPa)	24	18	15
		Elongation(%)	450	400	350
	After Aging	Change rate of TS(%)	±25	±25	±25
		Change rate of EL(%)	±25	±25	±25
Abrasion test (mm)		120	100	200	

### BS

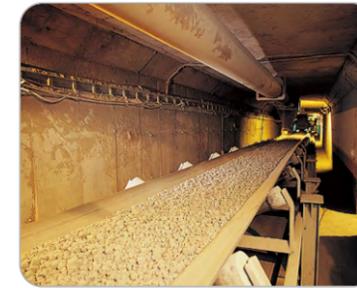
Standard		BS-N17	BS-M24	
Tensile test	Before Aging	Tensile Strength (MPa)	>17	>24
		Elongation(%)	>400	>450
	After Aging	Change rate of TS(%)	±25	±25
		Change rate of EL(%)	±25	±25



### RMA

Standard		RMA-1	RMA-2	
Tensile test	Before Aging	Tensile Strength (MPa)	>17	>14
		Elongation(%)	>400	>400
	After Aging	Change rate of TS(%)	±25	±25
		Change rate of EL(%)	±25	±25
Abrasion test (mm)		<125	<175	

## Heat Resistant Conveyor Belt



It is more economical to use a thermostable conveyor belt when transporting materials with 60°C or higher temperature. Damage to cover rubber varies depending on the temperature or shape of transported materials and it is critical to choose suitable belt materials depending on the use conditions. The relationship between the cargo and the belt surface temperature is especially noteworthy. This is because cooling is mainly achieved on the return trip as the temperature of the belt surface is different from that of the cargo, although it varies depending on the cargo shape, belt length, speed, operation environment and hours.

Grade	Features	Applications
HRS	Being a belt made of heat-hardening SBR materials, it has good abrasion resistance though some cracks are generated as cover rubber gets hardened by heat if used for a long time.	High abrasion resistance, Medium temperature
HRB	Being a belt made of heat-softening IIR materials, it has good resistance against cracks though its cover rubber gets softened by heat if used for a long time. It is suitable to transport cement or clinker with little abrasion.	Crack resistance, Medium high temperature
HRP	Being a belt made of EPR materials, it demonstrates outstanding performance in transporting hot materials as it has high resistance against abrasion and cracks.	High abrasion resistance, Crack resistance, High temperature
HRP (plus)	Being a new concept HRP product whose crack resistance is reinforced, you may experience a longer life span.	High abrasion resistance, Crack resistance, High temperature

### Selection of Belts by Material Type and Temperature

Grain shape	Powder materials					Lump materials					
	Material handled					Material handled					
	Cement, Chemical, Fertilizer, Soda ash, Casting sand, Clinker					Sintered ore, Cokes, Limestone, Iron Ore, Clinker					
Maximum temperature of material handled	120	150	200	200	400	200	200	400	400		
	↓	↓	↓	↓	↓	↓	↓	↓	↓		
Average temperature of material handled	60	80	100	120	150	180	60	100	120	150	200
Maximum temperature of belt surface	50	80	100	120	150	180	50	80	100	130	180
HRS(SBR)	██████████					██████████					
HRB(Butyl)	██████████					██████████					
HRP (EPR)/HRP (plus)	██████████					██████████					

### Relation between Material and Belt Surface Temperature

Belt surface temperature varies depending on material types, shapes, sizes, belt cycle time, and trough angle. The heat-resistant belts should be selected based on their surface temperature as their life span depends on the belt surface temperature.

Material handled	Temperature of material handled(°C)	Belt surface temperature(°C)	Used grade
Sintered ore	200~350	90~150	HRP
Cokes	60~200	40~60	HRS
Clinker	200~300	100~150	HRB
Clinker	300~400	150~180	HRP
Cement	110~140	100~110	HRB
Fertilizer	80~100	60~80	HRS
Casting cast	~100	60~80	HRS
	100~150	110~130	HRP

## Fire Resistant Conveyor Belt

### Features

Intended to prevent line loss while reducing flame damage to the belt by suppressing ignition, fire resistant conveyor belts are mainly used in grain processing industries, fertilizer plants, thermoelectric power plants, and mines.

### Fire Resistance Testing

Standard	Item	Laboratory flame test		Reappearance of Flame	Drum friction test	Electric resistance	Other Items
		Flame	Glow				
JIS	Each less than 15 sec. Total of 6 samples less than 45 sec.	None	None	Not permitted	None	None	None
ISO	Each less than 15 sec. Total of 6 samples less than 45 sec.	None	None	Not permitted	None	Less than $3 \times 10^8 \Omega$	None
DIN	Each less than 15 sec. Total of 6 samples less than 45 sec.	None	None	Not permitted	None	Less than $3 \times 10^8 \Omega$	None
MSHA (USA)	Avr. less than 60 sec.	Avr. less than 180 sec.	None	Not permitted	None	Less than $3 \times 10^8 \Omega$	None
AS (Australia)	Avr. less than 10 sec. Each less than 15 sec.	Avr. less than 120 sec. Each less than 180 sec.	None	Not permitted	Less than 325°C on drum surface and no glow	Less than $3 \times 10^8 \Omega$	Oxygen index test in accordance with ISO 4589 Gallery flame test
CSA (Canada)	Avr. less than 60 sec.	Avr. less than 180 sec.	None	Not permitted	Less than 400°C on drum surface and no glow	Less than $3 \times 10^8 \Omega$	None

MSHA (USA), CAN/CSA-M422 (Canada), MDA-M5010 (Australia) certified

### Fire Resistant Belt Grades

Grade	Application
FR, JIS-FR, MSHA	Suitable for lines that require general fire resistance.
DIN-K, FR JIS-A, FR SAR	Suitable for lines that require fire and abrasion resistance.
FR-NH, FR-ENH	Suitable for lines that require fire resistance in an environment where goods are handled at high temperatures (up to 150°C).
ORN-FR-ANTIS	Suitable for lines that require fire and oil resistance and anti-static features.
DIN-S, AS-S	Suitable for lines transporting flammable goods in an underground environment.
FR Cleanface	Cleanface belt with cake reduction feature and added fire resistance.



## Oil Resistant, Chemical Resistant, Anti Static, Color Conveyor Belt

### Oil Resistant Conveyor Belt

Ordinary grade belts are damaged quickly by imbibition of oil into cover rubber, peeling of cover rubber, and reversioning of the belt if oily materials are transported. Therefore, oil-resistant belts should be used to transport oily materials.

Grade	Color	Key Applications
ORN	White, Green, Black	Resistant to metal, animal or vegetable oil excluding aromatic compounds (benzene, toluene etc.) halogen hydrocarbon, ketone, and ester family. Further, the cover rubber is highly resistant to abrasion.
ORN-30	White, Black	Used for slightly oily materials. It is suitable for transporting wood chips or frozen meat.
HOR	White, Black	It is suitable for animal or vegetable oil transported at a relatively high temperature (up to 100°C)

### Chemical Resistant Conveyor Belt

Used for transporting chemicals, pulp, ceramic, foodstuffs, fertilizer and materials with chemicals attached. It is necessary to select cover rubber that is resistant to acid or alkali depending on the types of transport materials or chemicals attached to the materials.



### Anti-Static Conveyor Belt

Belt is made of cover rubber especially mixed to prevent static electricity. Anti-static belt is essential to transport fabrics that stick on the belt surface with static electricity or electronic products that may explode or ignite by electrification.

► Cover rubber electric resistance (ISO-284) :  $3 \times 10^8 \Omega$  or less

### Color Conveyor Belt

Belt is made of white, green or yellow cover rubber to match color in workplace, or to protect workers' eyesight or safety. It inspires easy sorting of transport materials and enhances workers' safety.

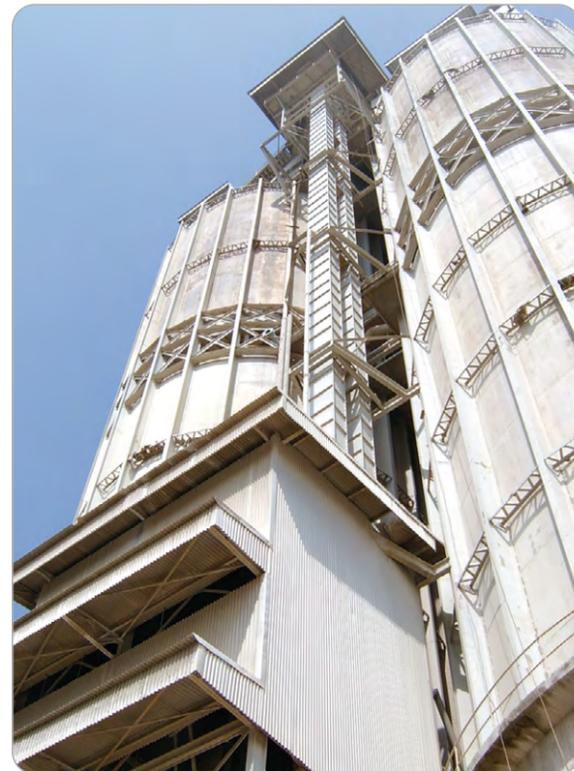
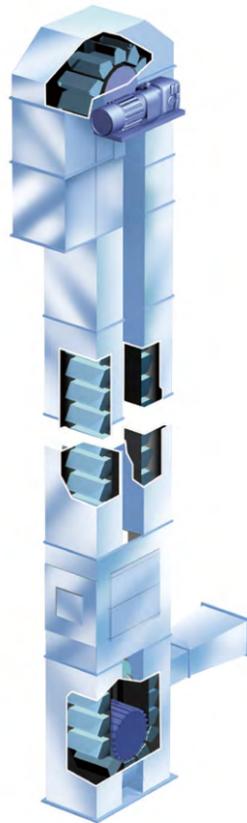
### Belt Wear Indicator

Belt Indicator is spaced evenly under the top cover and is using for maintenance step to help determine belt's condition. If the belt cover is worn to the point where is in need of replacement, the colored layer is shown up. This way, user can quickly and easily identify the belt condition while the belt is in operation.



