Company Profile

Company Name	Yoshino Rubber Industrial Co.,LTD.
Establishment	May 29, 1963
Capital Stock	30 million yen
Company director	Chairman and Representative Director Toru Itoh President and Representative Director Yoshihide Itoh Managing Director Yaeko Matsuda
Correspondent Banks	Mizuho Bank, Sumitomo Mitsui Bank, Osaka City Shinkin Bank, Kyoto Bank, Shoko Chukin Bank, Japan Finance Corporation
Construction License Number	Osaka Prefectural Governor's License (Special) No.74728
Employee	120

Head office

Head office second building

Business items

Conveyor belt

- General belt
- Special belt(belt with a cleat)
- S-CON
- NIMAIME-KUN
- SUPER-CONVEYOR

Conveyor System

- Design and production for the conveyor system
- Maintenance work

Parts of conveyor

- Ecoron Roller
- Conveyor Pulley Roller
- Skirt rubber and other processed rubber sheet products
- Belt Cleaners
- Various liner materials

Other products

- Rubber sheet, Processed belt products
- Super wide sheet
- Waterproof sheet for civil engineering
- Hoses and other rubber and plastic products

History

May. 1957	Founded Yoshino Rubber Industries.
May. 1963	Established "Yoshino Rubber Industrial Co., LTD." with a capital of 1 million yen. Relocated our factory office to the current location.
May. 1974	Mr.Toru Itoh was appointed president.
Apr. 1975	Increased capital to 10 million yen. Developed new product "S-CON".
Feb. 1984	Moved the factory to the current location of Tamba Sasayama City. Opened Sasayama Sales Office.
May. 1987	Osaka Prefecture Governor Permit (General-62) No. 74728 acquired for Mechanical equipment installation work.
Aug. 1987	Developed new product "Supercon". Completed Green Hall (Training building).
Mar. 1990	Established a new training retreat in Nishi-Maizuru.
Sep. 1990	Completed Log-style guest house "Yoshino Century Salon".
Mar. 1992	Established Hioki Dormitory in Tamba Sasayama.
Oct. 1992	Constructed new headquarters building for 30th anniversary.
Nov. 1992	Received Osaka Governor's Award for contribution to industrial promotion and development.
Mar. 1994	Opened Development Center at Sasayama factory.
Mar. 1996	Opened Aino Dormitory in Sanda City.
May. 1996	Developed vertical conveyor system "NIMAIME-KUN".
Apr. 2000	Sasayama Plant acquired ISO9002 certification. Held a presentation tour of completion of a large-sized NIMAIME-KUN model machine. President Toru Itoh received the Osaka Governor's Award as a person for the new technology development.
Oct. 2003	Opened Tokyo Sales office.
Oct. 2004	Completed Head office second building.
Jun. 2005	Completed multi-purpose sports ground.
Feb. 2006	Started sales of resin conveyor roller "ECORON ROLLER™".
Oct. 2006	Opened Nagoya Sales Office
Jan. 2008	Opened Kyushu Sales Office.
Jun. 2009	Expanded acquisition of IS09001 for all divisions throughout the company.
Feb. 2011	Opened new factory, No.2 Plant West Japan Belt Center, in Tamba Sasayama, (History Museum attached).
Jun. 2012	Mr. Toru Itoh was appointed Chairman. Mr. Yoshihide Itoh was appointed President.
Aug. 2012	Constructed the conveyors of waste treatment for the big earthquake in East Japan "Higashinihon daishinnsai".
Nov. 2015	Started the sales of wide width sheets in the field of civil engineering and waterproofing. (First achievement in the field of civil engineering and impervious membrane).
Sep. 2017	Entered the rubber dam business by using ultra-wide sheet.
Feb. 2018	Capital increased to 30 million yen.
Apr. 2018	Osaka Prefecture Governor Permit (Special-30) No.74728 (Machinery and equipment installation work, civil engineering work, etc.) acquired.
Sep. 2018	Completed the Taiwan Cooperation Factory Friendship Memorial Monument at Sasayama Factory.
May. 2019	Renamed "Sasayama Factory" to "Tamba Sasayama Factory".
Jun. 2019	Renewed "NIMAIME-KUN®" demonstration machine at Tamba Sasayama Factory.

