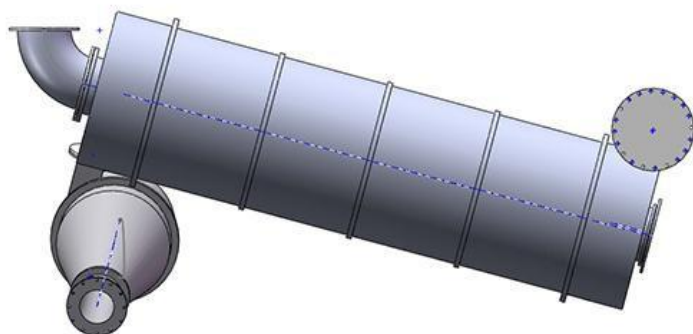
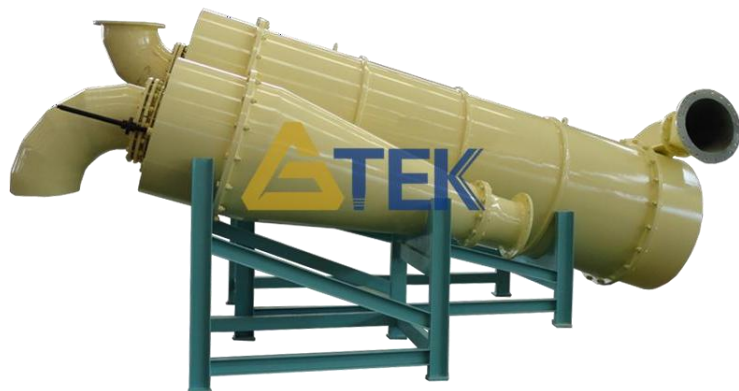


GTEK Gravity Feed Three Product Dense-Medium Cyclone Brochure

Description

The 3NW dense medium cyclones are capable of not only separating coal particles but also concentrating and the heavy media at the same time, which makes it possible to use single low density heavy medium, instead of using both low and high densities, to produce three qualified clean, middling, and reject products at one time. The first stage cyclone is in cylinder shape which makes density field uniform and materials separated accurately based on the given heavy medium density. The second stage cyclone with conventional (cylinder + con) shape is designed to enlarge separation density difference between the two stages in order to achieve high separation density in the second cyclone.



Vertical Layout

Technical Specification

Model	Sector 1 Cylinder Dia. (mm)	Sector 2 Cylinder Dia. (mm)	Feeding Size (mm)	Working pressure (MPa)	Processing Capacity (t/hr)
1400/1050	1400	1050	≤100	0.17~0.33	350~500
1300/920	1300	920	≤90	0.15~0.28	300~450
1200/850	1200	850	≤85	0.13~0.25	280~400
1100/780	1100	780	≤75	0.12~0.22	230~350
1000/700	1000	700	≤70	0.11~0.19	180~300
900/650	900	650	≤65	0.10~0.17	130~240
850/600	850	600	≤60	0.09~0.15	100~180
700/500	700	500	≤50	0.08~0.13	70~120
600/400	600	400	≤40	0.07~0.11	50~70
500/350	500	350	≤35	0.06~0.10	25~50

Advantages

- There is no requirement for desliming and sizing of raw coal fed to dense medium cyclone circuit;
- Raw coal is fed to the center of cyclone under the force of gravity, and medium is admitted tangentially by pumps;
- Using single low density heavy medium suspension to accurately separate the run-of-mine coal into qualified clean coal, middling, and refuse products;
- High precision and maximum efficiency of separation, suitable for preparation of difficult to clean coals;
- Little breakage impact on raw coal feed, which reduces slime produced during the preparation;
- Manufactured from mild steel and lined with wear resistant alumina tiles, compact structure, easy operation and with little possibility of blockage;
- Lower capital investment and reduced operating cost.