Bucket elevator conveyor belts have bolt holes to fix buckets along the entire belt length, making them apt to be torn easily and receiving pulled force with the buckets' weight. They also have a withdrawal force different from that of the ordinary belts in bending in connection with pulleys. Therefore, their carcasses mainly use polyester fabric that can address such problems. Steel cord is used when a highly powerful belt is required.

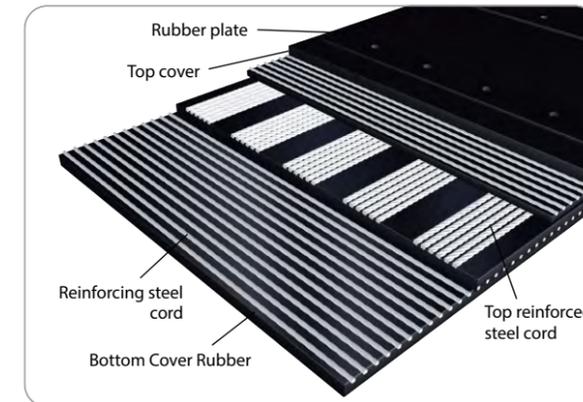
Specification	Cover rubber thickness	Minimum pulley diameter(mm)			
		4 (ply)	5 (ply)	6 (ply)	7 (ply)
EP 315	Over 1.5×1.5	500			
EP 400		650	600		
EP 500		650	750	850	
EP 630		700	800	950	1000
EP 800		800	850	1000	1150
EP 1000		850	1000	1000	1200
EP 1250		900	1050	1200	1400
EP 1500		1050	1100	1300	1400



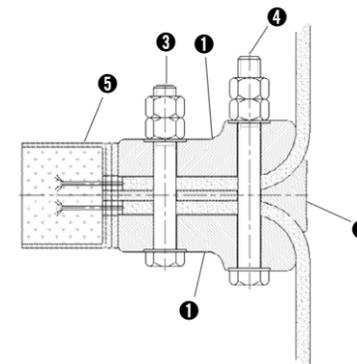
Standard Specifications (steel cord)

Belt Designation	Min. pulley diameter(mm)	Take-up adjustment Distance(mm)	Bucket Width	Volume streams(m³/h)	
				100% Filling	75% Filling
ST- 500	600	250	160	38	28
ST- 630	600	250	200	55	41
ST- 800	650	250	250	87	65
ST- 900	700	250	315	127	95
ST- 1000	750	250	400	197	148
ST- 1250	850	250	500	287	215
ST- 1400	950	315	630	465	349
ST- 1600	1000	315	800	665	499
ST- 1800	1200	315	1000	935	701
ST- 2000	1200	315	1250	1166	874
ST- 2500	1500	500	1400	1310	980
ST- 2800	1550	500	1600	1443	1102
ST- 3150	1700	500	1880	1613	1211
ST- 4000	1850	500	2000	1808	1352
ST- 5000	2100	500			

Belt Structure



Belt Clamping



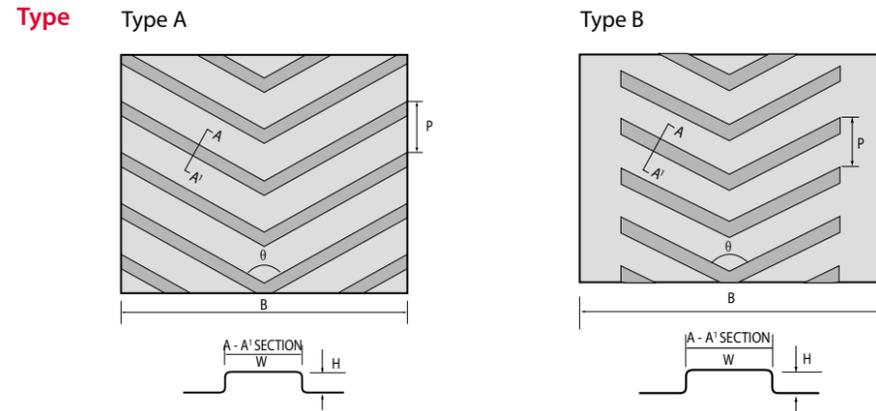
- 1. Clamping jaw (Duralumin)
- 2. Pusher (Duralumin)
- 3. Bolt, Nut, Washer
- 4. Bolt, Nut, Washer
- 5. U-shape



## Chevron Conveyor Belt



Chevron conveyor belts are highly effective for transporting sand, coal powder, grain or other powder or granular materials or materials packed in bags or boxes on incline though they can transport coal or mineral ore just like ordinary conveyor belts. They can transport powder or granular materials on 17°~28° inclines and materials packed in bags or boxes on 30°~35° inclines.



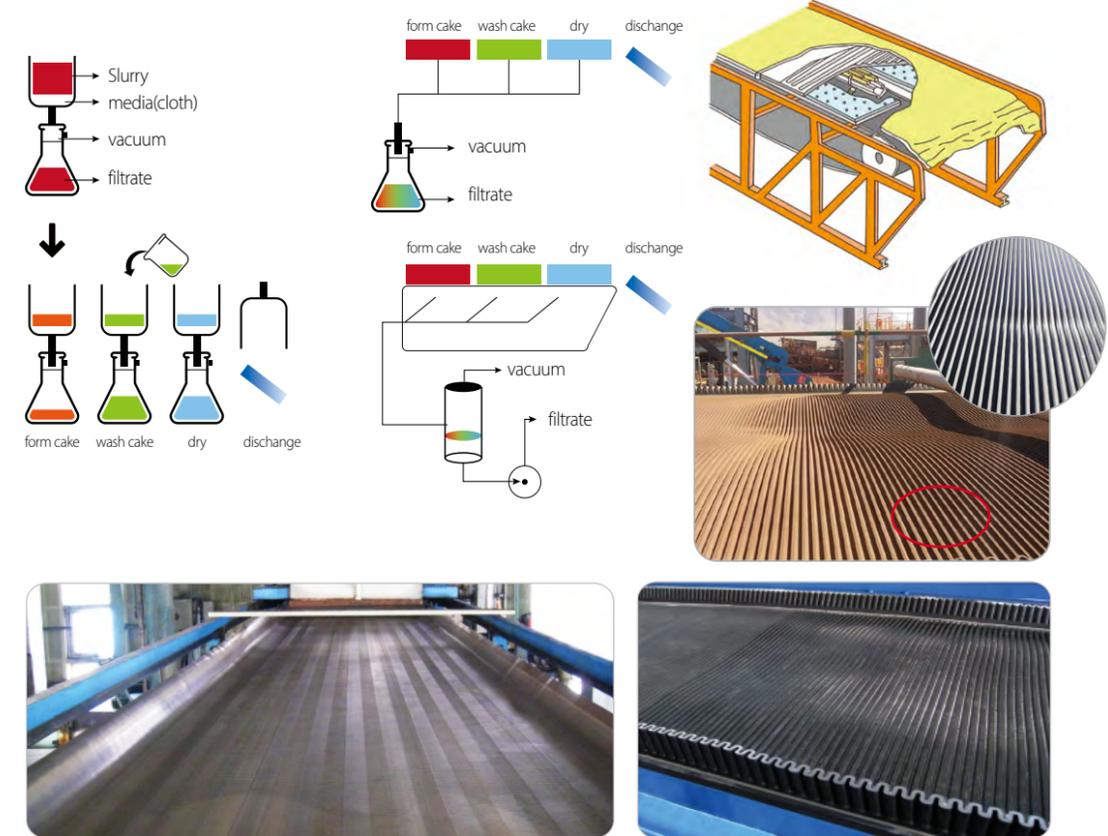
### Standard Specifications

Belt width B(mm)	Cleat height H(mm)	Cleat width W(mm)	Cleat pitch P(mm)	Cleat angle $\theta$	Type
350	6	12	80	120	A -
400	6	12	80	120	A -
450	6	12	80	120	A -
500	6	12	80	120	A -
600	6	12	80	120	A -
650	6	12	80	120	A -
700	6	12	80	120	A -
750	6	12	80	120	A -
800	6	12	80	120	A B
900	6	12	80	120	- B
900	8	12	120	120	A -
1000	8	12	120	120	A -
1050	8	12	120	120	A -
1200	8	12	120	120	A -
1300	8	12	120	120	- B
1400	8	12	120	120	- B
350	10	22	80	120	A -
400	10	22	80	120	A -
450	10	22	80	120	- B
500	10	22	80	120	- B
600	10	22	80	120	- B
650	10	22	80	120	- B
700	10	22	80	120	- B

## Filter Belt

### Features

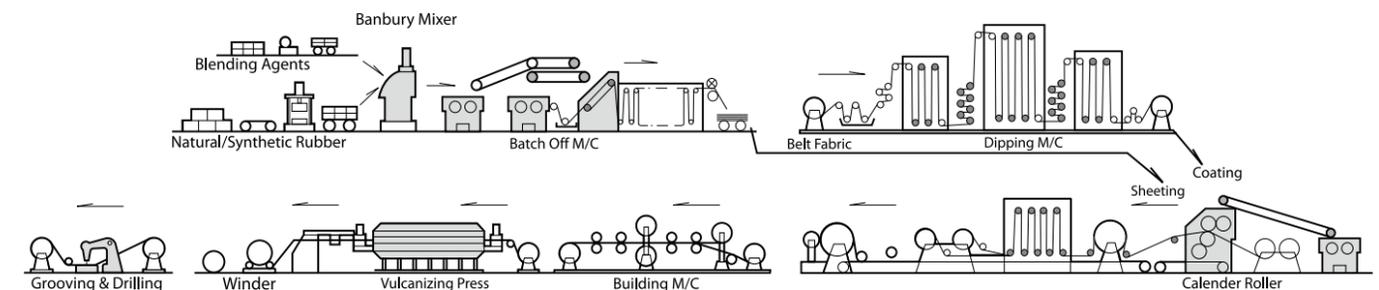
- Filter belts are used in fields that require continual mass filtering to separate slurry into its liquid and solid components and collect the end product as needed.
- Filter belts must be installed and used according to accurate specifications and measurement limits.
- For laboratory-wide filtering (separation of liquids and solids), please follow the procedure depicted below.
- Filter belt is a system that uses filtration principles for industrial purposes.



