Name of Machine	Magnetic Separation of minerals facility		
Make	S.G. Frantz Co., New Jersey	Model	LB-1, Isodynamic Magnetic Separator

Specification

LB-1 Magnetic Barrier Laboratory Separators exploit either paramagnetic or diamagnetic properties to separate dry materials according to magnetic susceptibility. They deliver more than 3.5 times the magnetic separating force of the Isodynamic® Separator, provide improved particle feed and transport systems, and allow the separation to be observed.

Working principle:

Material is fed into one end of the magnetic field of an electromagnet having two long pole pieces (with a long narrow air gap between them). Material travels the entire length of the pole pieces, with the more strongly paramagnetic particles being urged toward the narrow side of the gap. The grains are intercepted by a dividing edge which directs the two fractions into separate containers.

Application

Mineral separation from assemblages of minerals based on their magnetic susceptibility.

User Instruction

The samples must be collected as per the instructions and method given in Morthekai and Ali, 2014. "Luminescence Dating Using Quartz-for End Users, Gond. Geol. Mag., V. 29".

Contact Person

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