YOSHINO RUBBER INDUSTRIAL Co.,Ltd

Head office	4-26-14, Yoshino, Fukushima-ku, Osaka 553-0006, Japan TEL. +81 6 (6461) 5751 FAX. +81 6 (6465) 0708
Tokyo Sales Office	3-6-40-201, Roku-cho, Adachi-ku, Tokyo 121-0073, Japan TEL. +81 3 (3883) 7159 FAX. +81 3 (3883) 7259
Nagoya Sales Office	2-5-17, Fushimi, Tomikishima-cho, Tokai, Aichi 476-0012, Japan TEL. +81 52 (602) 0090 FAX. +81 52 (602) 0091
Hirosima Sales Office	1-1-1-703, Kasumi-cho, Fukuyama, Hiroshima 720-0812, Japan TEL. +81 84 (916) 4011 FAX. +81 84 (916) 4012
Kyushu Sales Office	1-2-39-804, Asano, Kokurakita-ku, Kitakyushu-shi, Fukuoka 802-0001, Japan TEL. +81 93 (551) 0775 FAX. +81 93 (551) 0776
Tamba Sasayama Factory	706 Tonomachi, Tamba Sasayama, Hyogo 669-2434, Japan TEL. +81 79 (552) 3981 FAX. +81 79 (552) 3321

Web Site Information

Our website, which continues to take on the challenge of "from conveyor belts to plants," strives to enhance the information needed by our customers. We provide useful information for our customers on a daily basis, such as "Case Studies," "Conveyor Belt Know-How Information," and the "Yoshino Rubber CH" video distribution service.