### Production

Filter belts are produced in the following process ;

- Endless by hot vulcanization
- Open rolls to be spliced on site by hot vulcanization or by cold splicing
- With applied or loose lateral curbs according to the dimensions of the filter belt



Standard Specifications

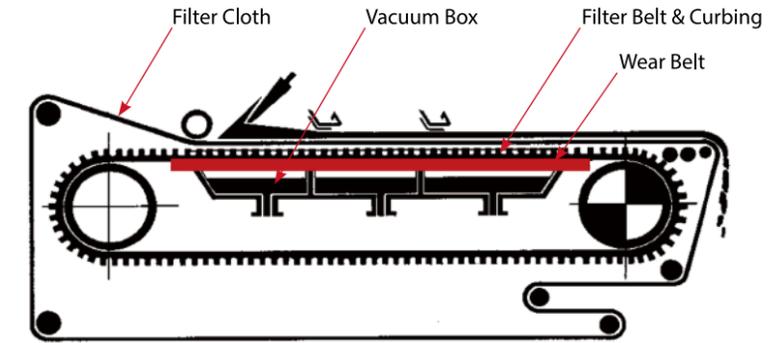
All the manufacturing steps of each filter are carefully monitored by our technical staff and all the components of the product are tested in DRB laboratory.

Cover Material	Carcass	Strength (KN/M)	No. of Plies	Width
NR	Nylon – Nylon (NN) Polyester - Nylon (EP)	500	3	300~2200mm without longitudinal joint
SBR-LT		630		
SBR-HT		800		
CR(Neoprene)	Polyester - Polyester (EE)	1000	5	2300~4280mm
EPDM		1250		

Areas of Application

Dewatering	Washing	Chemical Processing	Mineral Processing
General Tailings Gypsum Phosphate Rock Coal Fines Magnetite Iron Ore Lithium	Leached Materials Zinc Copper / Cobalt Nickel Gypsum Flue Gas Desulfurization Pulp Washer	Aluminium Fluoride Calcium Gypsum Ores Leaching Phosphates Magnesium Nichel Salt Peroxide Phosphoric Acid Boric Acid Zinc Carbonate Zeolite	Ores Dewatering Quartz Uranium Copper Lead Gold and Silver Titanium Dioxide Sylvine

Cover Grade	pH	Temperature	Application examples
NR	1~8	Max. 50	Phosphate ore, Sodium Cobalt chloride etc.
SBR-LT	1~10	Max. 50	Aluminium hydroxide, Jarosite filtration etc.
SBR-HT	1~10	Max.90	Phosphoric acid, Gypsum, Sulphuric salt etc.
CR(Neoprene)	2~12	Max. 50	Acid Acetic, Hydrocarbon etc.
EPDM	0.5~14	Max. 100	Phosphoric acid for fertilizer, Caustic Soda, CTA etc.

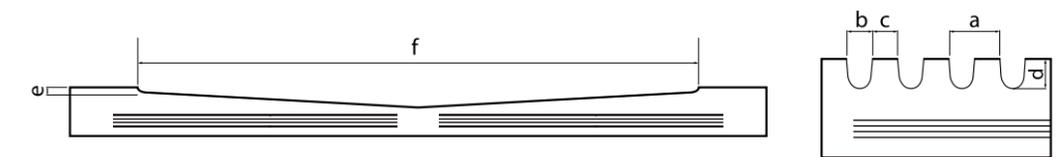


Structures

Available Thickness : Typically up to 40mm but possible even higher values.

Available Widths : Up to 2200mm in one piece  
Up to 4200mm with longitudinal splice by hot vulcanization

Available Length : As per customer's request



DATA

- a Pitch of Groove
- b Width of Groove
- c Width of Strand
- d Depth in Centre
- e Depth near edge at Left/Right side
- f Length of Groove

Structures

It is possible to "customize" Filte rbelt design by means of DRB's own Technology  
Here are DRB's standards ;



Round drilling holes in every Groove: diameter from 10mm to 25mm

Curbing

Type A	Type B	Type C
<p>Ripple Curb</p> <p>—</p> <p>Base 50mm</p> <p>Height 70mm</p>	<p>Ripple Curb</p> <p>—</p> <p>Base 85mm</p> <p>Height 70,100,130mm</p>	<p>Ripple Curb</p> <p>—</p> <p>Base 90mm</p> <p>Height 125mm</p>

Features

- Unlike conventional conveyor belts used for transporting goods, a seal belt is a cover-type belt that protects against wind and water penetration.
- Seal belt is an eco-friendly belt system used to prevent dust-related problems caused during the conveyor transportation process.
- Seal belts are used on lines with an unloader, reclaimer, or tripper (where there is a moving chute), where resin or metal covers cannot be used.

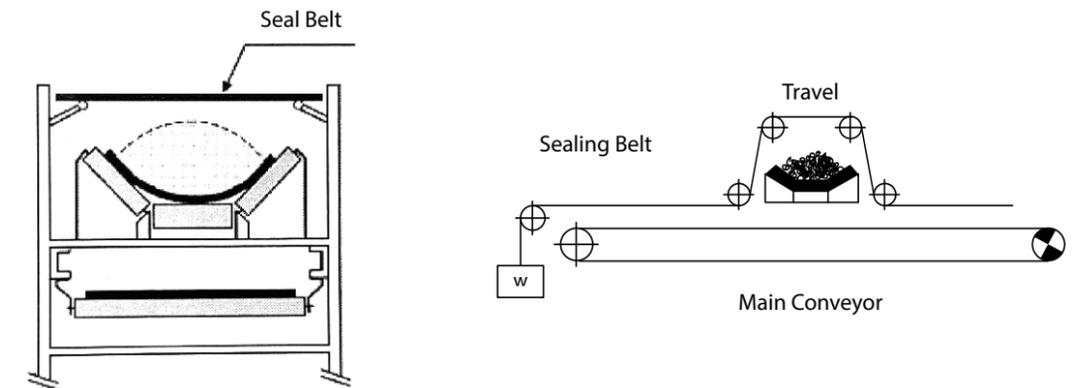


General type



Two-belt type

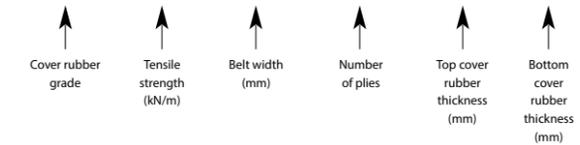
Structure



Belt Marking Protocol

SEAL KS-S EP-200 1200 × 2 × 3.0 × 2.0 (square iron type)

SEAL KS-S EP-200 1200 × 2+3P × 3.0 × 2.0 (file type)

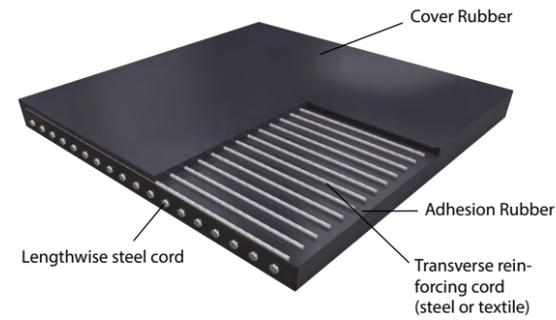


## Rip Protection Steel Cord Conveyor Belt

### Features

- Excellent rip protection and impact resistance.
- Minimizes damage to belt carcass from sharp objects or strong impact.
- Prevents the belt from being torn lengthwise by sharp objects inserted between the belt and other equipment.

### Belt Structure

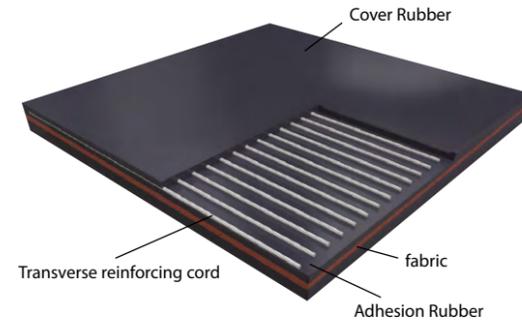


## Impact / Cut Resistant Conveyor Belt

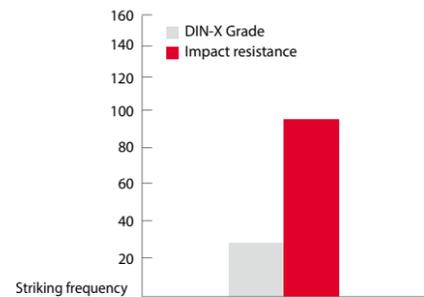
### Features

- Minimizes damages to belt carcass from sharp objects or strong impact.
- Prevents belts from being cut or broken by damage.

