**KAOLIN PROCESSING**

Our processing plant covers an area of 5000sqm and is placed within a 30,000sq meter depot. The plant is designed to remove water and impurities from raw kaolin clay, a soft white clay used in various industrial applications such as ceramics, paper, paint, and cosmetics. The facility typically consists of several key components and processes:

**Raw Material Intake**: Raw kaolin clay is delivered to the facility in bulk quantities through trucks. The clay is carefully sourced to meet the required quality standards for the intended applications.

**A. Slurry Density**: The raw ore kaolin clay undergoes a pulping process to disperse the kaolin and remove larger particles, rocks, wood, and other contaminants that could lessen the quality of clay.

**B. Grading**: The clay goes through a grading process to remove wood chips, coarse particles, and other contaminants to improve kaolin quality.

**C. Scrubbing**: The kaolin underflows are subjected to a scrubbing process to remove remaining impurities, separate any coarse particles, and improve consistency.

**D. Magnetic separation**: The kaolin slurry is passed through magnetic separators, where strong magnets attract and retain the magnetic particles, allowing purified kaolin to pass through unaffected.

**E. filter press**: This dewatering process results in the formation of filter cakes comprised mainly of concentrated kaolin. Water is expelled, leaving behind a material with reduced moister content.

**F. Dehydration**: The kaolin concentrate is then subjected to a dehydration process. This process involves removing a significant portion of the water content present in the clay. This is achieved through pressing and heat application methods.

**G. Packaging and Distribution**: Once the kaolin clay has been dehydrated, it is packaged into bags. These packages are labeled and exported to customers in various industries.

**H. Water recycling:** Water recycling is a fascinating process that helps conserve resources and protect the environment. It involves treating wastewater to remove impurities and contaminants making it safe for reuse. Water recycling is a vital process that plays a crucial role in promoting sustainable water management practices.

As a company, we are big advocates for sustainable practices. Therefore, we have incorporated recycling water into our factory processing setup. It involves treating and reusing water that is contaminated with various pollutants from our processing activities.

In treating our water, wastewater from the various segments of our production line is collected and channeled with the use of pipes into a pond. The water is then purified and filtered. These techniques ensure that water is thoroughly cleansed of impurities and contaminants before it can be safely reused. The coagulation technique is employed, where chemicals are added to the water to form larger particles that can be easily removed. The treated water goes back into our production line for reuse.

By implementing a water recycling system into our production line, Oceana Commodities Ltd minimizes its water consumption, reduces strain on local water sources, and mitigates the environmental impact of our operations. By embracing sustainable practices, we strike a balance between meeting our resource needs and preserving the planet for future generations.

Oceana’s processing plant plays a crucial role in transforming raw kaolin clay into a refined product with consistent quality, suitable for a wide range of industrial applications, and contributes significantly to economic development.