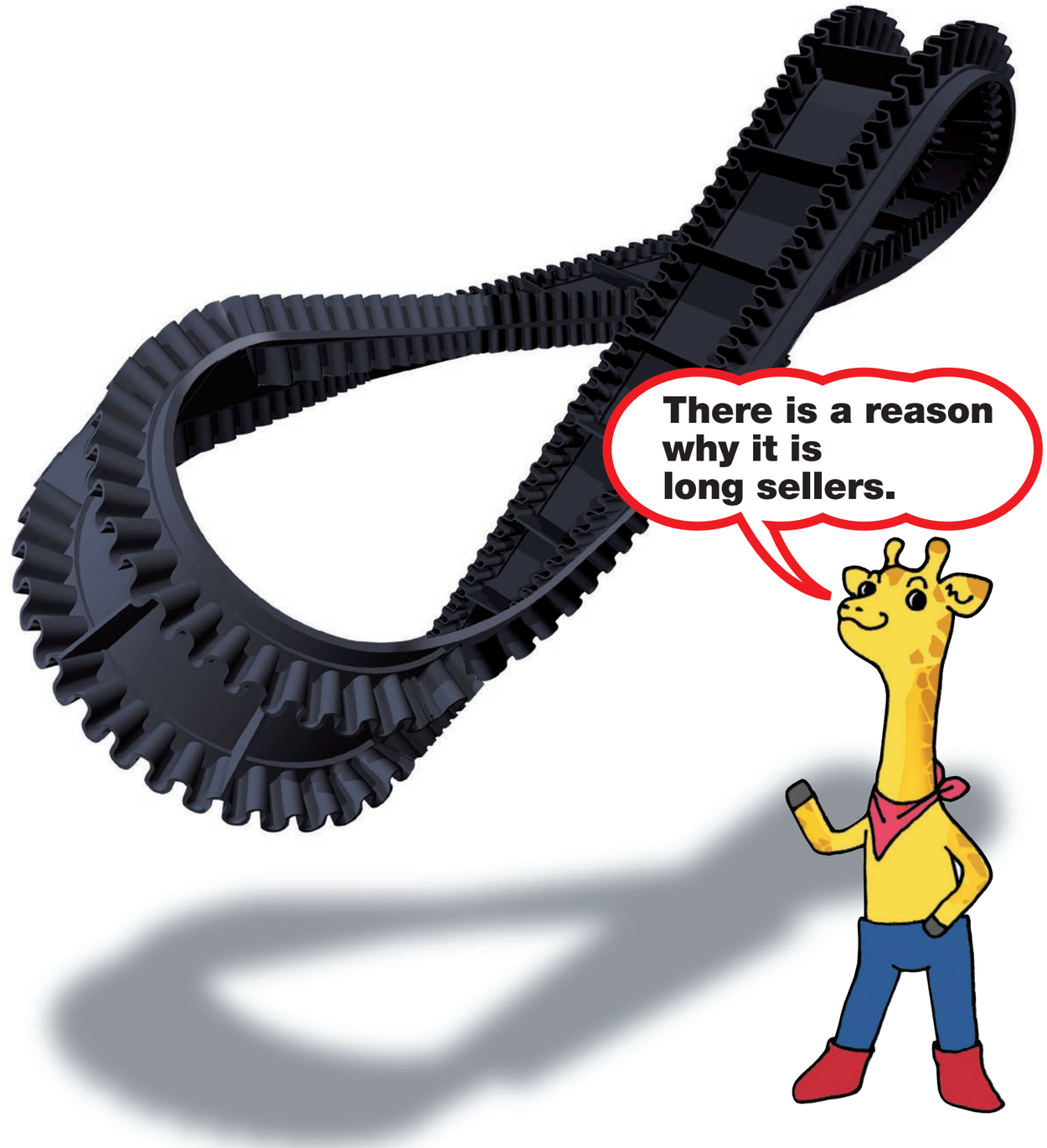
https://www.yoshino-rubber.com/english/

Yoshino

S CONVEYOR

STEEP SLOPE CONVEYOR belt

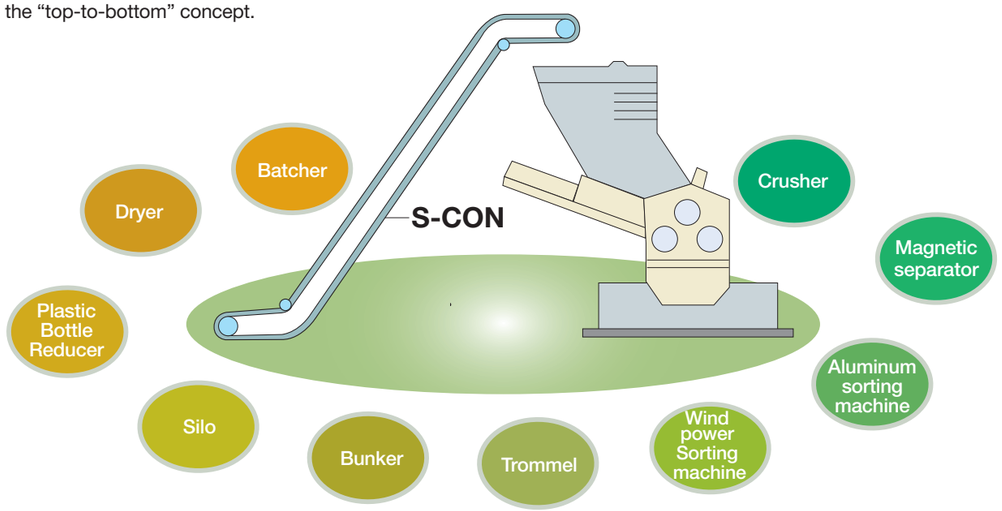
STEEP SLOPE CONVEYOR



S CONVEYOR BELT

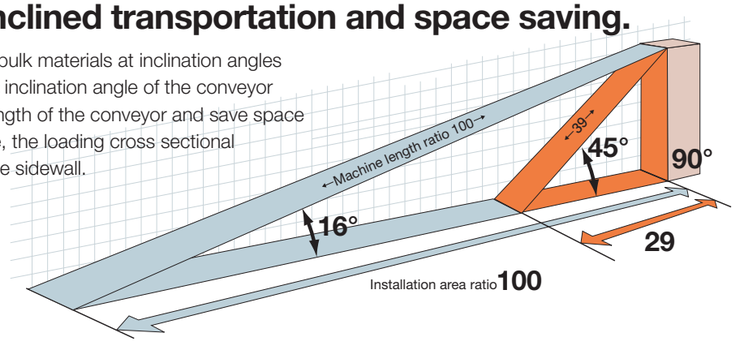
improves conveying efficiency in diverse production and processing lines.

The most efficient process in various conveyor lines is the "top-to-bottom" flow. For example, if "raw materials" in a manufacturing or processing line or "waste" in a waste treatment and sorting line can be conveyed to the highest point in a building at a stroke, wasteful conveying can be eliminated in subsequent processes. The S-CON steeply inclined conveyor, which can be installed to take advantage of limited space, is used in a wide variety of lines as a conveying system that realizes the “top-to-bottom” concept.



Efficient, steeply inclined transportation and space saving.

S-CON is optimized for conveying bulk materials at inclination angles from 45° to 90°. The increase in the inclination angle of the conveyor makes it possible to shorten the length of the conveyor and save space in the installation area. Furthermore, the loading cross sectional area can be increased by raising the sidewall.



