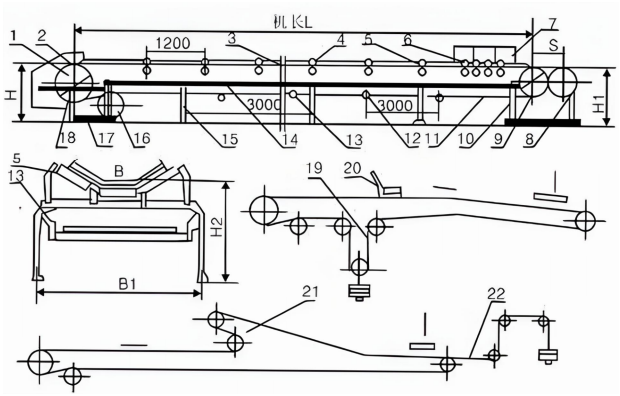
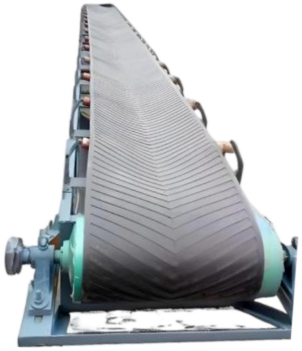
Conveyor Series

TD75 TYPE BELT CONVEYOR SERIES

The TD75 conveyor, with its simple structure, low cost, high parts interchangeability, easy maintenance, and sufficient conveying capacity for general applications, has become a widely used conveyor. Depending on needs, it can be used as a single unit, multiple units, or combined with other conveying equipment to form a horizontal or inclined conveying system.





1. Drive pulley
2. Head hood
3. Belt
4. Troughing self-aligning idler
5. Troughing idler
6. Impact idler
7. Chute
8. Screw take-up device
9. Tail pulley
10. Tail frame
11. Return belt cleaner
12. Flat self-aligning idler (bottom)
13. Bottom idler
14. Middle frame
15. Middle support leg
16. Snub pulley
17. Head frame
18. Spring belt cleaner
19. Vertical take-up device
20. Plough tripper
21. Discharge car
22. Car-type take-up device

TECHNICAL FEATURE

Belt widths available: 500, 650, 800, 1000, 1200, 1400, 1600, 2000 mm (eight options)
Drive power: 1.5–1600 kW
Belt speeds: 0.8, 1.0, 1.25, 1.6, 2.0, 2.4, 3.15, 4.0 m/s (eight options)
Conveying capacity: Refer to Table 1 (material density r = 1.0 ton/m^3, conveyor inclination angle B < 60° , material angle of repose = 30°)
Maximum incline: See Table 2 (for downward transport, the maximum allowable angle is 80% of the value shown in the table)

TECHNICAL PARAMETER

Table 1

Cross-section Type	Belt Speed (m/s)	Belt Width B (mm)					
		500	650	800	1000	1200	1400
		Conveying Capacity Q (t/h)					
Trough-type	0.8	78	131	-	-	-	-
	1.0	97	164	278	435	655	891
	1.25	122	206	348	544	819	1115
	1.6	156	264	455	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	-	-	-	-	2022	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	230	368	533	753
	2.0	103	174	289	451	677	922
	2.5	125	211	350	546	821	1117

Table 2

Material Name	β	Material Name	β	Material Name	β
Lump Coal	18°	20-40mm Oil Shale	20°	Wet Sand	23°
Raw Coal	20°	0-1200mm Oil Shale	22°	Salt	20°
Pulverized Coal & Washed Product	21°	Dry Loam Soil	20°	Molding Sand	24°
Coke after Weathering & Screening	17°	Wet Soil	20-23°	Waste Sand	20°
0-25mm Coke	18°	Wet Concentrate (12% Moisture)	20°	Unscreened Stone	18°
0-3mm Coke	20°	Dry Concentrate	18°	Cement	20°
0-350mm Ore	16°	Screened Limestone	12°	Blocky Clay	15-18°
0-120mm Ore	18°	Dry Sand	15°	Powdered Dry Clay	22°
0-60mm Ore	20°	Sand Mixed with Gravel	18-20°		
40-80mm Ore	18°	Quarry Sand	20°		