



# Flexowell Conveyor Belts

Special horizontal cleats and wave-shaped sidewalls enable Flexowell Belts to convey at angles up to 90° (vertical). Capital investment savings due to substantially reduced facility space, with high efficiency. The simple structure allows for easy maintenance and contributes to reduced running costs.

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## Types and applications

Types of rubber	Applications	Major transferred goods
Standard products	Transportation of loose materials and powders	Sand, gravel, crushed stone, iron ore, sintered steel, steelmaking auxiliary materials, granulated slag, steel shot, wood chips, pulp, used paper, clay, cement, bricks, tile raw materials, cullet, glass raw materials, grain, fertilizers, coal, and coal ash
Heat-resistant products	Transportation of high-temperature goods (Intermediate heat-resistant transportation with the temperature of transferred goods not higher than 100°C and the belt surface temperature not higher than 70°C)	Coke, molding sand, mesalite ore, sulfur, pellets, cement clinker, sintered steel, glass raw materials, and cement
Oil-resistant products	Transportation of oily goods (highly oil resistant)	Settled sand, dewatered sludge, scum, municipal refuse, paper making sludge, punched steel sheets, animal skin, grain, and animal feeding stuff
Flame-retardant products	Coal-fired power stations, etc.	Coal and others
Flame-retardant and oil-resistant products*	Bulk waste disposal sites, etc. (waste crushing facilities)	Coarse refuse, etc.

\* Fire prevention measure at bulk waste disposal sites. Used in steep-incline crusher lines. (Flame resistance performance equivalent to products passing JIS flame resistance test.)

## Features

### 1. Space saving

Vertical conveyance substantially saves space compared with conventional conveyor facilities.

### 2. Freely design conveyor line angles

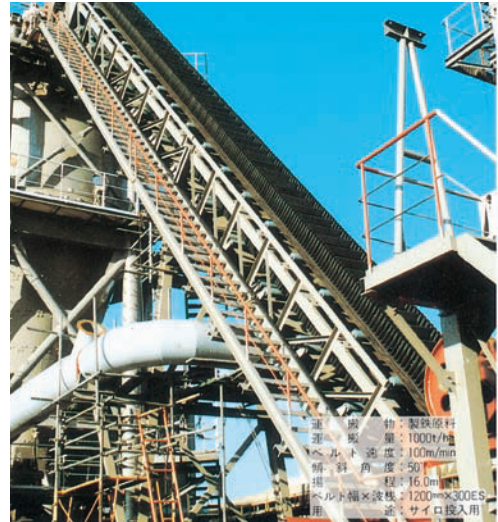
Easy to design the required conveyor angle, from flat to steep incline, depending on the facility layout.

### 3. High capacity conveyance

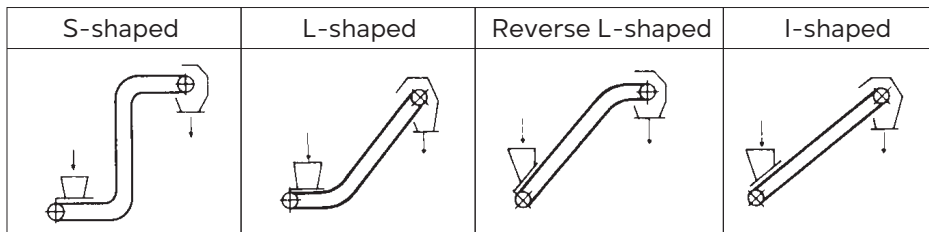
Significantly improved cross-section area, with dramatically increased load capacity compared with trough conveyors.

### 4. Reduced facility costs

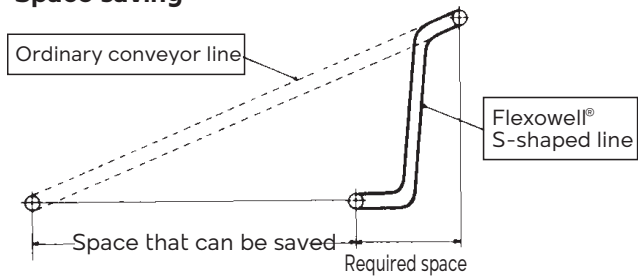
Small pulley diameters may be used, without the need for skirt boards. Facility costs are reduced with flat rollers.



