

High Tensile Strength Steel Cord belt

■ Features :

Open steel cord-layer adhesive fully penetrates into the wire slot to avoid wire air enhanced corrosion resistance and adhesion of the cables to enhance the dynamic and fatigue resistance extended product life.

Construction



K7 x 7



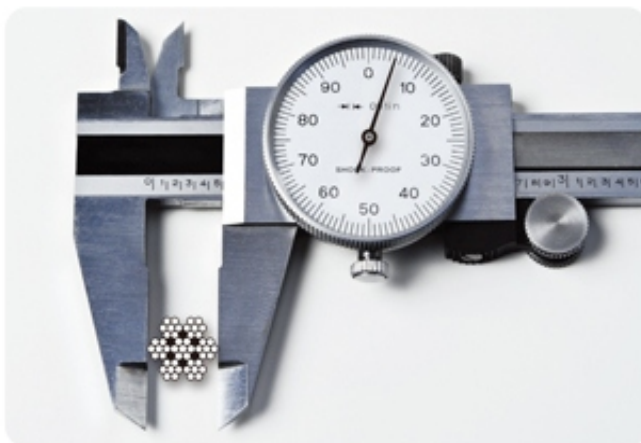
K7 x 19



Z Twist (Left Twist)



S Twist (Right Twist)



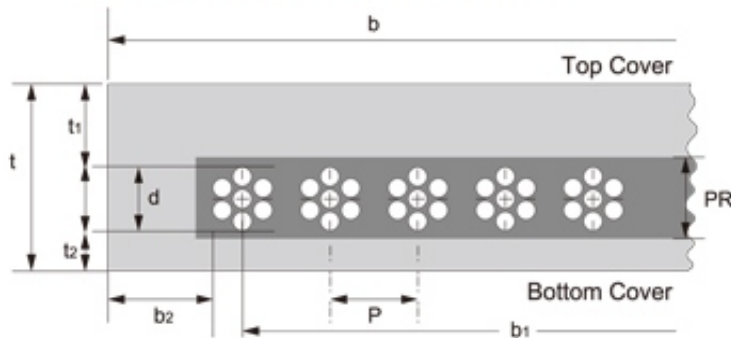
Steel cord diameter measurement method



Good condition in penetrating of inner rubber

Specification of Steel Cord Conveyor Belt

Steel Cord Belt Profile



- d : Steel cord diameter
- P : Distance of steel cord
- PR : Skim rubber
- t : Belt thickness
- b : Belt width
- b1 : Central pitch of steel cord
- b2 : Seal width
- t1 : Top cover
- t2 : Bottom cover

Specification

■ Breaking force (KN/Cord)

$$F_{bs} \geq \frac{K_n \times b}{n \times 1000}$$

- K_n : Belt tensile strength (N/mm)
- b : Belt width (mm)
- n : Number of steel cord

■ Pull-out force (N/mm)

- Before heating : $F_a \geq (15 \times d) + 15$
- After heating : $F_a \geq (15 \times d) + 5$
- d : Actual diameter of steel cord (mm)

■ Seal width > 15mm

■ International cover rubber standard

■ Adhesion

- Adhesion of rubber and layer ≥ 12 N/mm
- After test in 10,000 time dynamic fatigue resistant, the steel wire without pull-out

■ Rubber penetration

- Test sample in different 100Kpa pressure from end to end, pressure different width 60s < 5 kPa

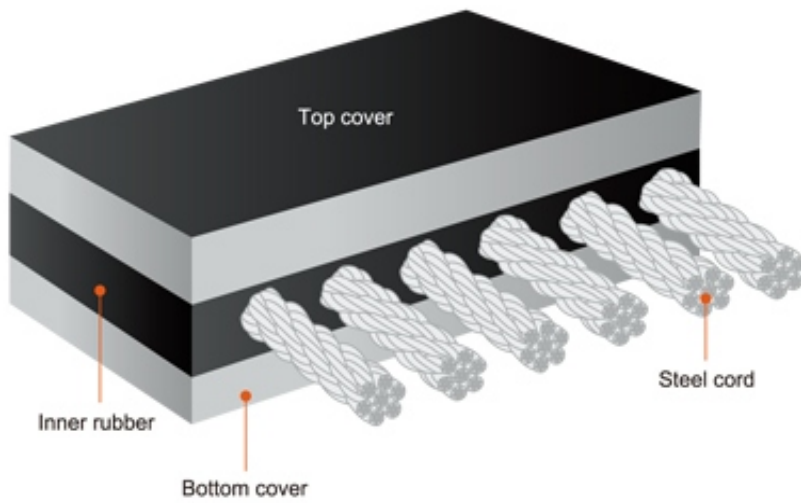
■ Tolerance

- Width tolerance : $\pm 1\%$
- Length tolerance : Total length $\geq 0-2.5\%$
- Thickness even : Range of max. and min. < 10%
- Thickness tolerance : Top / bottom cover within -0.5mm
- Pitch tolerance : ± 1.5 mm

Standard	Rubber grade	Tensile strength kgf/cm ² , min	Breaking elongation %, min	Abrasion mm ³ max	Standard	Rubber grade	Tensile strength N/mm ² , min	Breaking elongation %, min	Abrasion mm ³ max
CNS Taiwan	L	150	350	200	ISO International	H	24	450	120
	S	180	450	200		D	18	400	100
	H	240	450	120		L	15	350	200
Standard	Rubber grade	Tensile strength kgf/cm ² , min	Breaking elongation %, min	Abrasion mm ³ max	Standard	Rubber grade	Tensile strength Mpa, min	Breaking elongation %, min	Abrasion mm ³ max
AS Australia	A	173	400	70	JIS Japan	S	18	450	200
	E	143	300			A	14	400	150
	F	143	300			L	15	350	200
	M	245	450	125		D	18	400	100
	N	173	450	200		H	24	450	120
DIN Germany	S	143	300	250	Standard	Rubber grade	Tensile strength kgf/cm ² , min	Breaking elongation %, min	Abrasion mm ³ max
	W	18	400	90	SANS South Africa	M24	245	400	
	X	25	450	120	M17	173	400		
	Y	20	400	150	Standard	Rubber grade	Tensile strength kgf/cm ² , min	Breaking elongation %, min	Abrasion mm ³ max
Z	15	350	250	RMA America	GRADE1	176	400	200	
					GRADE2	141	400	250	