S-CON installation cases

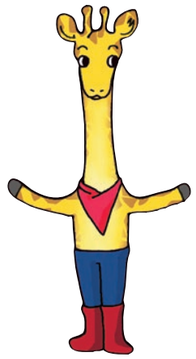

Limestone conveying


Wood chip conveying


Waste plastic conveying


Crushed stone conveying

STEEP SLOPE CONVEYOR belt
SCONVEYOR
STEEP SLOPE CONVEYOR



Propose and build a system for S-CON

We propose the S-con not only for the conveyor belt, but also as the system.

1 Head pulley
The head pulley drives the conveyor belt by means of a reduction gear (drive motor).

2 Tail pulley
Belt tension is adjusted by the take-up unit built into the tail pulley.

3 Disc pulley
This pulley supports the free zone for angular belt variation.

4 Carrier roller
Rollers installed on the carrier side (conveyor side) of the belt conveyor.

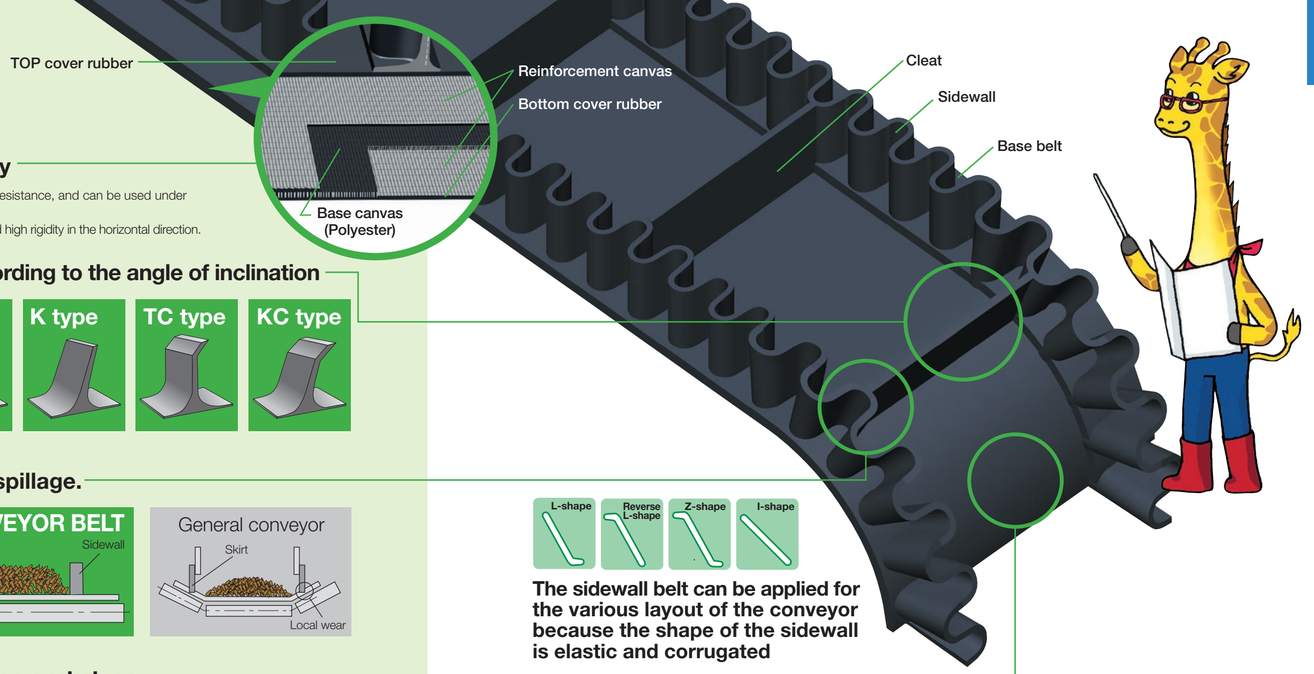
5 Return roller
These rollers are installed on the return side of the belt conveyor (conveyed side). There are two types: a through roller type that receives the head of the sidewall wave pier (flange) and an end roller type that receives the head of the sidewall wave pier (flange) at the belt free zone.

6 Beater cleaner
Vibration is applied to the belt to drop conveyed materials adhering to the belt. In principle, a driven type is used when the belt speed is 60 m/min or higher, and a driven type is used when the belt speed is less than 60 m/min.