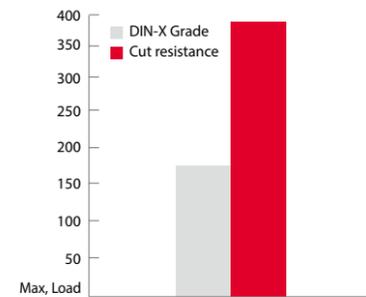
### Belt Structure



### Impact Resistance test



### Cut Resistance test

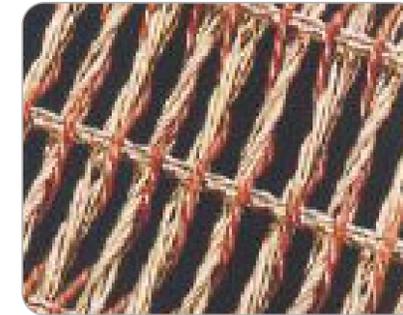


Belt type	Specification	Remark
DIN-X Grade Conveyor belt	NN800 1200 × 5P × 8 × 3	
Impact/Cut Resistant conveyor belt	NN800 1200 × 5P+1 × 8 × 3	Steel cord reinforced

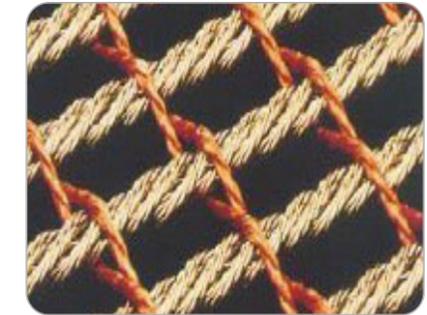
## IW Steel-Cord Conveyor Belt

### Features

- Unlike regular steel-cord conveyor belts with anti-tear and rip-resistant qualities, IW steel-cord conveyor belts have a carcass and weft cords woven in a special design that minimizes damage to the belt by impacts.
- Steel cords woven into a special design provide better flexibility and troughability compared to conventional steel-cord belts.



IW Cord



BF Cord

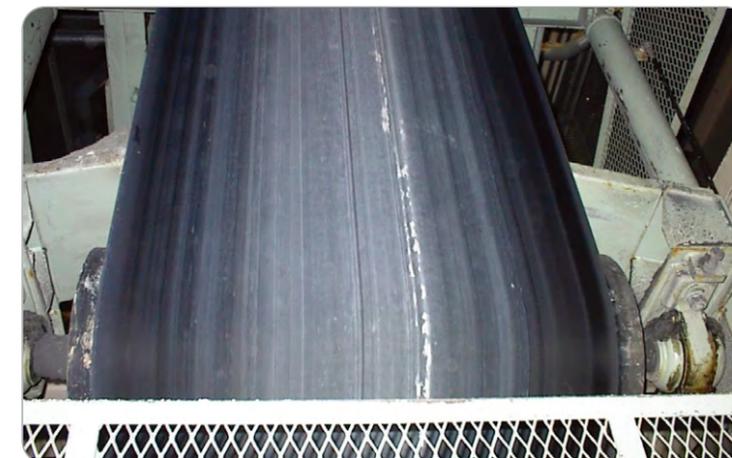
## Cleanface Conveyor Belt

### Features

- Cleanface conveyor belt has an improved belt-cleaning feature, which minimizes the caking of residue from transported materials in the return unit of the conveyor belt and thereby improves the environmental conditions of the line.
- Twice as abrasion resistant as KS-A, cleanface conveyor belts have a comparatively long lifespan.

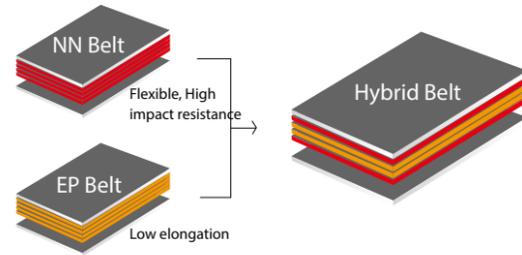
### Mounting Test Results

- Transport material: slurry
- Transport volume: 90 tons/hour
- Belt specifications: NN630 1050 x 4P x 6.4 x 3.2 86m
- Result: cake reduction of up to 57.5%
  - > Results may differ depending on the line facilities and operating conditions.



## Hybrid Conveyor Belt

### Features

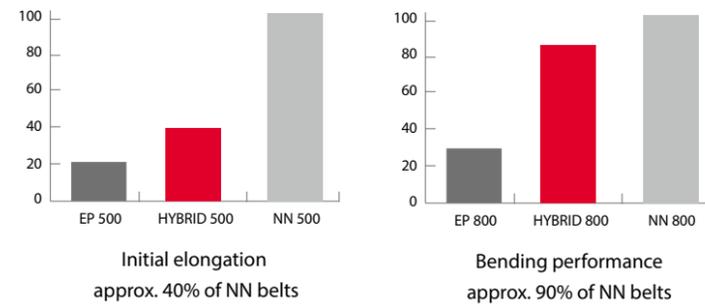


Hybrid belts combine merits of NN belt's flexibility and EP belt's low elongation. Satisfactory improvement is confirmed on lines where belts are lengthened as sufficient take-up stroke is not secured.

### Standard Specifications

Nomal	HYBRID
NN400/4	HB400/4
NN500/3	HB500/4
NN500/4	
NN500/5	
NN630/3	HB630/4
NN630/4	
NN630/5	
NN630/6	
NN800/4	HB800/4
NN800/5	
NN800/6	
NN1000/4	HB1000/4
NN1000/5	
NN1000/6	
NN1250/4	HB1250/4
NN1250/5	
NN1250/6	

### Belt Performance



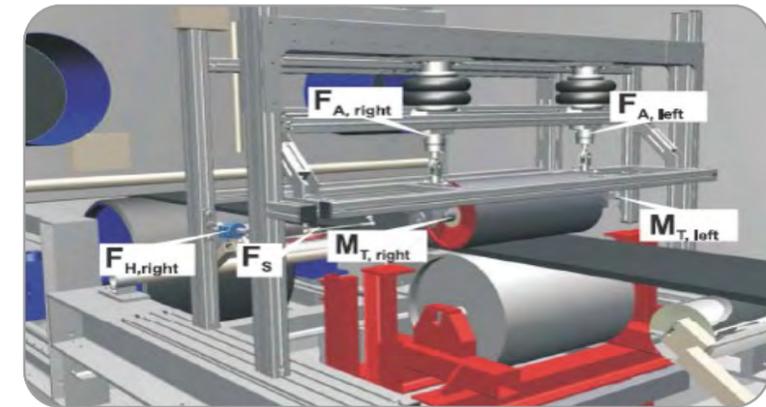
## Energy Saving Conveyor Belt

### Features

Energy Saving conveyor belt has rubber covers that minimize the elastic deformation of rubber caused by an idler. This reduces energy loss during operation and also reduces the power costs necessary for the operation of conveyor belts.

### Verification of Energy Saving Conveyor Belt Performance

Result of the University of Hannover's energy saving test based on DN22123. Verified that the belt reduced power consumption by up to 29%.



DIN 22123, Indentation rolling resistances test

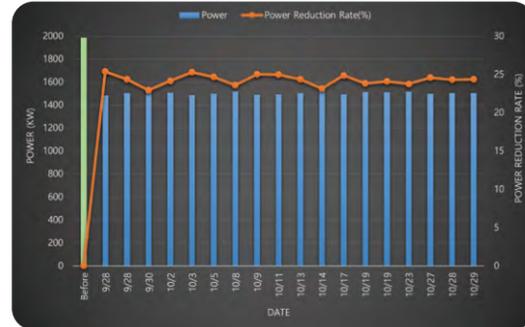
### Certificate



## Line Test Results

1) Installed on a long-distance line for a cement manufacturer

Customer	Cement Manufacturer
Belt Spec	ST2000 1050mm x 5.5mm x 5.5mm
C to C	12,854m
Slope	-4.95. (-111.1m)
Material	Limestone (2,400t/h)
Belt speed	360m/min
Power	1,200kW X 3 (2 unit Head / 1 unit Tail)



Average power reduction rate

Conventional belt	1,988kW
Energy-saving belt	1,471kW
<b>Reduction</b>	<b>517kW</b>
<b>Percentage</b>	<b>26%</b>

2) Applied short-distance yard line to power plant

Customer	Power Plant
Belt Spec	NN800 1400mm x 5mm x 3mm (Fire Resistant Energy-Saving Conveyor Belt)
C to C	652m
Slope	0.
Material	Coal (1,800t/h)
Belt speed	200m/min
Power	300kW X 1 (1 unit Head)



Average power reduction rate

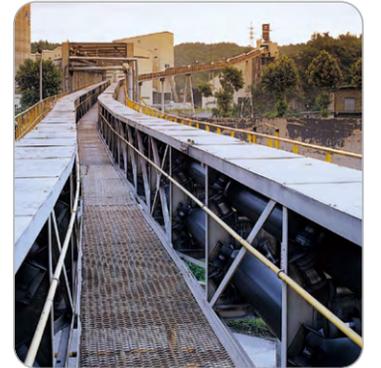
Conventional belt	123kW
Fire Resistant Energy-Saving Conveyor Belt	96kW
<b>Reduction</b>	<b>27kW</b>
<b>Percentage</b>	<b>22%</b>

## Features

- Prevents transport materials from flying, spilling or mixing with foreign substances as transported in a sealed pipe.
- Consumes less energy than ordinary conveyor lines.
- 3-dimension layouts are available with openings at top, bottom, left or right.
- Allows for maximum 30 degree incline transport, much steeper than ordinary conveyor belts.
- Occupies minimum installation space.
- Generates much less noise than ordinary conveyor lines.

