TRANSPORTING

TD75 Belt Conveyor

Principle

Belt conveyor is mainly composed of two end rollers and the closed belt which tightly set on it. The one driving the conveyor belt is named as the driving roller; the other one only used for changing the motion direction of the conveyor belt is named as the bend roller. The driving roller is drived by the motor through the reducer while the conveyor belt is dragged by the friction between the driving roller and the conveyor belt. The driving roller is generally installed on the discharging side to increase the traction and convenience to drug. Materials are fed by the feeding end, dropped on the conveyor belt, and discharged by the discharging end which is driven by the conveyor belt friction.



TD75 belt conveyor is a general series product of belt conveyor.

Application

Widely used in the fields of chemical, coal, metallurgy, mine, power, light, food, transportation, etc. Applied to convey bulk materials with loose density of 0.5-2.5 t/m² and unit goods.

Technical Features

The unit weight of materials conveyed by the TD75 belt conveyor should be less than 2.5 t/m³.

This series is divided into six specifications including 500 mm, 650 mm, 800 mm, 1000 mm, 1200 mm, and 1400 mm by the bandwidth.

Divided into 1.5 kW, 2.2 kW, 3 kW, 4 kW, 5.5 kW, 7.5 kW, 11 kW, 15 kW, 18.5 kW, 22 kW, 30 kW, 40 kW, etc. by the driving power.

Divided into 0.8m/s, 1.0 m/s, 1.25 m/s, 1.6 m/s, 2.0 m/s, 2.5 m/s, 3.15 m/s, 4 m/s, etc., by the belt speed.

Refer to the following table for the max. conveying capacity of this series.

Technical Parameters

| | | Belt Width B (mm) | | | | | |
|---------------------|------------------|----------------------------|-----|-----|------|------|------|
| Carrying Idler Type | Belt Speed (m/s) | 500 | 650 | 800 | 1000 | 1200 | 1400 |
| XO | | Conveying Capacity Q (t/h) | | | | | |
| | 0.8 | 78 | 131 | _ | _ | _ | _ |
| Trough Idler | 1.00 | 97 | 164 | 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 | 2995 |

The conveying capacity in the table is calculated under the condition of $\gamma=1$ t/m³ for the material density, 0°-7° for the conveyor inclination angle, and 30° for the material accumulation angle.