7 V-shape scraper
This is installed in front of the tail pulley on the back side of the tail section belt to prevent foreign objects from entering into the tail pulley.

8 Guide rollers (Side rollers)
This roller prevents the conveyor belt from meandering or leaning over by pressing against it at the belt edge.

S CONVEYOR belt
STEEL SLOPE CONVEYOR



Unique belt construction for durability

It has abrasion resistance, weather resistance, oil resistance, and heat resistance, and can be used under severe conveyance conditions.
The unique structure provides sufficient flexibility in the vertical direction and high rigidity in the horizontal direction.

Horizontal cleats can be selected according to the angle of inclination

The "T" and "K" types are available as standard types, and the "TC" and "KC" types are available as special types. Select the "T" type for inclination angles of less than 45° or the "K" type for inclination angles of 45° or more. The TC and KC types are suitable for large-volume conveying (consult us for details).

*If the height of the Cleat is 90 mm or more, the structure is reinforced with reinforced canvas.

No need for a skirt to prevent cargo spillage.

Because the side wall and the belt itself are of one piece, skirt boards are not required as in the case of ordinary conveyors. This eliminates localized belt wear caused by skirt boards.

It can carry items of different shapes and sizes.

The S-CON is designed to carry large, bulky waste materials on its cleat. Of course, S-CON can also handle dry granular materials such as silica sand, gravel, and raw salt; moist materials such as ready-mixed concrete, powdered coal, and wood chips; and materials of various shapes and properties such as ore, coke, and gypsum. The strength of the belt is designed for each customer in consideration of the weight and size of the material to be conveyed.

Wide choice and functionality...

that's why it's a long-seller.

The sidewall belt can be applied for the various layout of the conveyor because the shape of the sidewall is elastic and corrugated

The base belt of the S-CON has high lateral rigidity, allowing horizontal conveyance to inclined conveyance, and then inclined conveyance to horizontal conveyance, based on the conveyor layout. In addition, the angle can be changed with a small curvature, enabling a variety of layouts to suit the installation site.

● Example of belt indication

315N/mm(kgf/cm) 600×(2+2)P×4.0×2.5

1 Belt strength
5 Belt width (mm)
2 (Core+Reinforcement) Number of piles canvas
3 Top cover thickness (mm)
4 Bottom cover thickness (mm)

Specifications of the base belt

Reference: N/mm=1.02kgf/cm

Core	1 Belt strength N/mm (kgf/cm)	160	250	315	400	500	630	800	1000
	2 (Core+Reinforcement) P Number of piles canvas	(2+2) P	(2+2) P	(2+2) P	(2+2) P	(3+2) P	(3+2) P	(4+2) P	(5+3) P
Type of cover rubber	Cover rubber quality	Abrasion resistant, ultra abrasion resistant, oil resistant, heat resistant, flame retardant, flame retardant heavy oil resistant							
	Cover rubber thickness (3 top×4 bottom)	4.0×2.5	4.0×2.5	4.0×2.5	4.0×2.5	4.5×4.0	4.5×4.0	4.5×4.0	5.5×4.0
Belt width 5	300mm	●	●	●					
	350mm	●	●	●					
	400mm	●	●	●					
	450mm	●	●	●					
	500mm	●	●	●	●				
	600mm	●	●	●	●	●			
	650mm	●	●	●	●	●			
	700mm	●	●	●	●	●			
	750mm	●	●	●	●	●	●		
	800mm		●	●	●	●	●		
	900mm		●	●	●	●	●	●	●
	1,000mm			●	●	●	●	●	●
	1,050mm			●	●	●	●	●	●
	1,200mm				●	●	●	●	●
	1,350mm					●	●	●	●
	1,400mm						●	●	●
	1,500mm							●	●
	1,600mm							●	●
Reference data	Total belt thickness	9				13		14	16
	Unit weight	11				16		18	20

*Please refer to the table above for standard base belt sizes.
*When selecting a base belt, please consult us if the conditions of use (transport volume, lift, inclination angle) are heavy loads or if the specifications are other than the standard specifications shown in the table above.