## Structure

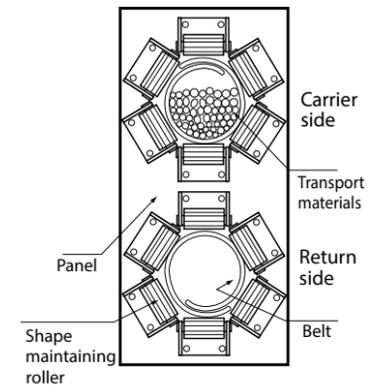
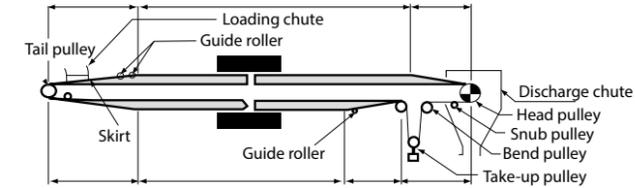
Inside diameter (mm)	Inside diameter (m <sup>2</sup> )	Belt speed (m/min)	Transport volume (m <sup>3</sup> /hr)
150	0.013	120	95
200	0.023	130	180
250	0.041	140	344
300	0.049	150	441
350	0.066	175	693
400	0.108	200	1296
500	0.155	225	2093



## Floor plan

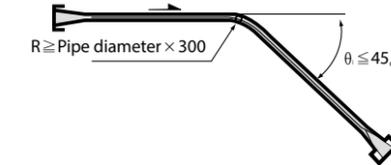


## Side plan

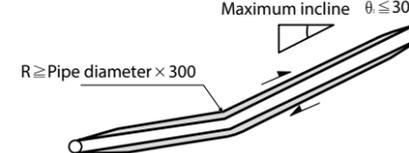


## Layout Conditions of Pipe Conveyor

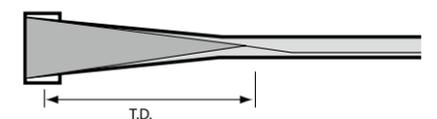
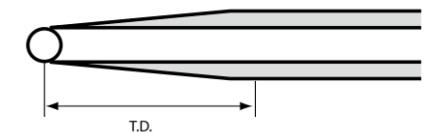
### Plane curve



### Side curve



Trough change distance(T.D.)  
 (T.D.) ≥ Pipe diameter × 25  
 NN Conveyor Belt ≥ Pipe diameter × 25  
 EP Conveyor Belt ≥ Pipe diameter × 30  
 ST Conveyor Belt ≥ Pipe diameter × 60



## Pipe Conveyor Belt

### Standard Specifications

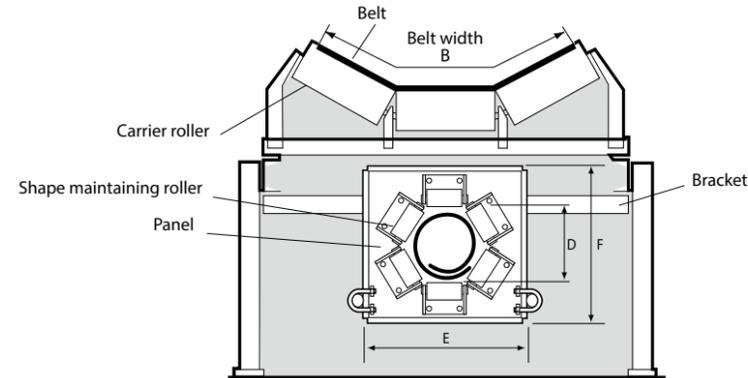
Pipe diameter (mm)	Belt width	Standard strength (kN/m)				
		200	315	500	630	800
150	600	3.0 × 2.0	3.0 × 2.0			
200	780	3.0 × 2.0 5.0 × 2.0	3.0 × 2.0 5.0 × 2.0	3.0 × 2.0 5.0 × 2.0		
250	950		3.0 × 2.0 5.0 × 2.0	3.0 × 2.0 5.0 × 2.0	3.0 × 2.0 5.0 × 2.0	
300	1100		3.0 × 2.0 5.0 × 2.0	3.0 × 2.0 5.0 × 2.0	3.0 × 2.0 5.0 × 2.0	
350	1300			5.0 × 2.0 5.0 × 2.0	5.0 × 2.0	5.0 × 2.0
400	1500				5.0 × 2.0	5.0 × 2.0
500	1850				5.0 × 2.0	5.0 × 2.0

## Return Pipe Conveyor Belt

### Features

Minimizes contamination of line environment with debris generated at the return part, as the carrier side has a general trough structure and the return omit has a pipe structure.

### Structure



### Photo of Installation



Amount of excess before return pipe conveyor applied



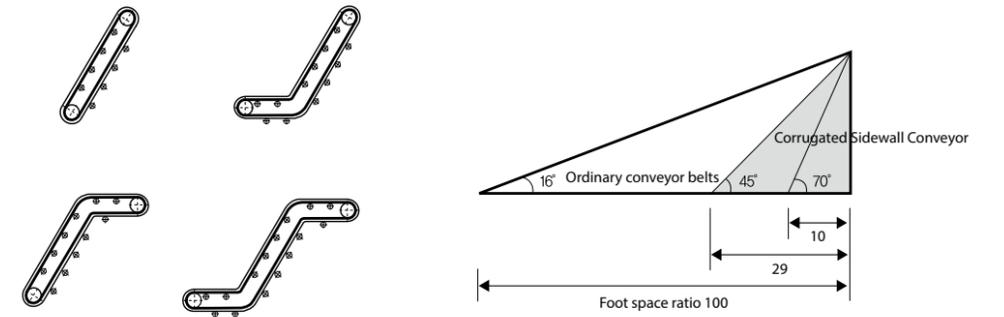
Cleanliness after return pipe conveyor applied

## Corrugated Sidewall Conveyor Belt

### Features

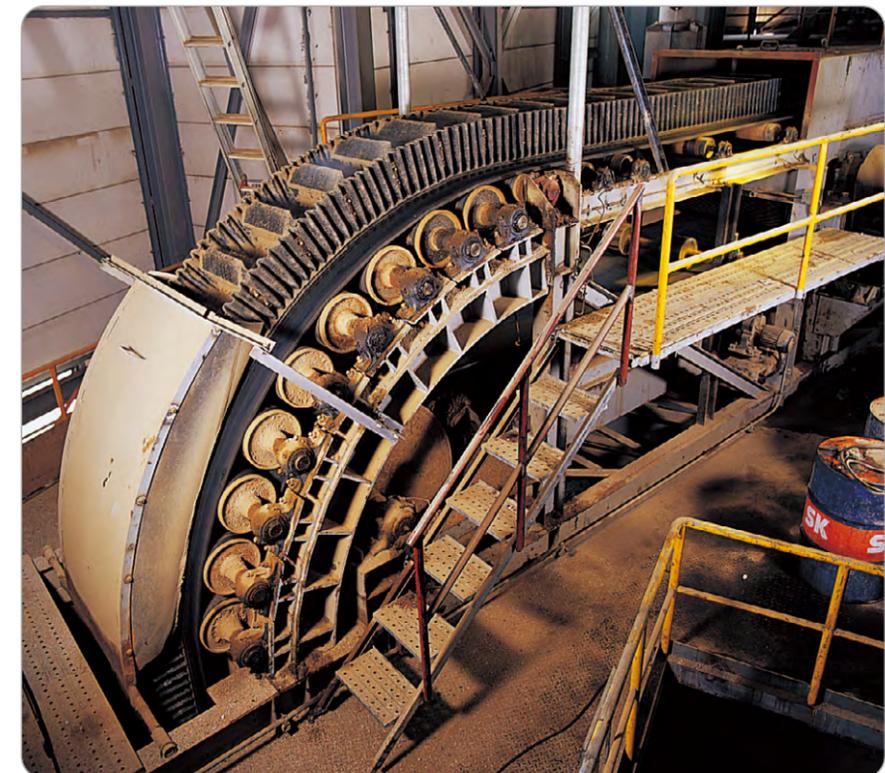
Conveyor belts equipped with special waves or cleats called corrugated sidewall on the belt provide the following features:

- Corrugated sidewall design allows for greater transport volume with increased sectional loading area, enabling a narrower conveyor design.
- Reduces foot space as steep incline or vertical transport is possible with cleats attached belt widthwise.
- No skirt board is required as transport materials spillage is prevented by high wavelike raised strips.
- Incline angle can be easily adjusted with specially strong belts and press rollers.
- Flat rollers may be used to reduce the equipment cost.



