

## Belt conveyor manufacturer

### Introduction of the belt conveyor

**Belt conveyor**, also called **belt conveyors** or **rubber belt conveyors**, are economical logistics conveying equipment that are indispensable for rhythmic assembly lines. Belt conveyors can be divided into heavy-duty belt conveyors such as mining belt conveyors and light-duty belt conveyors such as those used in electronic plastics, food and light industry, chemical and pharmaceutical industries according to their conveying capacity. Belt conveyors have strong conveying capacity, long conveying distance, simple structure, easy maintenance, and can easily implement programmed control and automatic operation.



17 years



**Recommend**

### Applicable material range of the belt conveyor

Raw material



### **Components of the belt conveyor**

**Belt conveyor** is a friction-driven machine that transports materials in a continuous manner. It is mainly composed of a frame, conveyor belt, roller, drum, tensioning device, transmission device, etc. It can form a material conveying process from the initial feeding point to the final unloading point on a certain conveying line. It can convey both bulk materials and finished items. In addition to pure material transportation, it can also cooperate with the requirements of the process in the production process of various industrial enterprises to form a rhythmic flow operation transportation line.

**Belt conveyor** is also called belt conveyor. The conveyor belt moves according to the principle of friction transmission. It is suitable for conveying low-abrasive materials and bagged materials with a bulk density of less than 1.67/ton/cubic meter, which are easy to take out, such as coal, gravel, sand, cement, fertilizer, grain, etc. The belt conveyor can be used in an ambient temperature range of -20°C to +40°C, and the temperature of the conveyed material is less than 60°C. The length and assembly form of the machine can be determined according to user requirements, and the transmission can be an electric roller or a drive device with a drive frame.





Product Features:

Belt conveyor is a continuous transportation equipment for coal mines. Compared with other transportation equipment (such as locomotives), it has the advantages of long transportation distance, large transportation volume, continuous transportation, etc., and reliable operation, easy to realize automation and centralized control. Especially for high-yield mines, belt conveyor has become a key equipment for coal mining mechatronics technology and equipment. The main features of belt conveyor are that the body can be easily extended and retracted, with a belt storage bin, the tail can be extended or shortened with the advancement of the coal mining face, compact structure, no foundation is required, and it can be laid directly on the bottom plate of the roadway. The frame is light and easy to disassemble and assemble. When the transportation capacity and transportation distance are large, an intermediate drive device can be equipped to meet the requirements. According to the requirements of the transportation process, it can be transported by a single machine, or multiple machines can be combined into a horizontal or inclined transportation system to transport materials.

### Technical Parameters of the belt conveyor ( General purpose belt conveyor)

Section form	Belt speed (m/s)	Belt width(mm)					
		500	650	800	1000	1200	1400
		G(t/h)					
Groove type	0.8	78	131				
	1.0	97	169	278	435	655	891
	1.3	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
	3.2			824	1233	1858	2528
	4.0					2202	2996
Flat type	0.8	41	67	118			
	1.0	52	88	147	230	345	469
	1.3	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	1111

**Note:** The conveying capacity is calculated under the conditions of material bulk density 1t/m<sup>3</sup>, conveying inclination 0°~7°, and material accumulation angle 30°.

length(m)		15	30	45	60	100	150	200	300
Belt Width (mm)	500	1	1.3	1.7	2	3.2	4.6	8	11.5
	650	1.3	1.9	2.4	2.8	4.6	9.2	11.5	16
	800	1.9	2.9	3.6	4.3	9.7	14	17.5	24.3

**Note:**The above power estimation conditions are calculated under ideal conditions of normal humidity, horizontal belt speed of 1m/s, material capacity of 1t/m<sup>3</sup>, and material stacking angle of 30°. In general, the power used should be about 30% more than the power in the table. If other devices are added, the power should be increased and calculated more heavily.

### Application of the belt conveyor

Belt conveyors are widely used in metallurgy, coal, transportation, hydropower, chemical industry



and other sectors because they have the advantages of large conveying capacity, simple structure, convenient maintenance, low cost and strong versatility.

Belt conveyors are also used in building materials, electricity, light industry, food, ports, ships and other sectors