General Steel Cord Belt



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
Steel cord construction	K7*7								K7*19									
Thickness of top cover mm	5	5	5	6	6	6	6	8	8	8	8	8	8	8	8	8	8.5	9
Thickness of bottom cover mm	5	5	5	5	6	6	6	6	6	6	6	6	8	8	8	8	8.5	9
Belt weight kg/m ²	18	18.5	19.5	23	24.5	25	26	29	30	31	34	35.5	39.5	41	43.5	46	49.5	53.5
Drive pulley	600	600	650	750	850	950	1000	1200	1200	1400	1500	1550	1700	1800	1850	2000	2100	2400
Take-up pulley	500	500	500	550	700	750	800	950	950	1200	1200	1250	1350	1400	1400	1600	1700	1900
Snubs pulley mm	350	350	400	450	500	510	600	700	700	800	900	950	1000	1050	1050	1200	1250	1400
Working tensile KN/M SF=7	72	90	110	140	175	200	225	255	285	320	355	400	450	500	570	645	715	770

ST Conveyor Belt

Grade M **1400 mm** x **ST2500** x **8 mm** x **6 mm** x **200 M**
 Cover grade Belt width Tensile strength Top cover Bottom cover Belt length



Bucket Elevator Belt

- Bucket elevator belt is designed for vertical conveyance, and good for transporting materials with powder and pellet, decreasing transportation distance.
- It is suitable to be used in metallurgy, chemical, building materials, mining, food, cement, feed, crop oil etc.



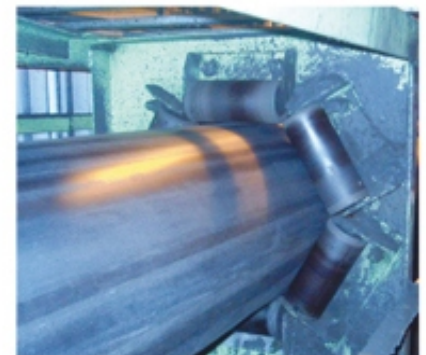
Corrugated Side-Wall Belt

- Excellent design of cross rigidity and skirt part. Corrugate side-wall belt can move material at any angle of inclination with types of cleats and height of the sidewalls. Saving the space and length of conveyor system.
- Save applied to harbors, metallurgy, mining, power stations, foundry, building materials, food, quarry, fertilizer etc.

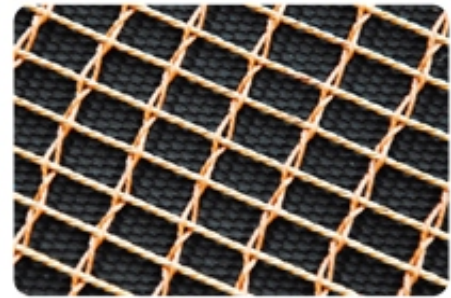
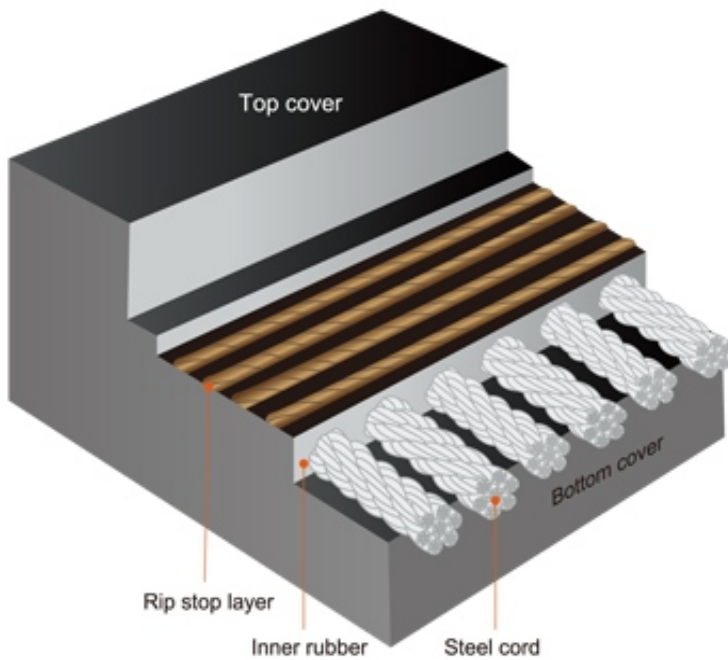


Pipe Belt

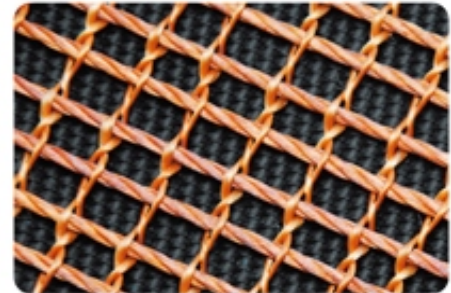
- Pipe belt provides close transportation that can avoid spillage and loss of bulk material to keep environment neat; can prevent foreign matters from mingling with or getting soaked by rain.
- Transportation in a winding path.
- Transportation at angles up to 30°.
- Save space.
- Can be used in various industries including harbors, power stations, metallurgy, building materials, bulk terminals, mining, cement, paper-making etc.



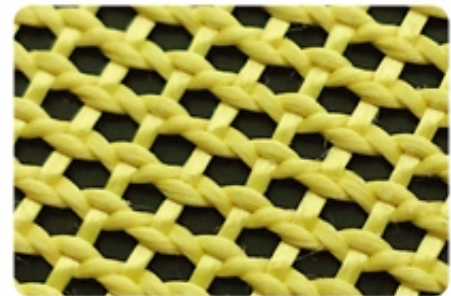
RIP STOP STEEL CORD BELT



Steel mesh (NS)



Nylon (NN)



Kevlar / Aramid (KA)

Construction :

Reinforced steel mesh or nylon on weft.