## Major line shapes



## Space saving



## Standard combination

In mm

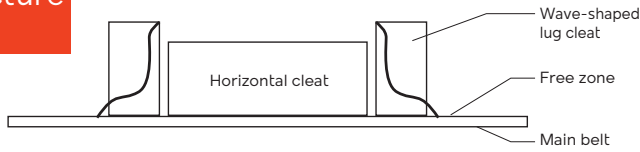
Belt width	Sidewall height	Horizontal cleat height	Effective width	Free zone width
300	60N	55	120	40
	80N	75	200	0
350	60N	55	150	50
	80N	75	250	0
400	60N	55	200	50
	80N	75		
	100N	90	300	0
	120N	110		
450	60N	55	230	60
	80N	75	350	0
	100N	90		
	120N	110	180	60
	120S	110	300	0
	120S	110	300	0
500	80N	75	280	60
	100N	90	400	0
	120N	110	260	70
			400	0
	120S	110	210	70
120S	110	350	0	
600	80N	75	360	70
	100N	90	500	0
	120N	110	340	80
			500	0
	120S	110	290	80
120S	110	450	0	
650	100N	90	390	80
	120N	110	550	0
	120S	110	340	80
			500	0
	160S	140	320	90
160S	140	500	0	
700	100N	90	440	80
	120N	110	600	0
			420	90
	160S	140	370	90
160S	140	550	0	
750	100N	90	470	90
	120N	110	650	0
	120S	110	420	90
			600	0
	160S	140	400	100
200S	180	600	0	
800	120S	110	450	100
	160S	140	650	0
	200S	180		
900	120S	110	530	110
	160S	140	750	0
	200S	180		
	240S	220	510	120
	240S	220	750	0
1000	120S	110	610	120
	160S	140	850	0
	200S	180		
	240S	220	590	130
			850	0
1050	120S	110	660	120
	160S	140	900	0
			640	130
	200S	180	900	0
	240S	220		
280S	260	900	0	
1200	160S	140	770	140
	200S	180	1050	0
	240S	220	750	150
	280S	260		
	300S	280	1050	0
	300ES	280	700	150
400ES	360	700	150	
1400	200S	180	930	160
	240S	220	910	170
	280S	260		
	300S	280	850	200
	300ES	280	800	200
400ES	360			
1600	280S	260	1050	200
	300S	280		
	300ES	280	1000	200
	400ES	360		

\* Standard effective widths of ES types are available in multiples of 100mm.

\* We can design and manufacture large-capacity non-standard belts, with various widths and strengths. Please contact us.

### Structure

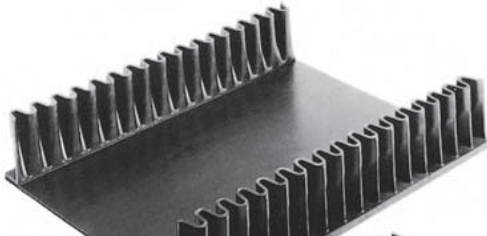
Belt cross section



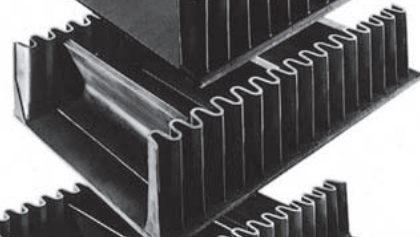
### Components

Flexowell® Belts are made up of the main body belt, wave-shaped sidewalls and horizontal cleats. The three components are rigidly cold-bonded by mechanical means. Please consult with us, as various combinations are available, depending on the items conveyed, volume and the angle of inclination.

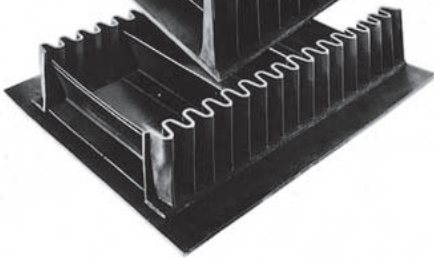
Type 1



Type 2



Type 3



### Combination types (Types 1, 2 and 3 are standard)

#### Type 1: No free zone, no horizontal cleats

For lines with 0-16° inclinations, without angle change in conveyance.

#### Type 2: No free zone, with horizontal cleats

For sharp inclines, without angle change in conveyance.

#### Type 3: With free zone and horizontal cleats

For sharp inclines, with angle change(s) in conveyance.

#### Type 4: With free zone, without horizontal cleats

For lines with 0-16° inclinations, with angle change(s) in conveyance.