

Dry Drum Magnetic Separator



Description:

Dry permanent drum magnetic separator is dry type magnetic separator, Compared other magnetic separator this type of separators have characteristics such as light body, easy operation and maintenance, stable performance, low energy consumption, large handling capacity, clear dividing line of magnetic separation. The core component of the separator is made of high performance permanent material earth NdFeB, The magnetic strength of drum surface can reach 7500-9000Gs, it can be used for good magnetism difference mineral such as ilmenite, chromite, garnet, quartz, feldspar etc. The drum is made of no magnetism stainless steel let it can be durable in use, the separator adopts electromagnetic stepless speed regulation motor, through the

rotary handle on the motor can get 1-5 times range of rotation speeds. The separator has a weak magnetic remove iron drum on upside, it can remove iron directly before purify process.

Structure and Working Principle

This kind of machine is mainly composed of feeding device, electromagnetic stepless speed regulation motor (or frequency conversion stepless speed regulation motor), weak magnetic de-ironing drum, strong magnetic separation drum, ore separation plate, concentrate discharge hopper, middling and tailing discharge hopper.

The raw ores to be selected first remove the strong magnetic ore (Fe_3O_4) in the raw ores when passing from the hopper through the weak magnetic de-ironing drum. Then they pass the strong magnetic separation drum. Since the magnetic ores is under the action of magnetic force in the drum and non-magnetic minerals are under the action of rotating centrifugal force of drum, different tracks are left. Then coupled with combined regulation of ore separating plate, best ore separation effects can be achieved.

Dry permanent drum magnetic separator Technical Parameters

Model	BT380×600	BT380×800	BT380×1000	BT380×1500
Drum size (mm)	Φ380×600	Φ380×800	Φ380×1000	Φ380×1500
Magnetic intensity (Gs)	7500~9000	7500~9000	7500~9000	7500~9000
Power (Kw)	2.2	2.2	3	4
Rotating speed (r/min)	0~300	0~300	0~300	0~300

Feeding size (mm)	< 2	< 2	< 2	< 2
Capacity (t/h)	0.6~1.2	0.8~1.6	1~2	1.5~3
Dimension (mm)	990×1430×1950	1190×1430×1950	1390×1430×1950	1890×1430×1950
Weight (Kg)	950	1200	1300	1650

Application:



ilmenite magnetic separator plant