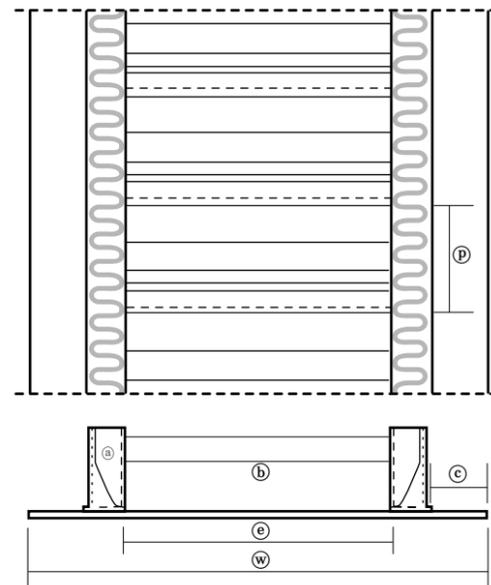
Line type

Foot space compared with that of ordinary conveyor belts



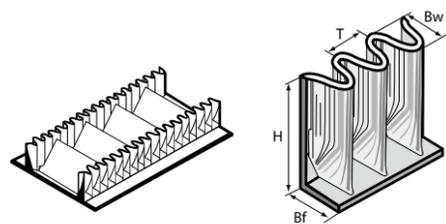
## Corrugated Sidewall Conveyor Belt

### General Shape and Name of Corrugated Sidewall Conveyor Belts



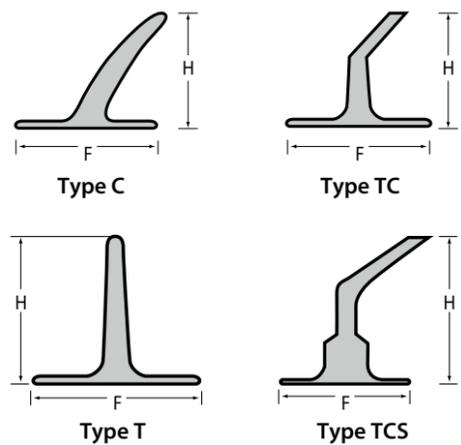
- Ⓐ : Corrugated Sidewall
- Ⓑ : Cleat
- Ⓒ : Free Zone width
- Ⓓ : Effective width
- Ⓔ : Cleat pitch
- Ⓜ : Belt width

### Corrugated Sidewall Dimension and Types



H(mm)	Bw(mm)	Bf(mm)	T(mm)
60	45	50	45
80	45	50	45
100	45	50	45
120	45	50	45
120	70	80	60
180	65	75	63
160	65	75	63
200	65	75	63
240	65	75	63
280	65	75	63
400	90	100	84

### Dimension and Types of Cleats

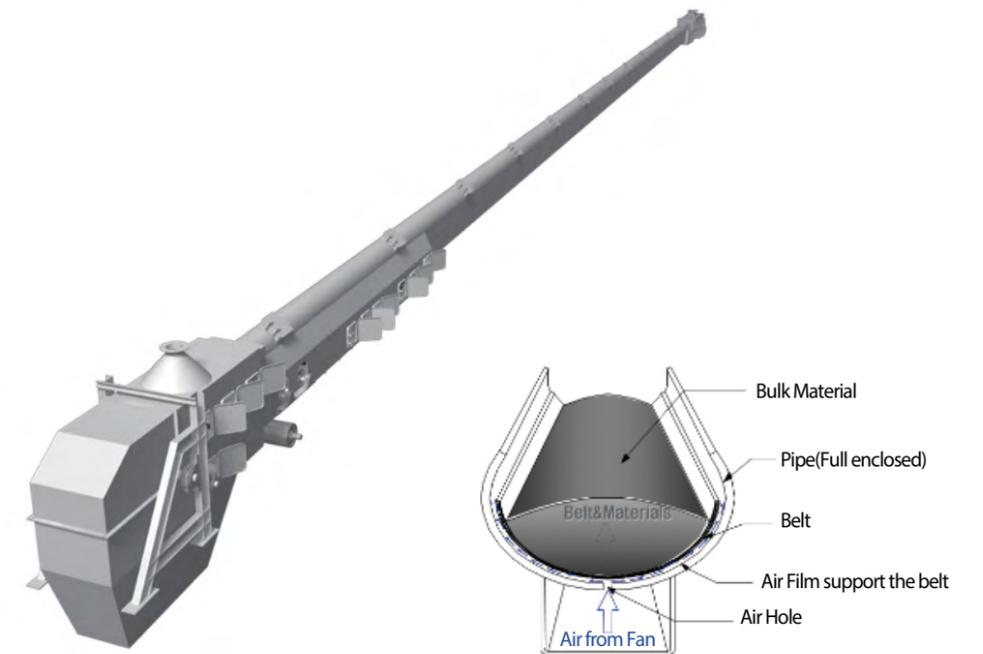


Type	H(mm)	F(mm)
C	90	100
	120	140
	140	140
T	90	110
	110	110
	180	180
	230	300
TC	110	100
	140	140
	180	160
	220	180
	230	230
TCS	240	160
	280	280
	280	240
	360	225

## Air Floating Conveyor Belt

### Features

Air Floating conveyor belt operates without rollers in the midsection, as the materials are carried on a layer of air that is continually created. As a result, the conveyor can be operated in a completely sealed frame, thereby minimizing caking and dust and making operation, maintenance, and repairs easier than for conventional conveyors.



### Main Specifications

- ME AFC FR EP1250 1800X4X6X3
- ME AFC EP1500 1000X3X5X2
- ME AFC EP1250 900X4X5X2
- ME AFC EP630 600X2X4.0X1.5

## Tips for Selecting Conveyor Belt

### Caution

- Please fill out and forward to us the use condition details on the rear cover of the catalog for right belt selection.
- Do not use conveyor belts for transporting bulk or unpacked foodstuff.
- Advance enquiry is invited for use environment prone to cracks (on belt surface) by ozone (seashore, woods, or other places exposed to direct sunray).
- Observe the following instructions in selecting conveyor belts:

	Instructions
Ordinary Belt	Belt surface temperature should be within the range of -30℃~+50℃. This cannot be applied to such specialty belts as heat-resistant, cold-resistant, acid-resistant, alkali-resistant, foodstuff transporting, fire-retardant, human transporting, and bucket elevator conveyor belts.
Heat-Resistant Belt	Belt life span is greatly reduced if use in a sealed space as belt temperature soon becomes the ambient temperature. Do not use belt for transporting materials above allowed temperatures as indicated on the catalog. The belt is not fully fire proof.
Oil-Resistant Belt	Please indicate the intended use conditions when ordering belts as belt life span is greatly affected by adhesion of materials on belt surface, types and amount of oil contained in materials, and temperature of materials.
Fire Resistant Belt	Flame-retardant belts may ignite into flames though they satisfy the flame retardancy standards.
Color Belt	Store belts indoors after covering. Do not leave belts idle on machines for an extended time.

## Tips for Using Conveyor Belt

### Routine Maintenance

### Caution

Belts should be inspected as to the following checkpoints before using them. Appropriate actions should be taken for any abnormal condition. Please contact the dealer if such abnormal conditions persist.

Checkpoints	Corrective actions
(1) Damage or wear of belt body	Repair or replacement
(2) Peeling or damage on joining parts	Repair and rejoining
(3) Poor roller rotation	Repair or replacement
(4) Foreign materials attached to pulley or rollers	Removal of foreign materials
(5) Abnormal take-up action parts	Maintenance
(6) Skirt or cleaner damages	Maintenance
(7) Shute damages	Maintenance
(8) Foreign materials or substances attached	Removal

## Tips for Using Conveyor Belt

### Points to note in operation

### Caution

- Install a shield wall or safety cover.  
Operator or others may be squeezed or drawn between the belt and equipment while under operation.
- Do not enter the area behind the shield wall.
- Do not wear a necktie and check for any loose clothing.  
Human body may be squeezed or drawn into the equipment.
- During operation don't step on the belt. Don't touch the belt with your hand or body.
- Don't throw in any foreign materials like cigarette butts or anything that may catch fire.
- Check power switch, emergency stop device, and escape exit before starting operation.
- Observe maximum load limit to prevent an unusual strain. It may cause the belt to break.
- Ensure transport materials are not spilt over the belt sides.
- Install a detection device on equipment for emergency stop situation.  
Ex) Device to prevent reverse rotation, serpentine action detection device, emergency stop device etc.
- Immediately stop and check the line for any joint breaks or serpentine action or any other maintenance issue.
- Do not enter the space below the belt or take-up part.
- Do not remove cake or debris while the belt is in operation.

### Points to note when stopped

- Turn off the switch and display "Stopped" sign on the switch to prevent a mistaken operation.
- Never step on the belt unless necessary for repair.
- Do not stop the belt with transport materials on it. Fire may result.

### Caution

- Do not turn on the switch for resuming operation until the entire line safety is thoroughly checked.
- Do not step on the belt for repair with cleated shoes. The belt may be damaged.
- Ensure that harmful objects do not fall onto or attach to the belt, including oil, chemical, welding torch flames, and heavy items.

### Points to note when splicing belts

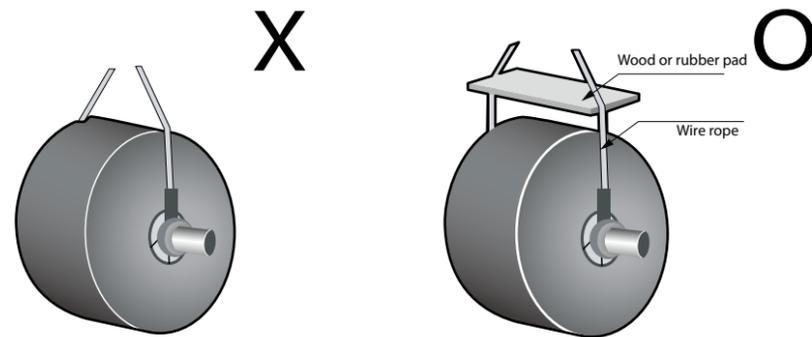
- Belts should be joined on an even surface according the strict procedures to ensure safety.
- Be careful in performing work or handling tools at a high or dangerous line.
- Beware of ignition in the workplace. Fire may result.
- Avoid direct sunlight and remove moisture or dust from the joint when joining belts. Adhesive power may be degraded.
- Ensure sufficient ventilation when rubber bond or solvent is used. They may hurt your health.
- Do not leave rubber bond or solvent or any other accelerants in the workplace. They may cause fire.
- Use only materials allowed for joining belts. Also observe the validity of the joining materials.