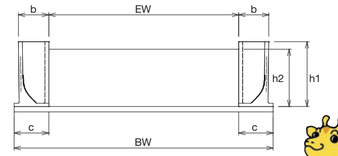
TECHNICAL DATA

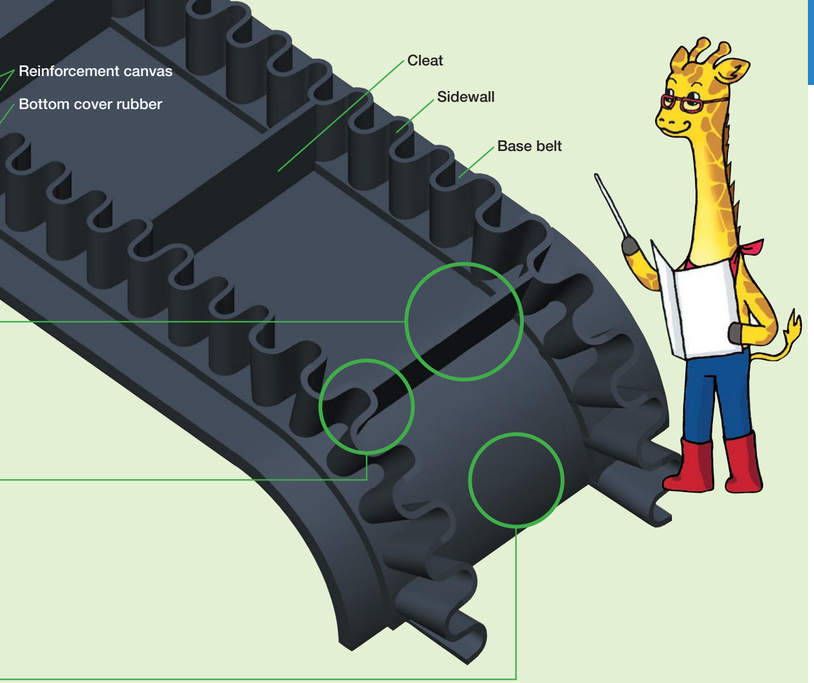
I-shape

No free zone (used for I-line shape with no transformation)

Belt width	Effective Width	Flange heigh	Flange pitch	Flange upper width	Flange foot width	Cleat height
BW	EW	h1	p1	b	c	h2
400	310	60	50	50	45	55
	300	80	50	55	50	75
	280	100	50	55	60	90
	300	120	45	50	50	110
	250	135	70	80	75	125
450	360	60	50	50	45	55
	350	80	50	55	50	75
	330	100	50	55	60	90
	350	120	45	50	50	110
	300	135	70	80	75	125
500	410	60	50	50	45	55
	400	80	50	55	50	75
	380	100	50	55	60	90
	400	120	45	50	50	110
	350	135	70	80	75	125
600	500	80	50	55	50	75
	480	100	50	55	60	90
	500	120	45	50	50	110
	450	135	70	80	75	125
	440	150	65	70	80	140
	440	160	65	70	80	140
	440	200	65	70	80	180
750	630	100	50	55	60	90
	650	120	45	50	50	110
	600	135	70	80	75	125
	590	150	65	70	80	140
	590	160	65	70	80	140
	590	200	65	70	80	180
900	800	120	45	50	50	110
	750	135	70	80	75	125
	740	150	65	70	80	140
	740	160	65	70	80	140
	740	200	65	70	80	180
1050	950	120	45	50	50	110
	890	150	65	70	80	140
	890	160	65	70	80	140
	890	200	65	70	80	180
	870	250	75	80	90	230
1200	1040	150	65	70	80	140
	1040	160	65	70	80	140
	1040	200	65	70	80	180
	1020	250	75	80	90	230
	1010	300	75	80	95	280
1400	1240	150	65	70	80	140
	1240	160	65	70	80	140
	1240	200	65	70	80	180
	1220	250	75	80	90	230
	1210	300	75	80	95	280
1600	1440	150	65	70	80	140
	1440	160	65	70	80	140
	1440	200	65	70	80	180
	1420	250	75	80	90	230
	1410	300	75	80	95	280