Rip stop conveyor belt for prevention during transport are influenced by external factors, resulting in conveyor belt caused by puncture or cut of damaged or broken.

Construction : Warp and Weft

Weft reinforcement : Steel mesh
Warp : Nylon



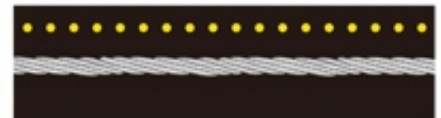
Construction : Warp and Weft

Weft reinforcement : Nylon
Warp : Nylon



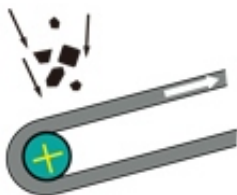
Construction : Warp and Weft

Weft reinforcement : Kevlar (Aramid)
Warp : Kevlar (Aramid)

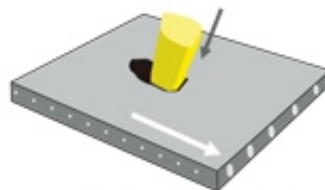


Conveyor belts tear damage

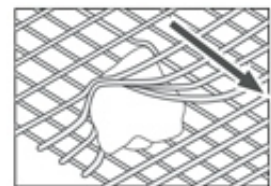
Material impact (continuous)



Foreign parts piercing (non-continuous process)



Warp tear (accident process)



Note : Rip stop steel cord conveyor belt provide comprehensive protection in above three cases.



RIP STOP STEEL CORD BELT

Carcass material

- Active protection of the belt
- Resistance to impact and longitudinal cutting of material damage threat

- Impact resistant
- Wearing resistant
- Tear resistant
- Good troughing index
- Thin thickness
- Strong adhesion
- Fatigue resistant
- High temperature resistant
- Cutting resistant



Single deck—On top cover



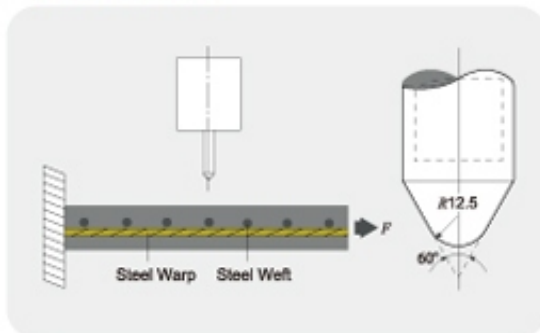
Double deck—On top and bottom cover

■ Specification of Rip stop steel cord belt

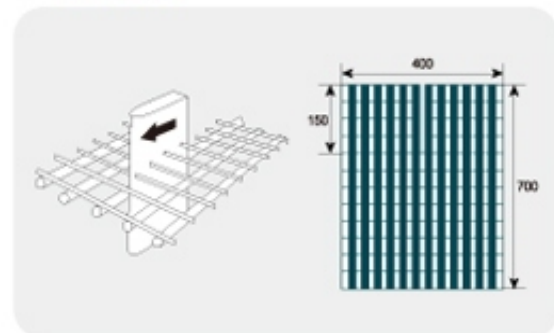
ST value warp/strength (N/mm)	Strength (N/mm)	Weight of mesh (kg/m ²)	Thickness of mesh (mm)	Diameter (mm)	Weft cord		
					Tearing strength (N)	Break Elongation	Pitch (mm)
≤ 1000	125	0.61	1.85	1.23	1050	> 5%	8.2
1250-1600	150	0.73	1.85	1.23	1050	> 5%	6.8
2000-2500	200	0.96	1.99	1.37	1325	> 5%	6.4
3150-3500	250	1.20	1.99	1.37	1325	> 5%	5.1
4000-4500	300	1.32	2.14	1.52	1720	> 5%	5.5
≥ 5000	400	1.71	2.14	1.52	1720	> 5%	4.2
≥ 5000	500	2.22	2.64	2.02	2900	> 5%	5.6
≥ 5000	650	2.81	2.64	2.02	2900	> 5%	4.4

Note : Rip stop steel cord conveyor belt need to consider warp strength. Rip stop steel cord conveyor belt also consider the belt speed, the environment, materials, the thickness of belt cover, width, ply number and other factors. The above specification reference in one single ply (In the higher strength, speed, harsh environmental conditions, the user need to consider in higher than specifications of 650).

■ Impact test



■ Rip test

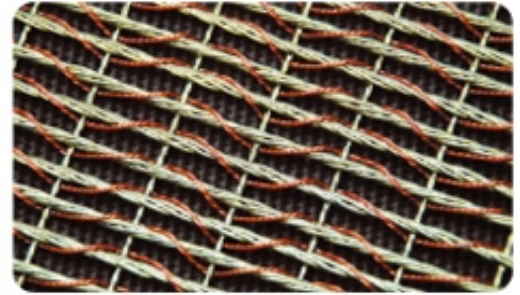
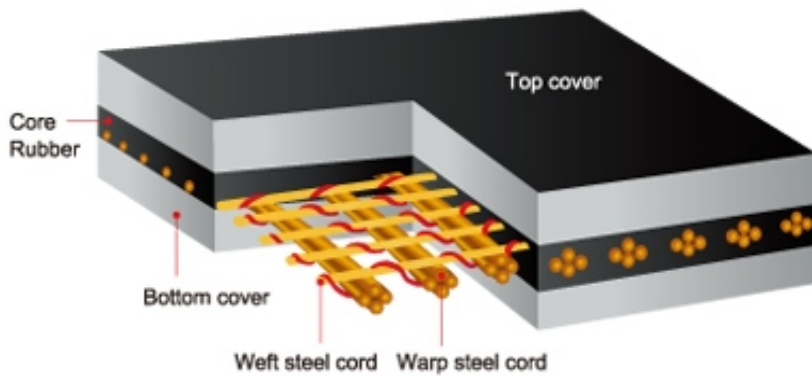


STR Conveyor Belt

Grade M	1400 mm	x	ST2500	+	1NS	x	8 mm	x	6 mm	x	200 M
Rubber grade	Width		Tensile strength		Weft reinforcement layer		Top thickness		Bottom thickness		Length



IW Steel Mesh Conveyor Belt



HYC IW steel mesh conveyor belt is constructed from high quality woven steel cord fabric with steel cord in longitudinal and transversal direction fixed together in 1 ply as carcass and special rubber compound to provide excellent impact and tear resistance, as well as thermal stability.