## Points to Note in Handling Conveyor Belt

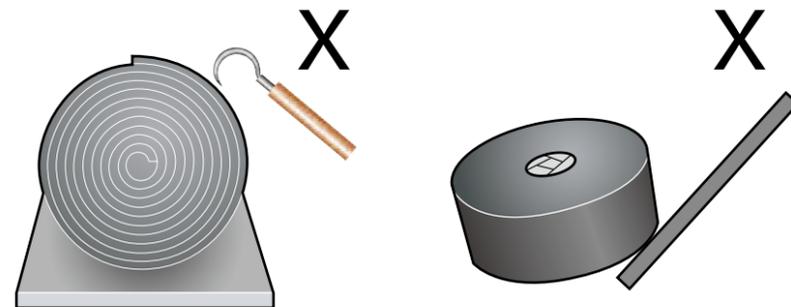
Belts are rolled on wood or steel drum and wrapped with polypropylene. Beware of the following points:

### ⚠ Caution

- The belt rolls should be fixed on the cargo bed of a truck. Pay special care not to damage them with forks of lift trucks.
- Do not roll them. It may hurt people in the area.
- Ensure the belt is not damaged by inserting a shaft in the roll holes as shown in the figure when you lift them by a crane.



- Do not use a hook or lever.



## Tips for Storing Conveyor Belt

When Keeping stand-by belts or used belts, pay attention to the following points to prevent aging or damage from prolonged storage:

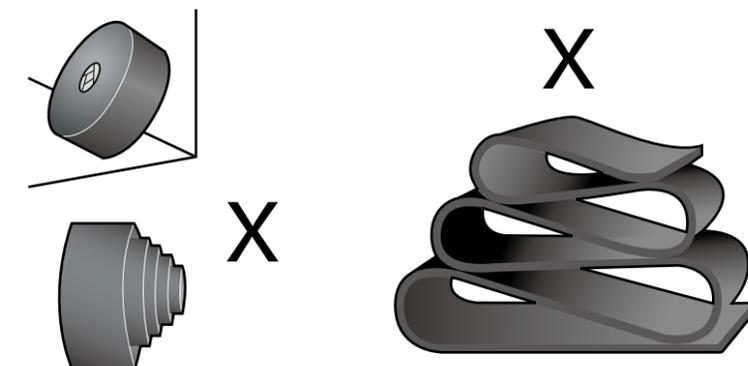
### Acceptable storage conditions

### ⚠ Caution

- Keep the belts away from direct sunlight.
- Keep the belts away from wind, rain, or moisture.
- Keep them in a dry, even place.
- Keep them away from harmful objects like fire, oil, chemical or organic gas.
- Fix belt rolls to prevent them from rolling.



### Inadequate storage conditions



Issues

Causes

Solutions

1. **The belt runs to one side in a particular section of the conveyor.**

- A. Crooked conveyor frame in the affected section.
- B. Problem with the rollers in the affected section.
- C. Cake buildup on the pulleys or rollers in the affected section.
- D. Roller rotation problem on the conveyor.
- E. Problem with the pulleys.

- A. Straighten the frame in the affected section and adjust the vertical and horizontal positions.
- B. Adjust the horizontal and vertical angles to align with the belt's running direction. If the problem persists, tilt the roller in the affected section toward the belt's running direction (less than 2 percent).
- C. Install or repair cake removal or cleaning devices.
- D. Repair or replace rollers and check stud bolts.
- E. Repair pulleys in the affected section.

2. **A particular section of the belt zigzags regardless of the location on the conveyor.**

- A. Straightness problem in the spliced section.
- B. Curvature of the belt in the affected section.

- A. Resplice the belt, if the affected section of the belt comes into contact with the conveyor frame. If the problem is not so severe, observe and take measurements as needed.
- B. Replace a section of or the entire belt if the problem is severe. Install guide rollers.

3. **The entire belt zigzags across the entire conveyor.**

- A. Crooked conveyor frame in the affected section.
- B. Uneven (off-center) loading of the material on the belt.
- C. Tilted carrier or return roller.
- D. Edge wear resulting in exposed carcass.
- E. Troughability problem of the belt.

- A. Make sure the conveyor frame is level and properly supported. Check the entire conveyor frame for straightness.
- B. Redesign the chute so that the load is centered on the belt.
- C. Adjust the horizontal and vertical angles of all rollers.
- D. Repair the damaged section of the edge or replace the entire belt. Address the causes of the damage.
- E. If the problem persists even after the break-in period, replace the belt with one with different specifications.

4. **The top cover rubber is damaged.**

- A. Mismatch between exit velocity of materials and belt speed.
- B. Chute located too high above the belt.
- C. Loading materials stuck between the skirt and belt.
- D. Loading materials stacked on the return side, rubbing against the belt.
- E. Material buildup on rollers or pulleys.
- F. Problems with scraping and/or skirting rubber.
- G. Problems with impact, return, or carrier rollers.

- A. A significant difference between the exit velocity of materials and belt speed will cause the top cover rubber to wear down faster when loading materials onto the belt. Make sure the exit velocity of materials is matched to the belt speed.
- B. Install a feeder belt or bar screen. Lower the angle of the chute. Use a movable bar.
- C. Reduce the distance between impact rollers. Increase the take-up weight.
- D. Adjust the angle of the chute and repair the line.
- E. Check and repair the scraper.
- F. Using an old belt may cause the belt to wear down quickly during operation, therefore replace with skirt rubber.
- G. Perform regular maintenance and repairs on rollers. Replace old rollers.

5. **There is excessive wear on the bottom cover rubber.**

- A. Belt slips off drive pulley.
- B. Rotation problems in rollers.
- C. Wear from loading materials jamming the conveyor.

- A. Review the take-up operation and weight. Install rubber lagging on the drive pulley. Increase the contact angle of the snap pulley.
- B. Perform regular maintenance and repairs on rollers. Replace old rollers.
- C. When materials spill over and get jammed under the tail pulley, check the status of the skirt, impact roller, and/or V-Cleaner.

Issues

Causes

Solutions

6. **The belt carcass is damaged.**

- A. Loading material is too large, causing significant impact.
- B. Loading material trapped between a pulley and the belt.
- C. Material build-up on a pulley disfigured the belt.
- D. Reduced safety factor due to startup overload or significant take-up weight.
- E. Belt is jammed in the carrier roller.
- F. Inadequate transition length between a pulley and the trough carrier.
- G. Rips and tears in the belt from zigzagging and rubbing against the frame.
- H. Bending fatigue caused by small pulley diameter.

- A. Install a feeder belt or bar screen. Perform repairs and maintenance on the impact roller.
- B. Perform repairs and maintenance on the scraper or cleaner.
- C. Perform repairs and maintenance on the scraper or cleaner.
- D. Check the belt specifications and take-up weight.
- E. Adjust the distance between the carrier rollers. Check the total thickness of the belt and number of plies.
- F. Check the trough transition length.
- G. Identify the causes of the zigzagging of the conveyor belt and resolve the issue.
- H. Replace pulleys with ones with a larger diameter and review the belt specifications to make sure they match the pulley diameter.

7. **The edge side of the belt is damaged.**

- A. Edge wear from the belt zigzagging or running to one side.
- B. Tripper issue.

- A. Identify the causes of the zigzagging of the conveyor belt and resolve the issue. Increase the space between the belt and conveyor frame.
- B. Perform regular maintenance and repairs.

8. **The spliced area zigzags on the conveyor belt or the spliced area is damaged.**

- A. Bad finishing.
- B. Bad splicing.
- C. Poor working conditions.
- D. Splicing standards (splicing method, vulcanization time) were not followed.
- E. Belt was misaligned during splicing.
- F. Bending fatigue caused by small pulley diameter.

- A. Attach cover rubber and perform sanding.
- B. Inspect splicing materials and methods. Repair the spliced area or resplice the belt.
- C. Remove dust or materials that create dust before operating the conveyor.
- D. Resplice the belt.
- E. Repair or resplice the belt.
- F. Replace pulleys with ones with a larger diameter and review the belt specifications to make sure they match the pulley diameter.

9. **The take-up touches the ground due to the size of the belt.**

- A. Problem with take-up length.
- B. Belt too elongated.

- A. Ensure suitable take-up length for the belt carcass. Cut off the elongated portion and resplice the belt.
- B. Review the belt's safety factor and take-up weight. Cut off the elongated portion and resplice the belt.

10. **The belt breaks while carrying materials.**

- A. Low safety factor.
- B. Instantaneous overload from loading materials becoming jammed between the belt and a pulley.
- C. Belt damage caused by sharp materials loaded on the belt.

- A. Review the safety factor.
- B. Install a cleaner and perform inspections to remove the cause of the problem.
- C. Redesign the chute unit to dampen the impact.

11. **There is a lengthwise rip in the belt.**

- A. Steel sheets or other sharp objects jammed in equipment, such as a roller or the chute.
- B. Loading of sharp objects.

- A. Do not load sharp objects onto the conveyor belt. Inspect the tears and perform partial repair, partial removal and replacement of the belt, or replacement of the entire belt.
- B. Replace with a rip-protection belt.

12. **Materials spill over because of belt sag between rollers.**

- A. Inadequate take-up weight.
- B. Belt load resulting from a deviation of the belt specifications and thickness from the optimal standards.

- A. Recheck the take-up weight.
- B. Review belt specifications and replace with an optimal belt.