Belt width	Effective Width	Flange heigh	Flange pitch	Flange upper width	Flange foot width	Cleat height
BW	EW	h1	p1	b	c	h2
300	210	60	50	50	45	55
	200	80	50	55	50	75
350	260	60	50	50	45	55
	250	80	50	55	50	75
	230	100	50	55	60	90
550	460	60	50	50	45	55
	450	80	50	55	50	75
	430	100	50	55	60	90
	450	120	45	50	50	110
	400	135	70	80	75	125
650	530	100	50	55	60	90
	550	120	45	50	50	110
	500	135	70	80	75	125
	490	150	65	70	80	140
	490	160	65	70	80	140
	490	200	65	70	80	180
700	580	100	50	55	60	90
	600	120	45	50	50	110
	550	135	70	80	75	125
	540	150	65	70	80	140
	540	160	65	70	80	140
	540	200	65	70	80	180
800	680	100	50	55	60	90
	700	120	45	50	50	110
	650	135	70	80	75	125
	640	150	65	70	80	140
	640	160	65	70	80	140
	640	200	65	70	80	180
1000	900	120	45	50	50	110
	840	150	65	70	80	140
	840	160	65	70	80	140
	840	200	65	70	80	180
	820	250	75	80	90	230
1350	1190	150	65	70	80	140
	1190	160	65	70	80	140
	1190	200	65	70	80	180
	1170	250	75	80	90	230
	1160	300	75	80	95	280





● Example of belt indication

315 N/mm (kgf/cm) 600×(2+2)P×4.0×2.5

- 315 N/mm (kgf/cm): ❶ Belt strength
- 600: ❺ Belt width (mm)
- (2+2)P: ❷ (Core+Reinforcement) Number of piles canvas
- 4.0: ❸ Top cover thickness (mm)
- 2.5: ❹ Bottom cover thickness (mm)

Specifications of the base belt

Reference: N/mm=1.02kgf/cm

Core	❶ Belt strength N/mm (kgf/cm)	160	250	315	400	500	630	800	1000
	❷ (Core+Reinforcement) P Number of piles canvas	(2+2) P	(2+2) P	(2+2) P	(2+2) P	(3+2) P	(3+2) P	(4+2) P	(5+3) P
Type of cover rubber	Cover rubber quality	Abrasion resistant, ultra abrasion resistant, oil resistant, heat resistant, flame retardant, flame retardant heavy oil resistant							
	Cover rubber thickness (❸ top×❹ bottom)	4.0×2.5	4.0×2.5	4.0×2.5	4.0×2.5	4.5×4.0	4.5×4.0	4.5×4.0	5.5×4.0
Belt width ❺	300mm	●	●	●					
	350mm	●	●	●					
	400mm	●	●	●					
	450mm	●	●	●					
	500mm	●	●	●	●				
	600mm	●	●	●	●	●			
	650mm	●	●	●	●	●			
	700mm	●	●	●	●	●			
	750mm	●	●	●	●	●	●		
	800mm		●	●	●	●	●		
	900mm		●	●	●	●	●	●	●
	1,000mm			●	●	●	●	●	●
	1,050mm			●	●	●	●	●	●
	1,200mm				●	●	●	●	●
	1,350mm					●	●	●	●
	1,400mm						●	●	●
	1,500mm							●	●
	1,600mm							●	●
Reference data	Total belt thickness	9				13		14	16
	Unit weight	11				16		18	20

*Please refer to the table above for standard base belt sizes.
*When selecting a base belt, please consult us if the conditions of use (transport volume, lift, inclination angle) are heavy loads or if the specifications are other than the standard specifications shown in the table above.

TECHNICAL DATA

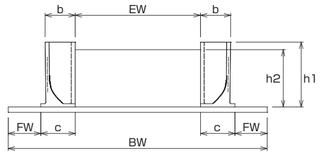
Standard combination dimensions of S CONVEYOR BELT With free zone

(used for L-shape, reverse L-shape, and Z-shape line shapes with variable angles)