Constructure of IW steel mesh

Steel weft

The weft is composed of high elongation thin steel wires compared to conventional steel-cord belts. It offers superior impact resistance, tear resistance, and good troughability.

Steel warp

The longitudinal steel cables provide for both a limited elongation and a resistance to the compressive effects of impacts on the belt.

Application

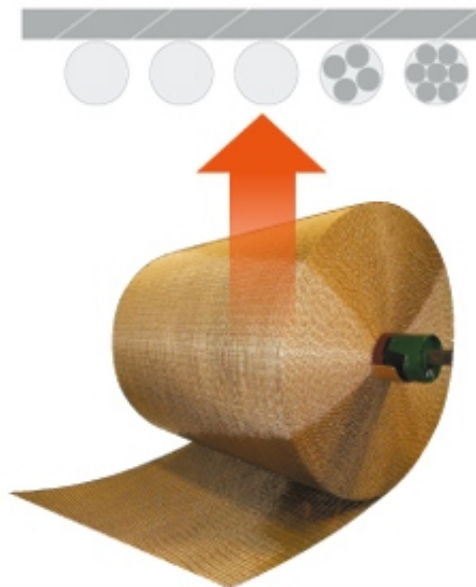
- Requirement for impact resistance :
mining, quarry, harbors.....
- Requirement for rip resistance :
metallurgy, mining, quarry, harbors.....
- Requirement for heat resistance :
metallurgy, cement, chemical.....
- Requirement for flexibility :
small pulley, bucket elevator

Recommended min. pulley diameter :

Diameter(mm)	IW350	IW500	IW630	IW800	IW1000	IW1250	IW1600
Drive pulley	355	355	355	500	500	630	630
Take-up pulley	315	315	315	400	400	500	500
Snub pulley	250	250	250	315	315	400	400

Straight warp and weft

IW steel mesh is built from woven steel cord fabric with steel cord in longitudinal and transversal direction fixed together in 1 ply.

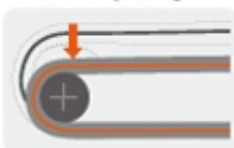


Advantages of steel mesh carcass

Heat resistance



Allowance of small pulleys



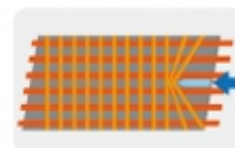
Good troughability



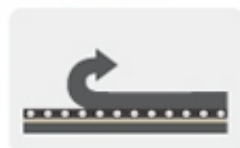
Impact resistance



Rip & tear resistance



Excellent adhesion between covers and carcass



IW Steel Mesh Specification

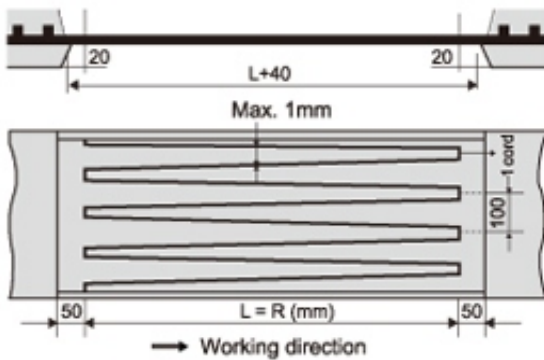
IW Type : General Type

MODEL		IW350	IW500	IW6300	IW800	IW1000	IW1250	IW1400	IW1600
Tensile strength	Warp N/mm	350	500	630	800	1000	1250	1400	1600
	Weft N/mm		90		125		175		
STF conveyor belt	Mass kg/m ²	1.65	2.45	2.95	4.15	5.00	6.35	7.05	7.90
	Thickness mm		3.2		4.5		6.0		
Warp cord	Diameter mm		2.0		2.85		3.9		
	Break strength N		3075		5600		9600		
Weft cord	Diameter mm		1.52		2.10		2.40		
	Break strength N		1720		2900		3775		

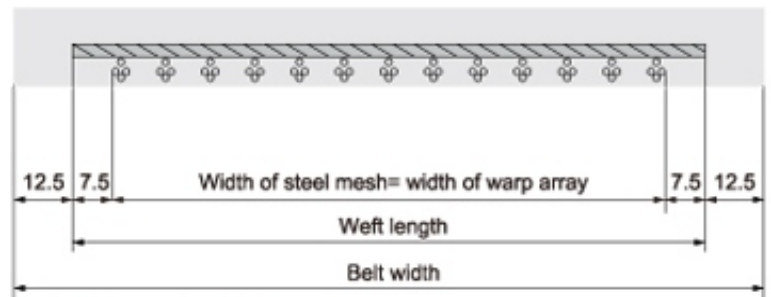
IWR Type : Reinforcement Type

MODEL		IW630R	IW800R	IW1000R	IW1250R	IW1400R	IW1600R	IW1800R	IW2000R
Tensile strength	Warp N/mm	630	800	1000	1250	1400	1600	1800	2000
	Weft N/mm				200				
STF conveyor belt	Mass kg/m ²	3.45	4.35	5.20	6.40	6.90	7.95	9.10	9.80
	Thickness mm	5.0	5.6		6.4		7.2		
Warp cord	Diameter mm	3.0	3.6		4.4		5.2		
	Break strength N	9700	13500		19800		26700		
Weft cord	Diameter mm				2.10				
	Break strength N				2900				

Splice



*Finger splice



Width of steel mesh = belt width - 40mm

Weft length = width of steel mesh + 15mm

STF Conveyor Belt

Grade M	IW1000	1400 mm	x	1P	x	6 mm	x	5 mm	x	200 M
Cover grade	Tensile strength	Belt width		Reinforced weft		Top cover		Bottom cover		Belt length



Flame Resistant for Underground Mining

Property and application :

Our steel cord conveyor belts are distinguished by their extremely high transmission of forces, long lengths and very high load-carrying capacities. Our rubber engineers have develop a wide range of flame-resistant and anti-statics compound, in addition to satisfying underground requirement.

