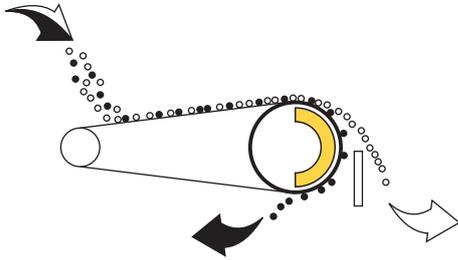


Belt Drum Separator

BDS



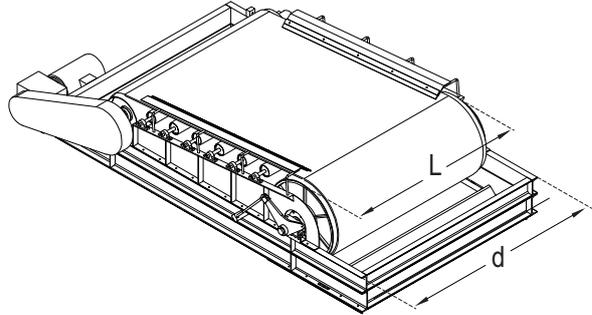
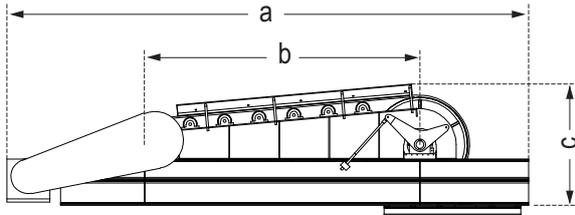
BDS series Belt Drum Separators are designed to concentrate coarse Ferromagnetic particles up to 200 mm in size by removing the large impure stones, making them highly effective for the primary stage of iron ore processing. Belt Drum Separators consist of key components such as the drum magnet, rubber belt, drive and idler pulleys, motor drive, frame, power transmission system, and an adjustable splitter. Belt Drum Separators incorporate a 180-degree magnetic arc inside of the stainless-steel shell which has been inhabited by aluminum alloy caps. The drum shell and end caps rotate at a specific speed around a fixed magnetic arc. As material is fed onto the Belt Drum Magnet, non-magnetic contaminants follow their natural trajectory and are discharged in front of the magnet. In contrast, iron ore particles are attracted to the magnetic drum, carried along the arc, and discharged behind the splitter at the end of the magnetic field. Belt Drum Magnets can be manufactured using either ceramic magnets (LIMS) or neodymium magnets (MIMS), each generating different magnetic forces with varying amplitudes and gradients. Key factors affecting separation efficiency include drum speed, splitter position, magnet type, and pole configuration.

A Notable Selected Specification

The capacity and performance of the BDS depend on various material factors, including mineralogical composition, particle size distribution, moisture content, degree of liberation, magnetic properties of the ore, and the ratio of magnetic to non-magnetic components.



BDS



Model	Drum Dia.	Drum Length L	Belt Speed	Motor	Weight	Dimensions			
						a	b	c	d
						mm			
BDS 60-100	600	1,000	2	5.5	2,550	3,360	1,500	900	1,450
BDS 60-120		1,200		7.5	2,950				1,650
BDS 60-150		1,500		7.5	3,300				1,950
BDS 90-100	900	1,000	2	11	3,650	4,785	2,500	1,050	1,450
BDS 90-120		1,200		15	4,550				1,650
BDS 90-150		1,500		18.5	5,350				1,950
BDS 90-200		2,000		18.5	6,400				2,450
BDS 120-120	1,200	1,200	2	18.5	6,750	6,430	3,500	1,200	1,650
BDS 120-150		1,500		22	7,600				1,950
BDS 120-200		2,000		22	8,950				2,450

