Permanent Magnetic Drum Magnetic Separator

Features

All are new type and high-efficiency wet magnetic separators
Magnetic systems all adopt Nd-Fe-B magnets with high magnetic energy product and high coercivity, strong magnetic density and high affect depth. The demagnetization rate of the magnetic density within 8 years is no more than 5%.
With gradual change and smooth transition large angle magnetic system, by increasing the length of sorting belt and magnetic turn, the efficient separation of magnetic and non-magnetic (or weak magnetic) minerals can be realized.
Covering the magnetic system with non-magnetic stainless steel ensures no peeling off of the magnet
According to the different uses and flotation conditions, different series of magnetic separators adopt different magnetic systems and groove structures.
The groove structures are all semi counter-flow, and can be made into down flow type according to the beneficiation conditions and the requirements of the clients.
The cylinder adopts non-magnetic stainless steel, and is covered with the super wear-resistant rubber produced by our company, thus the service life can be prolonged significantly.
With strong adaptability to production, it can bear great fluctuation of feeding quantity of slurry and the fluctuation of feed size and slurry concentration.
Excellent beneficiation index with high grade and high rate of recovery can be achieved at the same time.
Magnetic separators of different series can be used together or singly to get excellent beneficiation target.
Reasonable design, reliable running and convenient maintenance.

Application

CTBY permanent cylindrical magnetic separator for preconcentration: Suitable for wet preconcentration of magnetite before entering grinding mills after fine crushing, and the selected particle size should be less than 10mm.
CTBC permanent cylindrical magnetic separator for roughing: Suitable for roughing of magnetite after stage one grinding or multi-stage grinding or the roughing when recycling the magnetite from the tailings after sorting of nonferrous metals. The selected particle size should be less than 4mm.
CTBJ permanent cylindrical magnetic separator for concentration: Suitable for further concentration of coarse magnetite concentrate after grinding and classification and roughing. The selected particle size should be less than 2mm.
CTBN permanent cylindrical magnetic separator for thickening: Suitable for thickening and magnetic separation of magnetite before sending back to grinding mills after grinding, classification and sand returning, or the thickening and magnetic separation of magnetite concentrate before entering the filter press. The selected particle size should be less than 4mm.

Technical Parameters of CTBY Permanent Cylindrical Magnetic Separator for Preconcentration

Model & Spec.	CTBY1018	CTBY1024	CTBY1030	CTBY1218	CTBY1224	CTBY1230
Diameter of Cylinder (mm)	1000	1000	1000	1200	1200	1200
Length of Cylinder (mm)	1800	2400	3000	1800	2400	3000
Surface Magnetic Density (mt)	350~550	350~550	350~550	350~550	350~550	350~550
Rotating Speed of Cylinder (r/min)	23	23	23	20	20	20
Capacity of Dry Ore (t/h)	42~65	53~86	82~124	58~97	71~120	103~158
Feed Size (mm)	0~10	0~10	0~10	0~10	0~10	0~10
Slurry Density (%)	20~50	20~50	20~50	20~50	20~50	20~50
Motor Power (kW)	5.5	7.5	7.5	7.5	11	11
Total Weight (t)	5.2	6.4	7.1	6.7	7.2	8.9
Equipment Length (mm)	3160	3790	4460	3380	4190	4770
Equipment Width (mm)	2250	2250	2250	2460	2460	2460
Equipment Height (mm)	1750	1750	1750	2000	2000	2000

Technical Parameters of CTBC Permanent Cylindrical Magnetic Separator for Roughing