Safety performance :

Item		Standard	
Electrical resistance	The average anti-static in the cover and bottom side	$\leq 3 \times 10^5$	
Drum friction test	Drum surface temperature.	≤ 325	
	Test pieces shall not show not sign of flame.		
Finger Burn Test S = Sec.	With covers	The self-extinguish average time of six samples (S)	≤ 3
		The self-extinguish time of one sample (S)	≤ 10
	Without covers	The self-extinguish average time of six samples (S)	≤ 5
		The self-extinguish time of one sample (S)	≤ 15
Gallery test	Test result confort to (a) or (b)	(a) Each samples undamaged length (mm)	≥ 600
		(b) Undamages length (mm)	≥ 50
		Max. average temperature (°c)	≤ 140
		Damaged length (mm)	≤ 1250

Thickness of flame resistant rubber :

Unit : mm

Designation	ST630	ST800	ST1000	ST1250	ST1600	ST1800	ST2000	ST2500	ST2800
Top cover \geq	5.0	5.0	6.0	6.0	6.0	8.0	8.0	8.0	8.0
Bottom cover \geq	5.0	5.0	6.0	6.0	6.0	8.0	8.0	8.0	8.0
Designation	ST3150	ST3500	ST4000	ST4500	ST5000	ST5400	ST6300	ST7000	ST7500
Top cover \geq	8.0	8.0	8.0	8.0	8.5	9.0	10.0	10.0	10.0
Bottom cover \geq	8.0	8.0	8.0	8.0	8.5	9.0	10.0	10.0	10.0

ST Fire Resistant Conveyor Belt

Grade K 1200 mm x ST1600 x 6 mm x 6 mm x 300 M
 Belt grade Width Tensile Strength Top cover Bottom cover Length



Standard of Flame Resistant

Finger Burn Test

Belt property :

- Tensile strength : $\geq 15\text{MPa}$
- Elongation : $\geq 350\%$
- Ageing test : (70 °C x 168h)
- Tensile strength rate : $\pm 25\%$
- Elongation strength rate : $\pm 25\%$
- Din : $\leq 200\text{mm}^3$

Cord rubber compound penetration :

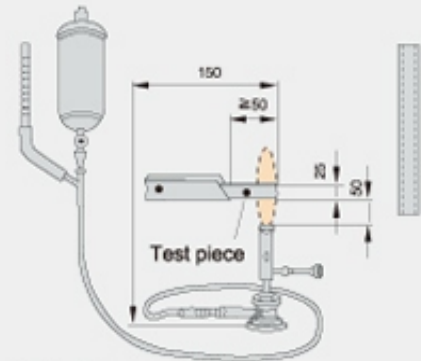
- The average steel belts of adhesion strength does not less than 85% after aging.
- In cover rubber and adhesive layer, the average of adhesion strength does not less than 10 KN/M.
- Containing fabric in flame resistant steel cord belts, the average of adhesion does not less than 8 KN/M in rubber cover and adhesion.

Rubber permeability :

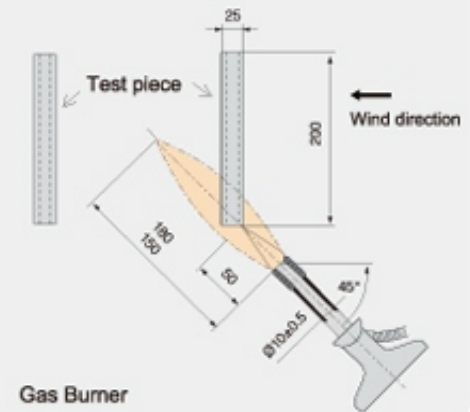
- 100kPa pressure is applied to both edge in the test pieces, with 60 seconds, the difference does no more than 5kPa.

Dyanmic adhesion of steel cord belts :

- 10,000 times cycle test, steel cord belts without any pull-out phenomenon.

