

STEEPLY INCLINED CONVEYOR ECOBELT® B-TYPE



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WORKING CONCEPT



The driving force is transmitted by friction between the head pulley and the mesh belt while a pneumatic take-up device on the tail pulley provides a constant tension. This unique system insures that fine materials are contained within the conveyor.

MAIN FEATURES

DAMAGE-TOLERANT DESIGN

Mesh provides redundancy, little to no maintenance & trouble-free continuous operation.

STEEP INCLINATIONS

The inclination angle can reach up to 75°.

HIGH TEMPERATURE RESISTANCE Material temperature can be up to 1,000 °C (e.g. clinker, slag, HDRI)

HIGH CONVEYING CAPACITIES

Buckets are arranged efficiently and belt widths can be up to 1,600 mm.

UNIFORM BUCKET FILLING

Suitably selected feeding equipment allows for uniform bucket filling and even material distribution.

NO PRODUCT SPILLAGE & DUST CONTAINMENT

NEGLIGIBLE WEAR

Conveyor runs on smooth sealed idlers with bearings (no wear bars).

VIRTUALLY NO MAINTENANCE

- It is possible thanks to:
- Sealed self-lubricated idlers
- Direct drive gearmotor
- Self-adjusting pneumatic take-up
- No pins, hinges, chain or sprockets to maintain.

LOW POWER DEMAND

There is no friction between moving parts.

QUIET RUNNING

Noise level is typically below 75 dB(A).

LONGER SERVICE LIFE

OPEN OR FULLY ENCLOSED CONVEYOR

COMMON APPLICATIONS

The ideal solution when it comes to transporting from very fine to coarse-grained bulk materials.





Solid-fuel fly ash







Hot sinter pellets



THEORETICAL CONVEYING CAPACITY (M³/H)



BUCKET CONVEYOR - THEORETICAL CONVEYING CAPACITIES (m3/h) *								
Bucket width (mm)	Bucket height (mm)	Belt speed (m/s)						
		0,1	0,15	0,2	0,25	0,3	0,35	
500	200	32	49	65	81	97	113	
500	250	41	61	81	101	122	142	
650	200	42	63	84	105	126	147	
650	250	53	79	105	132	158	184	
650	300	63	95	126	158	190	221	
800	250	65	97	130	162	194	227	
800	300	78	117	156	194	233	272	
800	350	91	136	182	227	272	318	
1000	250	81	122	162	203	243	284	
1000	300	97	146	194	243	292	340	
1000	350	113	170	227	284	340	397	
1200	250	92	139	185	231	277	323	
1200	300	111	166	222	277	333	388	
1200	350	129	194	259	323	388	453	
1400	300	129	194	259	323	388	453	
1400	350	151	226	302	377	453	528	
1400	400	172	259	345	431	517	604	
1600	300	148	222	296	369	443	517	
1600	350	172	259	345	431	517	604	
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* based on 100% bucket filling with water

TECHNOLOGY COMPARISON

	ECOBELT [®] B-TYPE CONVEYOR	BUCKETS CHAIN CONVEYORS
	High dependability (multi-link construction & damage-tolerant design)	Low dependability (single-link connections subject to sudden failure)
(Q)	Limited wear components	High wear rate on chain rollers, sprockets, tracks and hinge loops
	3-year mesh guarantee	Limited lifespan
<u>II</u>	No hinge loops and pins for material to adhere and return to the tail section	Hinge loops stretch, allowing for material build-up & sticking, carry-over & leakage between pans
	Low friction for conveying	High friction for conveying
	High temperature resistance	Limited temperature resistance
K	Belt self-alignment and adjustment	Alignment issues
R	Easy maintenance from outside. No sprockets and roller block assemblies to replace	Heavy maintenance and long downtime for repairs; lack of maintenance creates more problems with tracks
2	Low Operational Expense (OPEX)	High Operational Expense (OPEX)
	Trackless design = less maintenance	Dual track design takes much more time to inspect, maintain and repair

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