Belt width	Effective Width	Flange heigh	Flange pitch	Flange upper width	Flange foot width	Free zone	Cleat height
BW	EW	h1	p1	b	c	FW	h2
400	210	60	50	50	45	50	55
	200	80	50	55	50	50	75
	180	100	50	55	60	50	90
	190	120	45	50	50	55	110
	140	135	70	80	75	55	125
450	250	60	50	50	45	55	55
	240	80	50	55	50	55	75
	220	100	50	55	60	55	90
	230	120	45	50	50	60	110
	180	135	70	80	75	60	125
500	290	60	50	50	45	60	55
	280	80	50	55	50	60	75
	260	100	50	55	60	60	90
	270	120	45	50	50	65	110
	220	135	70	80	75	65	125
600	360	80	50	55	50	70	75
	340	100	50	55	60	70	90
	350	120	45	50	50	75	110
	300	135	70	80	75	75	125
	290	150	65	70	80	75	140
	290	160	65	70	80	75	140
	280	200	65	70	80	80	180
750	460	100	50	55	60	85	90
	470	120	45	50	50	90	110
	420	135	70	80	75	90	125
	410	150	65	70	80	90	140
	410	160	65	70	80	90	140
	400	200	65	70	80	95	180
900	590	120	45	50	50	105	110
	540	135	70	80	75	105	125
	530	150	65	70	80	105	140
	530	160	65	70	80	105	140
	520	200	65	70	80	110	180
1050	710	120	45	50	50	120	110
	650	150	65	70	80	120	140
	650	160	65	70	80	120	140
	640	200	65	70	80	125	180
	610	250	75	80	90	130	230
1200	770	150	65	70	80	135	140
	770	160	65	70	80	135	140
	760	200	65	70	80	140	180
	730	250	75	80	90	145	230
	710	300	75	80	95	150	280
1400	930	150	65	70	80	155	140
	930	160	65	70	80	155	140
	920	200	65	70	80	160	180
	890	250	75	80	90	165	230
	870	300	75	80	95	170	280
1600	1090	150	65	70	80	175	140
	1090	160	65	70	80	175	140
	1080	200	65	70	80	180	180
	1050	250	75	80	90	185	230
	1030	300	75	80	95	190	280

Belt width	Effective Width	Flange heigh	Flange pitch	Flange upper width	Flange foot width	Free zone	Cleat height
BW	EW	h1	p1	b	c	FW	h2
300	130	60	50	50	45	40	55
	120	80	50	55	50	40	75
350	180	60	50	50	45	40	55
	160	80	50	55	50	45	75
	140	100	50	55	60	45	90
550	340	60	50	50	45	60	55
	320	80	50	55	50	65	75
	300	100	50	55	60	65	90
	310	120	45	50	50	70	110
	260	135	70	80	75	70	125
650	380	100	50	55	60	75	90
	390	120	45	50	50	80	110
	340	135	70	80	75	80	125
	330	150	65	70	80	80	140
	330	160	65	70	80	80	140
	320	200	65	70	80	85	180
700	420	100	50	55	60	80	90
	430	120	45	50	50	85	110
	380	135	70	80	75	85	125
	370	150	65	70	80	85	140
	370	160	65	70	80	85	140
	360	200	65	70	80	90	180
800	500	100	50	55	60	90	90
	510	120	45	50	50	95	110
	460	135	70	80	75	95	125
	450	150	65	70	80	95	140
	450	160	65	70	80	95	140
	440	200	65	70	80	100	180
1000	670	120	45	50	50	115	110
	610	150	65	70	80	115	140
	610	160	65	70	80	115	140
	600	200	65	70	80	120	180
	570	250	75	80	90	125	230
1350	890	150	65	70	80	150	140
	890	160	65	70	80	150	140
	880	200	65	70	80	155	180
	850	250	75	80	90	160	230
	830	300	75	80	95	165	280

*In the case of h1=160, FW is the same value as the h1=150

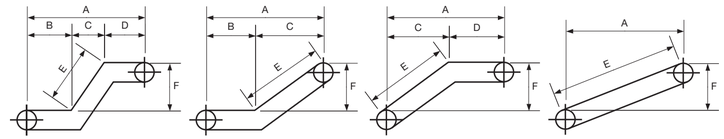


Design condition entry form (contents to be determined by the user)

STEEP SLOPE CONVEYOR belt S CONVEYOR STEEP SLOPE CONVEYOR

Basic conditions	Company name	
	Contact person	
	Line name	
	Operating conditions	Time/day
	Deadline	Day/year
	With or without inspection walkway	
	With or without conveyor cover	
	Paint specifications and color	
	Other construction conditions	
Layout	height of head pulley center	(mm)
	height of tail pulley center	(mm)
	angle	(°)
	Installation location	Indoor Outdoor
	Conveyance feed method	Fixed quantity supply is the principle

Conveyance conditions	Transported material	
	Shape and dimensions	
	Biggest chunk	mm)
	Transportation amount	(mm) / (m^3/h)
	Apparent specific gravity	(t/m^3)
	Angle of repose	(°)
	Lateral angle	(°)
	Temperature	(°C)
	Oil and moisture	
	Special properties	
Other conditions	Service voltage	(V)
	Frequency	(Hz)
	Safety device	



Machine length	A	Horizontal Machine length	
	B	Bottom horizontal machine length	
	C	Slope horizontal machine length	
	D	Top horizontal machine length	
	E	Actual length of inclined part incline length	
	F	Lifting height	
	α	Incline angle	