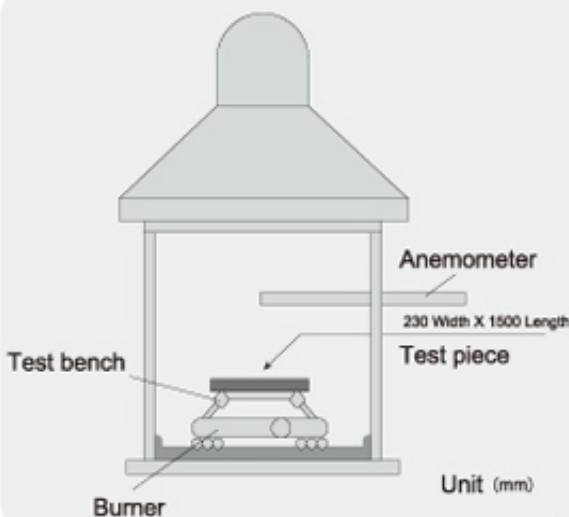


Alcohol Burner

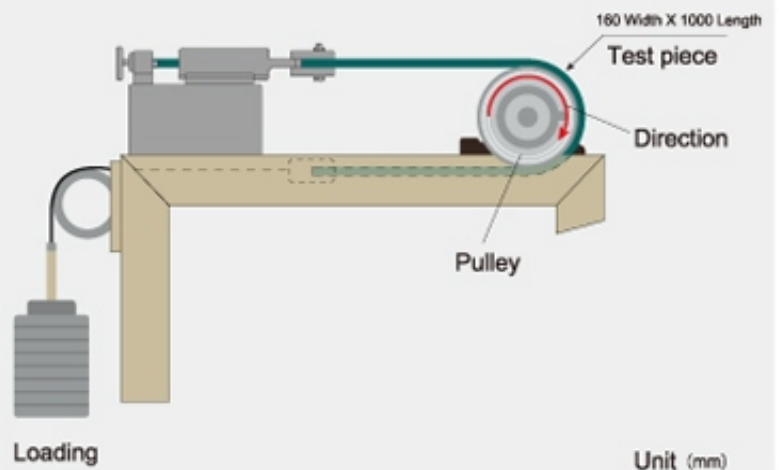


Gas Burner

Gallery Test



Drum Friction



JIS6369 JAPAN Standard

Designation	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
Streight Code	500	630	800	1000	1250	1400	1600	1800	2000	2250	2500	2800	3150	3500	4000	4500	5000	5400
Cord diameter (max.)	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
Cord breaking force(min.)	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
Cord pitch	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
Min. cover rubber	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
Width	Number of cords																	
500	45	45	45	38	38	38	38	—	—	—	—	—	—	—	—	—	—	—
650	60	60	60	50	50	50	50	50	50	50	40	40	40	40	40	37	37	35
750	70	70	70	59	59	59	59	59	59	59	47	47	47	47	47	44	44	41
800	75	75	75	63	63	63	63	63	63	63	50	50	50	50	50	47	47	44
900	85	85	85	71	71	71	71	71	71	71	57	57	57	57	57	53	53	50
1000	95	95	95	79	79	79	79	79	79	79	64	64	64	64	64	59	59	56
1050	98	98	98	82	82	82	82	82	82	82	66	66	66	66	66	62	62	58
1200	113	113	113	94	94	94	94	94	94	94	76	76	76	76	76	71	71	67
1400	133	133	133	111	111	111	111	111	111	111	89	89	89	89	89	83	83	78
1500	141	141	141	118	118	118	118	118	118	118	94	94	94	94	94	89	89	83
1600	151	151	151	126	126	126	126	126	126	126	101	101	101	101	101	95	95	89
1800	171	171	171	143	143	143	143	143	143	143	114	114	114	114	114	107	107	101
2000	191	191	191	159	159	159	159	159	159	159	128	128	128	128	128	120	120	113
2200	211	211	211	176	176	176	176	176	176	176	141	141	141	141	141	132	132	125

1. Adjustment the specification base on environment and design.
2. International standard be required.
3. Number of cords, cords of diameter, cord of strength and cord pitch to be determined in consultation with the manufacturer.



AS 1333 Australian Standard

Designation	Steel cords		Number													
	Cord breaking force(min.)	Cord pitch	600	650	750	800	900	1000	1050	1200	1400	1500	1600	1800	2000	2200
ST-500	7.3	13.8	42	45	52	56	63	70	74	84	99	106	113	128	142	156
ST-560	8.2	13.8	42	45	52	56	63	70	74	84	99	106	113	128	142	156
ST-630	9.3	13.8	42	45	52	56	63	70	74	84	99	106	113	128	142	156
ST-710	10.3	13.8	42	45	52	56	63	70	74	84	99	106	113	128	142	156
ST-800	11.6	13.8	42	45	52	56	63	70	74	84	99	106	113	128	142	156
ST-900	14.7	15.3	37	40	47	50	56	63	66	76	89	96	102	115	128	141
ST-1000	16.5	15.3	37	40	47	50	56	63	66	76	89	96	102	115	128	141
ST-1120	18.5	15.3	37	40	47	50	56	63	66	76	89	96	102	115	128	141
ST-1250	20.6	15.3	37	40	47	50	56	63	66	76	89	96	102	115	128	141
ST-1400	23.1	15.3	37	40	47	50	56	63	66	76	89	96	102	115	128	141
ST-1600	29.1	17.3	33	36	42	45	50	56	59	67	79	85	90	102	113	124
ST-1800	32.7	17.3	33	36	42	45	50	56	59	67	79	85	90	102	113	124
ST-2000	36.4	17.3	33	36	42	45	50	56	59	67	79	85	90	102	113	124
ST-2240	41	17.3	33	36	42	45	50	56	59	67	79	85	90	102	113	124
ST-2500	51.1	19.4	30	32	37	40	45	50	52	60	70	75	81	91	101	111
ST-2800	57.4	19.4	30	32	37	40	45	50	52	60	70	75	81	91	101	111
ST-3150	64.6	19.4	30	32	37	40	45	50	52	60	70	75	81	91	101	111
ST-3550	72.8	19.4	30	32	37	40	45	50	52	60	70	75	81	91	101	111
ST-4000	82	19.4	30	32	37	40	45	50	52	60	70	75	81	91	101	111
ST-4500	92.3	19.4	30	32	37	40	45	50	52	60	70	75	81	91	101	111
ST-5000	102	19.4	---	---	---	---	45	50	52	60	70	75	81	91	101	111
ST-5600	113.5	19.4	---	---	---	---	45	50	52	60	70	75	81	91	101	111
ST-6300	133.0	20	---	---	---	---	43	48	50	58	68	73	78	88	98	108

1. Adjustment the specification base on environment and design.
2. International standard be required.
3. Number of cords, cords of diameter, cord of strength and cord pitch to be determined in consultation with the manufacturer.



EN ISO 15236 Europe, International Standard

Designation		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
Strength Code	N/mm	500	630	800	1000	1250	1400	1600	1800	2000	2250	2500	2800	3150	3500	4000	4500	5000	5400
Steel cord diameter (max.)	mm	3.0	3.0	3.7	4.2	4.9	5.0	5.6	5.6	5.6	5.6	7.2	7.2	8.1	8.6	8.9	9.7	10.9	11.3
Min-Tensile strength	KN/Cord	7.6	7.6	10.3	12.9	18.4	20.6	26.2	25.5	25.5	26.2	39.7	39.7	50.0	55.5	63.5	75.0	90.3	96.0
Cord pitch	mm	14.0	11.0	12.0	12.0	14.0	14.0	15.0	13.5	12.0	11.0	15.0	13.5	15.0	15.0	15.0	16.0	17.0	17.0
Min. cover rubber	mm	4.0	4.0	4.0	4.0	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
Width	Tolerance	Number of cords																	
500	+10/-5	33	42	39	39	34	34	31	---	---	---	---	---	---	---	---	---	---	---
650	+10/-7	44	54	51	51	45	45	41	46	52	56	41	46	41	41	41	39	36	---
800	+10/-8	54	68	64	63	55	55	50	57	64	69	51	57	51	51	51	48	45	45
1000	± 10	68	84	80	80	68	68	63	71	80	86	63	71	63	64	63	60	56	57
1200	± 10	86	110	97	97	82	82	76	85	96	104	76	85	76	76	76	72	67	68
1400	± 12	96	124	114	113	97	97	90	100	112	122	89	99	89	89	89	84	79	79
1600	± 12	111	142	130	130	111	111	103	114	129	140	102	114	102	102	102	96	90	90
1800	± 14	125	160	147	147	125	125	116	129	145	159	116	128	116	116	116	108	102	102
2000	± 14	139	177	164	163	140	139	130	144	162	177	129	143	129	129	129	121	114	114
2200	± 15	153	195	180	180	154	154	143	159	179	195	142	158	142	142	142	133	126	126

