

Business Investment Opportunities in Bentonite (Quarrying, Processing & Exporting)

Description:

Business Investment Opportunities in Bentonite (Quarrying, Processing & Exporting). Profitable Business Ideas in Clay and Minerals Industry

Bentonite is the commercial name of a whole range of natural clays with a high water absorption capacity causing it to expand and swell. Bentonite predominantly consists of montmorillonite: a clay mineral belonging to a class of phyllosilicates called smectites. Bentonites may contain a variety of accessory minerals in addition to montmorillonite. These may include lesser amounts of other clay minerals such as kaolin, mica, illite, as well as non-clay minerals like quartz, feldspar, calcite, and gypsum. Bentonite quality, and, consequently, its applications, depend on whether it contains any of these other minerals.

Bentonite is an industrial mineral, rich in a clay mineral called montmorillonite. Bentonites used for hydraulic barriers in North America are produced from the naturally occurring sodium bentonites mined in the state of Wyoming. These bentonites have a unique cation chemistry. The cations that balance electrostatic charge in the clay structure are “exchangeable” cations and consist of sodium (Na⁺), calcium (Ca⁺⁺), and Mg (++) cations. The largest deposits of commercial sodium bentonite are found in Wyoming, Montana and South Dakota.

Bentonite has high swelling properties along with good viscosity and liquid limit. These properties are highly valued in most of the industrial applications. Sodium bentonite is well suited as a binder in the preparation of pellets and in foundry and as oilwell drilling mud. Bentonite also acts as a suspending agent in oil-well drilling fluids and is abundantly used in horizontal drilling for shale production. Bentonite exhibits good green strength along with high hot and dry strength which helps in preventing moulds from breaking or cracking during the pouring or cooling process in the foundry industry.

For more details download PDF file.

Keywords: Bentonite Processing, Bentonite Processing Plant, Bentonite Clay Processing Plant, Bentonite Mining, Bentonite Processing Unit, Bentonite Processing and Production, Bentonite Mining and Processing, Industrial Minerals & Rocks, Bentonite Processing Factory, Mineral Processing, Bentonite Formula, Industrial Applications of Bentonite, Bentonite Applications, Uses and Applications of Bentonites, Uses of Bentonite in Construction, Bentonite Processing in Pharmaceutical Industry, Bentonite Processing

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