

Belt Conveyor - Full Process Solution Provider



Belt conveyor (hereinafter referred to as belt conveyor) is a kind of conveying equipment with large conveying capacity, low operating cost and wide application range; this machine is suitable for conveying bulk materials or finished materials, and can be conveyed by a single machine according to the requirements of the conveying process, can also be multiple or combined with other conveying (feeding) equipment to form a horizontal or inclined conveying system.

The ambient operating temperature of the belt conveyor is -10°C to $+40^{\circ}\text{C}$. The temperature of the conveying material varies depending on the conveyor belt. The temperature of the conveying material on the ordinary conveyor belt is generally not higher than 60°C , and the heat-resistant rubber belt can convey higher temperatures below 120°C . For materials, when transporting acidic, alkaline, oily materials and materials with organic solvent properties, it is necessary to use oil-resistant, acid-resistant and alkali-resistant rubber belts or plastic belts.



Table 1: Universal Fixed Belt Conveyor Capacity Table

Section form	Belt speed m/s	Belt width B (mmm)					
		500	650	800	1000	1200	1400
		Convey capacity G (t/h)					
Trough shape	0.8	78	131				
	1.0	97	169	278	435	655	891
	1.25	122	206	348	544	819	1115
	1.6	156	264	445	696	1048	1427
	2.0	191	323	546	853	1284	1748
	2.5	232	391	661	1033	1556	2118
	3.15			824	1233	1858	2528
	4.0					2202	2996
Flat type	0.8	41	67	118			
	1.0	52	88	147	230	345	469
	1.25	66	110	184	288	432	588
	1.6	84	142	236	368	553	756
	2.0	103	174	289	451	677	922
	2.5	125	211	350	546	821	111

Note: The conveying capacity is calculated under the conditions of material bulk density 1 t/m³, conveying inclination angle of 0°~7°, and material accumulation angle of 30°.



Table 2: General Fixed Belt Conveyor Power Selection Table (KW)

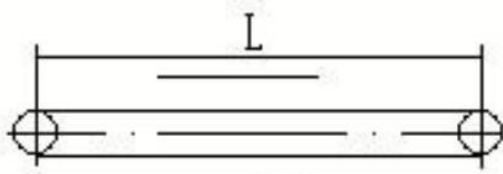
Length m		15	30	45	60	100	150	200	300
Belt width mm	500	1.0	1.3	1.7	2.0	3.2	4.6	8.0	11.5
	600	1.3	1.9	2.4	2.8	4.6	9.2	11.5	16.0
	800	1.9	2.9	3.6	4.3	9.7	14.0	17.5	24.3

The above power estimation conditions are based on the ideal conditions of normal humidity, horizontal belt speed of 1 m/s, material capacity of 1 t/m³, and material stacking angle of 30 °.

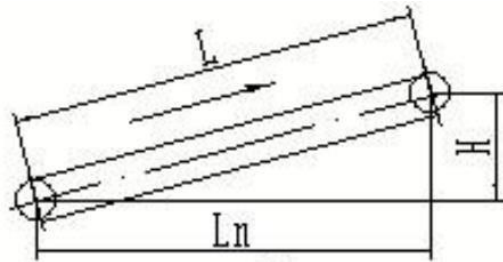
Generally, the power used is about 30% more than the power in the table. If other devices are added, the power should be increased and the calculation should be emphasized



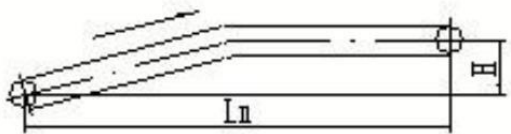
General type of Belt conveyor



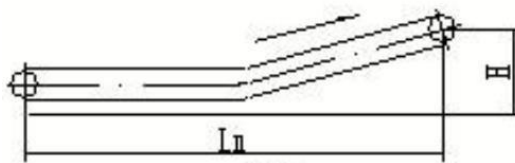
A: Level belt conveyor



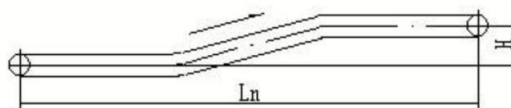
B: Inclined conveyor



C: Conveyor with convex arc section



D: Conveyor with concave arc



E: Conveyor with concave arc and convex arc segment



Full Process Solution Provider – SDCAD



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Product advantages:

- 1, Full erector frame, suitable for any working condition, length adjustment; Can be repeated disassembly and assembly use, convenient installation, can organize their own general workers to implement the installation;
- 2, Support full immersion zinc process, especially suitable for coastal areas such as heavy corrosion protection (15 years no rust);
- 3, The configuration of all the domestic first-class manufacturers brand;
- 4, Parts can be bundled transport, site assembly, loading and packing flexible, delivery is basically not restricted by road



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