## Relation between Roll Diameter Belting, Belt Length and Belt Thickness

$$D = \sqrt{\frac{4}{\pi} t\ell + d^2}$$

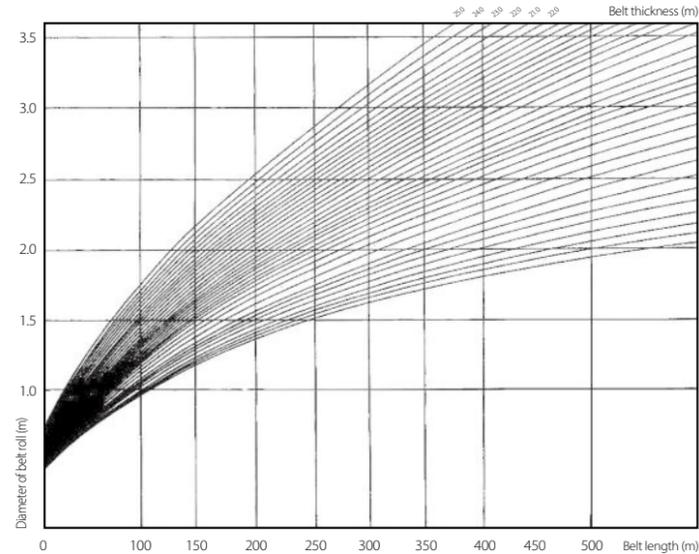
Diameter of belt roll (m)

Box diameter (m)

Belt thickness (m)

Belt length (m)

Belt thickness	Box diameter
6.0 ~ 10.0mm	150mm
10.5 ~ 20.0mm	300mm
20.5 ~ 25.0mm	400mm



$$L = \left(d + \frac{D-d}{2}\right) \pi \cdot N$$

L : Belt length

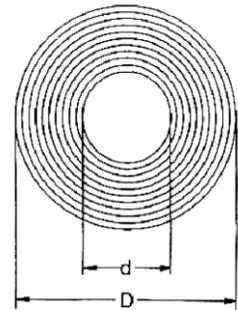
d : Box diameter

D : Diameter of belt roll

N : Number of coils in roll

Ex: D=3M d=0.4M N=60

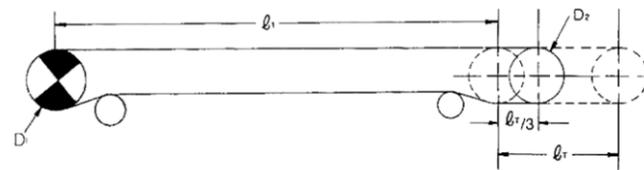
$$L = \left(d + \frac{D-d}{2}\right) \pi \cdot N = \left(0.4 + \frac{3-0.4}{2}\right) 3,1416 \times 60 = 320(\text{m})$$



Formula for Calculating the Length of a Roll of Belting

## Formula for Calculating Belt Length

Screw Take-up



1) When mounted with an endless belt

$$L = 2\ell_1 + \frac{\pi}{2}(D_1 + D_2) + 2(\ell_1/3) + \text{Compensation length}$$

Where:  $\ell_1$  : Conveyor length (m)

$D_1$  : Drive pulley diameter (m°)

$D_2$  : Tail pulley diameter (m°)

$\ell_1$  : Take-up stroke (m)

$\ell_1$  When the measurement is unknown,

fabric belt .....  $\ell_1/3 = 25\text{mm}$

ST belt .....  $\ell_1/3 = 50\text{mm}$

Compensation length:

The following is applied

when the contact angle

between the pulley and belt ( $\theta$ ) is over  $90^\circ$ .

Compensation length per pulley =  $\theta \times \pi \times t$

where  $t$  = conveyor belt thickness (m)

## Formula for Calculating Belt Length

2) Onsite endless conveyor belt system

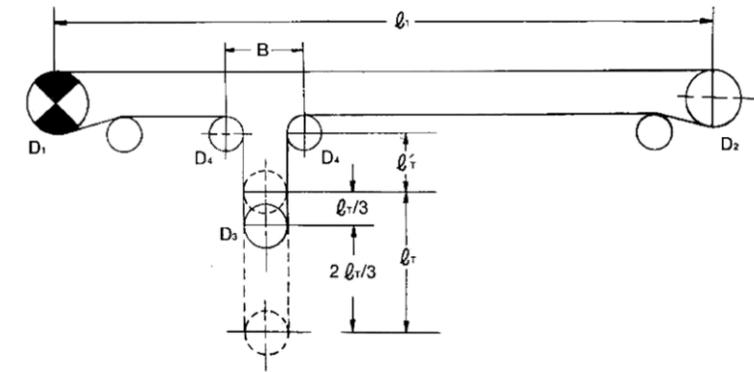
$$L = 2\ell_1 + \frac{\pi}{2}(D_1 + D_2) + 2(\ell_1/3) + \ell_1 \times n + \text{Compensation length}$$

$\ell_1$  : Length of endless belt (m)

$n$  : Number of endless belts

Compensation length for belt sag: a length that includes the mounted belt sag between rollers: 0,3% of belt length

Gravity Take-up



1) Conveyor mounted with an endless belt

$$L = 2\ell_1 + \frac{\pi}{2}(D_1 + D_2 + D_3 + D_4) + 2\ell_1' + 2(\ell_1/3) - B$$

2) Onsite endless conveyor belt system

$$L = 2\ell_1 + \frac{\pi}{2}(D_1 + D_2 + D_3 + D_4) + 2\ell_1' + 2(\ell_1/3) - B + \ell_1 \times n + \text{Compensation length for belt sag}$$

Where:  $D_3$  : Take-up pulley diameter (m°)

$D_4$  : Bend pulley diameter (m°)

$\ell_1'$  : Center-to-center distance between take-up pulley and bend pulley (m)

$B$  : Center-to-center diameter of bend pulleys (m)

Belt Length for Calculation

• For a mounted endless conveyor belt, the belt length is expressed to the nearest 0.01 meters (rounded up).

Ex.) A calculation result of 22.423 meters is expressed as 22.43 meters

• For an onsite endless conveyor belt system, the belt length is expressed to the nearest 0.05 meters (rounded up).

Ex.) A calculation result of 22.423 meters is expressed as 22.5 meters.

## PIW (lb/in-width) Conversion

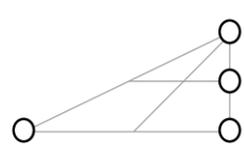
• NN Conveyor Belt (N/mm) = PIW X 2.10

• EP Conveyor Belt (N/mm) = PIW X 1.75

• ST Conveyor Belt (N/mm) = PIW X 1.23

## Data Inquiry Form Of Conveyor Belt

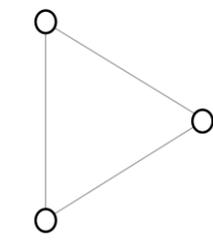
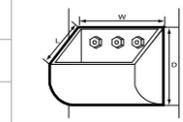
NO. \_\_\_\_\_ Date : \_\_\_\_\_

Company name		Application		
Name NO.		Use conditions		
Belt width(mm) *		Belt length (mm)		
Transport materials	Name *	Take-up specification	Type	
	Shape (mm) *		Space(m) *	
	Specific gravity (t/m <sup>3</sup> )		Weight (kg)	
	Temperature (°C) *		Location * Head, Tail Midpoint, Around Head, Around Tail	
	Attributes		Carrier	
	Moisture Content * Yes No		Roller	1, 2, 3, 4, 5
Transport specifications	Length (m) *	Return	Trough angle(deg.) * 0°, 10°, 20°, 30°, 45°, 50°, 60°	
	Incline (deg.) *		Installed interval(m)	
	Horizontal length (m) *		Roller	1, 2, 3
	Vertical length (m) *		Trough angle(deg.) 0°, 10°, 20°, 30°	
	Incline length (m)	Tripper	Yes, No * Yes No	
	Belt speed (m/min) *		Type	
	Transport volume (t/h) *		Quantity	
			Drive(mm) *	
Drive specification	Type	Pulley diameter	Head(mm)	
	Location		Tail(mm)	
	Pulley surface		Take-up(mm)	
	Belt bending degree (deg.)		Tripper(mm)	
	Motor (kw)		Snap(mm)	
			Head (m)	
Line sketch				
	* Currently used belt	Producer name		
		Specifications		
		Damage status		
Other required information				

\* Marked items are essential.

## Data Inquiry Form Of Bucket Elevator Conveyor Belt

NO. \_\_\_\_\_ Date : \_\_\_\_\_

Company name		Application			
Name NO.		Use conditions			
Belt width(mm) *		Belt length (mm)			
Transport materials	Name *	Belt sketch			
	Shape (mm) *				
	Specific gravity (t/m <sup>3</sup> )				
	Temperature (°C) *				
	Attributes				
	Moisture Content * Yes No				
Belt speed (m/min) *					
Transport volume (t/h) *					
Pulley distance (m)(C to C) *					
Incline degree (deg.) *					
Bucket dimension	Width (W)(mm) *		Loading method	Lift up, Flow in	
	Protrusion(L)(mm)		Pulley diameter	Top pulley (mm) *	
	Depth (D)(mm)			Bottom pulley (mm) *	
	Weight (kg/ea) *		Drive	Type	Head, Tail
	Attached interval (mm) *			Pulley surface	Rubber lagging, No lagging
	Number of attachments (each) *			Belt bending degree (deg.)	
	Size of bolts used (ea) *			Motor output	
	Number of bolts used (ea) *				
	Capacity (kg/ea) *				
	* Currently used belt			Producer name	
	Specifications				
	Damage status				
Other required information					

\* Marked items are essential.

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