

Design and fabrication of filtration unit of Sodium Silicate solution suspension grains

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Abstract

Sodium Silicate Solution (soluble silicate) is known as the materials necessary for detergent factory, paper-mill and carton-work and cast-works. The current competitive market requires that the output of Sodium Silicate factories should be a limp solution without any suspension grain. Nowadays different methods are employed for filtering in Sodium Silicate Solution producer factories. As this reason that the product and consumption volume is high, the currently employed methods are known as a throat. Among these methods employed, diluting the Solution by adding water and then deposition and again solution condensation by taking its extra water to access solution with specific density is the most important one. In addition to being time-consuming, using this method requires much energy for specific of the added water. In this article, after studying the process of solution production after exiting from the mixer and firer pot, the advantages and disadvantages of each method is discussed and the favorite system is designed and introduced, then the analysis and laboratory results are presented.

Key words: Design and Manufacturing, Filtration, Sodium Silicate Solution

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