Factory Customized High Quality Adjustable Inclined Rubber Belt Conveyor

Introduction of the Rubber Belt Conveyor

Rubber Belt Conveyor is used for the packing, loading and unloading of the goods in the wharf and warehouse, it can be used in two purpose, which is driven by an electric drum, for lifting, we adopts double hydraulic cylinder, and for flexing, is rack and pinion drive. It has the advantages of compact structure, simple operation, convenient movement, beautiful appearance

Applicable material range of the belt conveyor



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 | D -14 | Belt width(mm) | | | | | | |
|--------------|------------|----------------|-----|---|------|------|------|--|
| | Belt speed | 500 | 650 | 800 | 1000 | 1200 | 1400 | |
| | (m/s) | G(t/h) | | | | | | |
| Groove type | 0.8 | 78 | 131 | | | | j | |
| | 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 | 111 | |

Note: The conveying capacity is calculated under the conditions of material bulk density lt/m3, conveying inclination $0^{\circ}\sim7^{\circ}$, 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/m3, 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