1. Adjustment the specification base on environment and design.
2. International standard be required.
3. Number of cords, cords of diameter, cord of strength and cord pitch to be determined in consultation with the manufacturer.



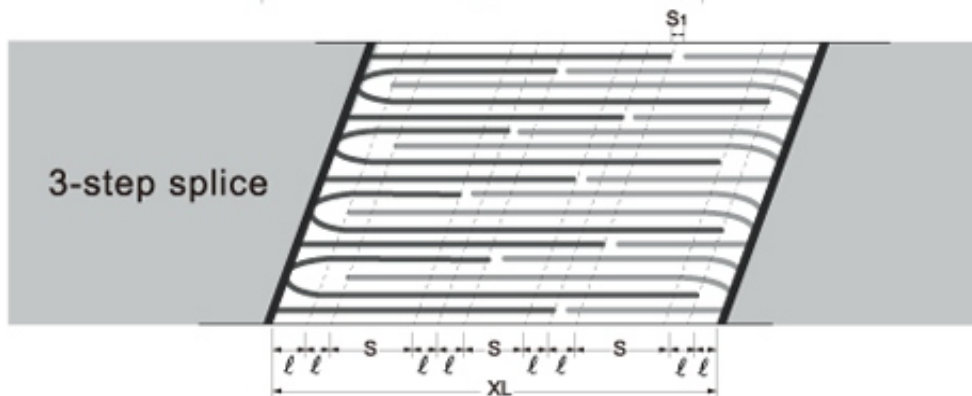
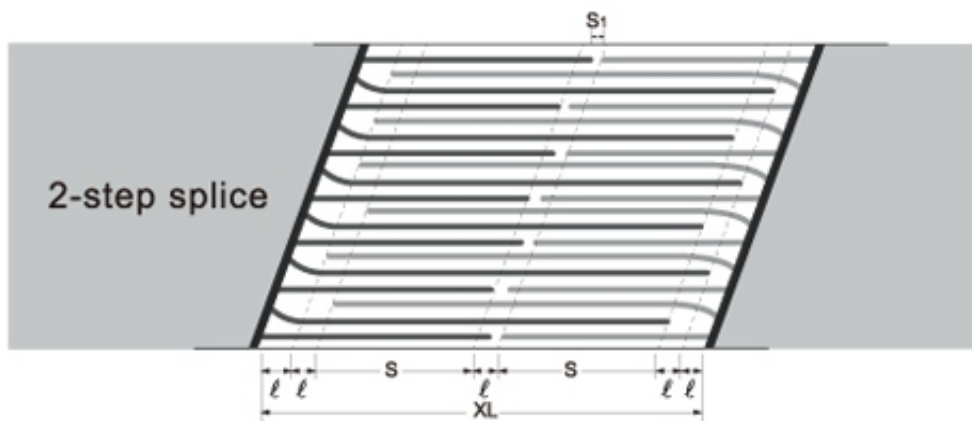
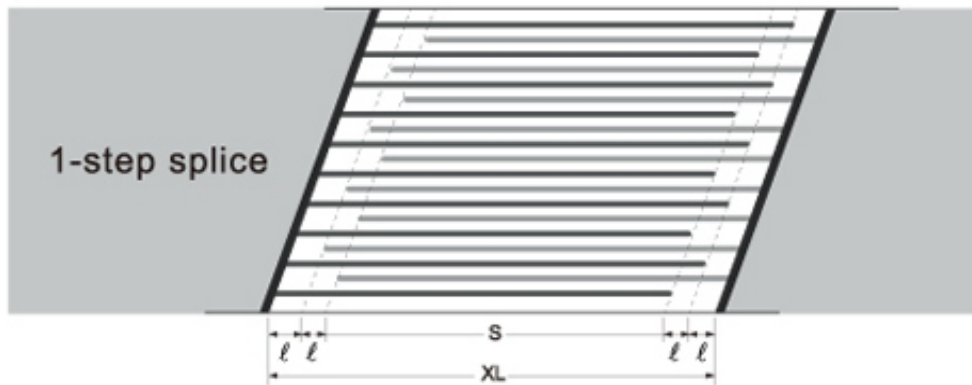
■ ASTM D378 USA Standard

Designation		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	
Strength code	N/mm	500	630	800	1000	1250	1400	1600	1800	2000	2250	2500	2800	3150	3500	4000	4500	5000	5400	
	PIW	2855	3598	4568	5710	7138	7994	9136	10278	11420	12848	14275	15988	17987	19985	22840	25695	28550	30834	
Steel cord diameter (max.)	mm	3.0	3.0	3.7	4.2	4.9	5.0	5.6	5.6	5.6	5.6	7.2	7.2	8.1	8.6	8.9	9.7	10.9	11.3	
Min-Tensile strength	KN/Cord	7.6	7.6	10.3	12.9	18.4	20.6	26.2	25.5	25.5	26.2	39.7	39.7	50.0	55.5	63.5	75.0	90.3	96.0	
Cord pitch	mm	14.0	11.0	12.0	12.0	14.0	14.0	15.0	13.5	12.0	11.0	15.0	13.5	15.0	15.0	15.0	16.0	17.0	17.0	
Min. cover rubber	mm	4.0	4.0	4.0	4.0	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	
Width	Tolerance	Number of cords																		
		33	42	39	39	34	34	31	---	---	---	---	---	---	---	---	---	---	---	---
500	+10/-5	33	42	39	39	34	34	31	---	---	---	---	---	---	---	---	---	---	---	---
650	+10/-7	44	54	51	51	45	45	41	46	52	56	41	46	41	41	41	39	36	---	---
800	+10/-8	54	68	64	63	55	55	50	57	64	69	51	57	51	51	51	48	45	45	---
1000	±10	68	84	80	80	68	68	63	71	80	86	63	71	63	64	63	60	56	57	---
1200	±10	86	110	97	97	82	82	76	85	96	104	76	85	76	76	76	72	67	68	---
1400	±12	96	124	114	113	97	97	90	100	112	122	89	99	89	89	89	84	79	79	---
1600	±12	111	142	130	130	111	111	103	114	129	140	102	114	102	102	102	96	90	90	---
1800	±14	125	160	147	147	125	125	116	129	145	159	116	128	116	116	116	108	102	102	---
2000	±14	139	177	164	163	140	139	130	144	162	177	129	143	129	129	129	121	114	114	---
2200	±15	153	195	180	180	154	154	143	159	179	195	142	158	142	142	142	133	126	126	---