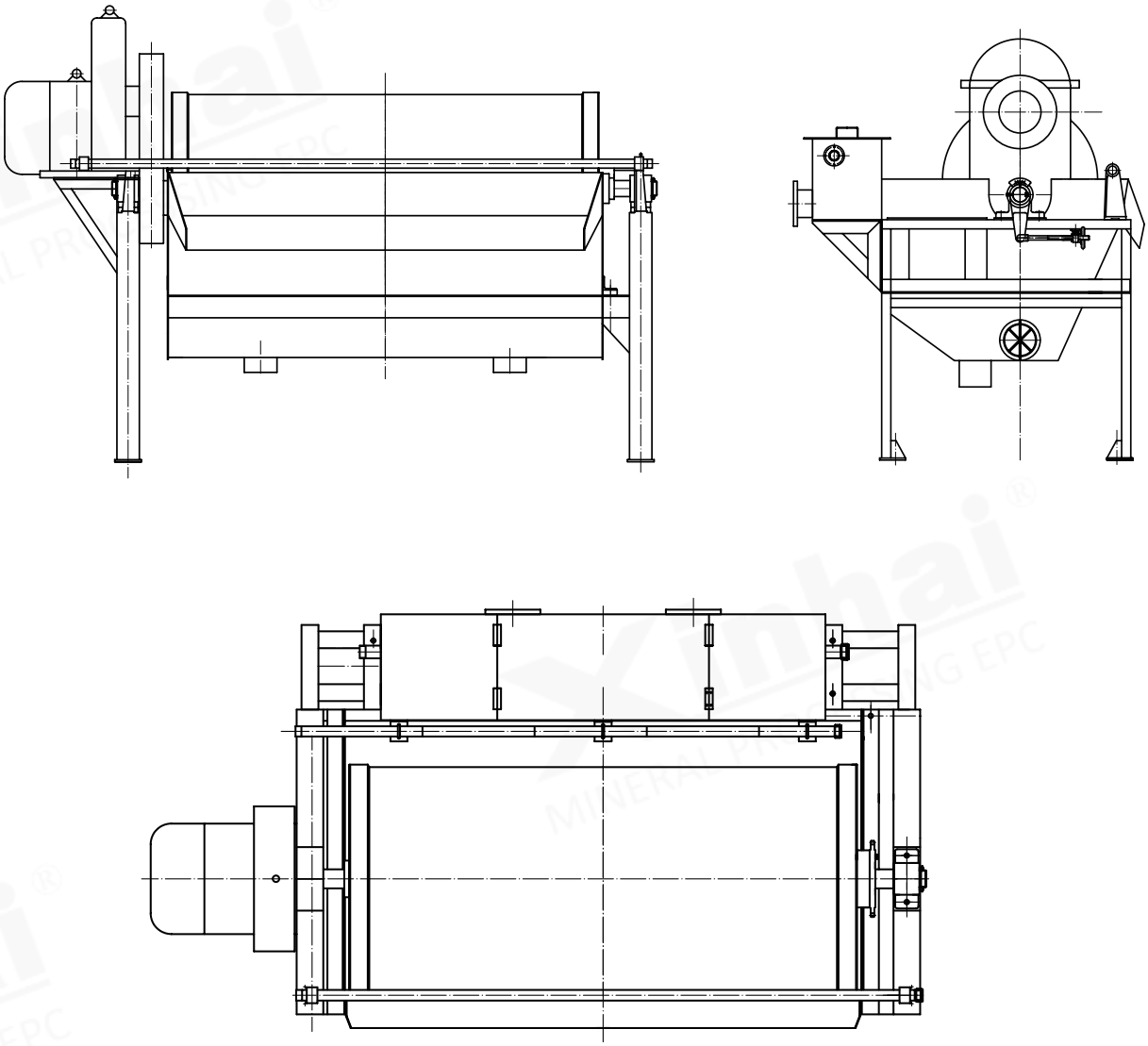
Model & Spec.	CTBC1018	CTBC1024	CTBC1030	CTBC1218	CTBC1224	CTBC1230
Diameter of Cylinder (mm)	1000	1000	1000	1200	1200	1200
Length of Cylinder (mm)	1800	2400	3000	1800	2400	3000
Surface Magnetic Density (mt)	300~500	300~500	300~500	300~500	300~500	300~500
Rotating Speed of Cylinder (r/min)	23	23	23	20	20	20
Capacity of Dry Ore (t/h)	36~54	44~75	66~103	47~82	62~105	83~129
Feed Size (mm)	0~4	0~4	0~4	0~4	0~4	0~4
Slurry Density (%)	20~50	20~50	20~50	20~50	20~50	20~50
Motor Power (kW)	5.5	7.5	7.5	7.5	11	11
Total Weight (t)	5.2	6.4	7.1	6.7	7.2	8.9
Equipment Length (mm)	3160	3790	4460	3380	4190	4770
Equipment Width (mm)	2250	2250	2250	2460	2460	2460
Equipment Height (mm)	1750	1750	1750	2000	2000	2000

Technical Parameters of CTBJ Permanent Cylindrical Magnetic Separator for Concentration

Model & Spec.	CTBJ1018	CTBJ1024	CTBJ1030	CTBJ1218	CTBJ1224	CTBJ1230
Diameter of Cylinder (mm)	1000	1000	1000	1200	1200	1200
Length of Cylinder (mm)	1800	2400	3000	1800	2400	3000
Surface Magnetic Density (mt)	200~300	200~300	200~300	200~300	200~300	200~300
Rotating Speed of Cylinder (r/min)	23	23	23	20	20	20
Capacity of Dry Ore (t/h)	24~36	33~56	46~72	35~45	43~77	54~86
Feed Size (mm)	0~2	0~2	0~2	0~2	0~2	0~2
Slurry Density (%)	20~50	20~50	20~50	20~50	20~50	20~50
Motor Power (kW)	5.5	7.5	7.5	7.5	11	11
Total Weight (t)	5.2	6.4	7.1	6.7	7.2	8.9
Equipment Length (mm)	3160	3790	4460	3380	4190	4770
Equipment Width (mm)	2250	2250	2250	2460	2460	2460
Equipment Height (mm)	1750	1750	1750	2000	2000	2000

Technical Parameters of CTBN Permanent Cylindrical Magnetic Separator for Thickening

Spec. & Model	CTBN1018	CTBN1024	CTBN1030	CTBN1218	CTBN1224	CTBN1230
Diameter of Cylinder (mm)	1000	1000	1000	1200	1200	1200
Length of Cylinder (mm)	1800	2400	3000	1800	2400	3000
Surface Magnetic Density (mt)	260~450	260~450	260~450	260~450	260~450	260~450
Rotating Speed of Cylinder (r/min)	23	23	23	20	20	20
Capacity of Dry Ore (t/h)	35~68	46~86	67~126	52~90	77~126	90~160
Feed Size (mm)	0~4	0~4	0~4	0~4	0~4	0~4
Slurry Density (%)	20~50	20~50	20~50	20~50	20~50	20~50
Motor Power (kW)	5.5	7.5	7.5	7.5	11	11
Total Weight (t)	5.2	6.4	7.1	6.7	7.2	8.9
Equipment Length (mm)	3160	3790	4460	3380	4190	4770
Equipment Width (mm)	2250	2250	2250	2460	2460	2460
Equipment Height (mm)	1750	1750	1750	2000	2000	2000



■ Structure Drawing of Permanent Magnetic Drum Magnetic Separator