1. Adjustment the specification base on environment and design.
2. International standard be required.
3. Number of cords, cords of diameter, cord of strength and cord pitch to be determined in consultation with the manufacturer.



Steel cord belts splicing



Tensile strength	ST-630	ST-800	ST-1000	ST-1250	ST-1600	ST-2000	ST-2500	ST-3150	ST-4000	ST-4500	ST-5000	ST-5400
Splicing method	1-step				2-step				3-step			
l (mm)	50											
S (mm)	300	350	400	450	500	600	800	950	1050	1200	1350	1400
S_1 (mm)	$\geq 3d$											
Length XL (mm)	500	550	600	650	1250	1450	1850	2150	3550	4000	4450	4600

d =Diameter of Steel Cord (mm)



Belt Diameter and Weight Conversion Table

Diameter :

Length	Belt thickness															
	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
10	0.61	0.63	0.65	0.67	0.69	0.71	0.73	0.75	0.76	0.78	0.79	0.81	0.83	0.84	0.86	0.87
20	0.71	0.75	0.78	0.81	0.84	0.87	0.90	0.92	0.96	0.98	1.01	1.03	1.06	1.08	1.10	1.13
40	0.87	0.93	0.98	1.03	1.08	1.13	1.17	1.21	1.25	1.29	1.33	1.37	1.41	1.44	1.48	1.51
60	1.00	1.08	1.15	1.21	1.27	1.33	1.39	1.44	1.50	1.55	1.59	1.64	1.69	1.73	1.76	1.82
80	1.13	1.21	1.29	1.37	1.44	1.51	1.58	1.64	1.70	1.76	1.82	1.87	1.93	1.98	2.03	2.08
110	1.23	1.33	1.43	1.51	1.59	1.67	1.75	1.82	1.87	1.95	2.02	2.08	2.14	2.20	2.26	2.31
120	1.33	1.44	1.55	1.64	1.73	1.82	1.90	1.98	2.05	2.13	2.20	2.27	2.33	2.40	2.46	2.52
140	1.43	1.55	1.66	1.76	1.86	1.95	2.04	2.13	2.21	2.29	2.37	2.44	2.51	2.58	2.65	2.72
160	1.51	1.64	1.76	1.87	1.98	2.08	2.17	2.27	2.36	2.44	2.52	2.60	2.68	2.75	2.83	2.90
180	1.59	1.73	1.86	1.98	2.09	2.20	2.30	2.40	2.49	2.58	2.66	2.75	2.84	2.92	2.99	3.07
200	1.67	1.82	1.95	2.08	2.20	2.31	2.42	2.52	2.62	2.72	2.81	2.90	2.98	3.07	3.15	3.23
220	1.75	1.90	2.04	2.17	2.30	2.42	2.53	2.64	2.74	2.84	2.94	3.04	3.13	3.21	3.30	3.38
240	1.82	1.98	2.13	2.26	2.40	2.52	2.64	2.75	2.86	2.97	3.07	3.17	3.29	3.35	3.44	3.53
260	1.89	2.05	2.21	2.36	2.49	2.62	2.74	2.86	2.98	3.09	3.19	3.29	3.39	3.49	3.58	3.67
280	1.95	2.13	2.29	2.44	2.58	2.72	2.84	2.97	3.08	3.20	3.31	3.41	3.51	3.62	3.71	3.80
300	2.02	2.20	2.37	2.52	2.67	2.80	2.94	3.07	3.19	3.31	3.42	3.53	3.64	3.74	3.84	3.94
310	2.08	2.27	2.44	2.60	2.75	2.90	3.04	3.17	3.29	3.41	3.53	3.65	3.76	3.86	4.07	
340	2.14	2.33	2.51	2.68	2.84	2.98	3.13	3.26	3.39	3.52	3.64	3.76	3.87	3.98	4.09	
360	2.20	2.40	2.58	2.75	2.92	3.06	3.21	3.35	3.49	3.62	3.74	3.86	3.98	4.09		
380	2.25	2.46	2.65	2.82	2.99	3.15	3.30	3.44	3.58	3.71	3.84	3.97	4.09			
400	2.31	2.52	2.72	2.90	3.07	3.23	3.38	3.53	3.67	3.81	3.94	4.07				
420	2.37	2.52	2.78	2.96	3.14	3.30	3.46	3.62	3.76	3.90	4.04					
440	2.42	2.64	2.84	3.03	3.21	3.38	3.55	3.70	3.85	3.99						
460	2.47	2.70	2.91	3.10	3.29	3.46	3.62	3.78	3.93	4.08						
480	2.52	2.75	2.97	3.17	3.35	3.53	3.70	3.86	4.02							

Belt weight :

$$W = (T \times r + C \frac{W_c}{P}) \times B$$

W : Approximately conveyor belts weight

T : Belt thickness (Top cover thickness + Bottom cover thickness+ Steel cords diameter)

W_c : Steel cord weight

r : Cover rubber gravity

P : Cord pitch

C : Factor

B : Width

