

DUAL FLOCCULANT SELECTION IN THE FIBER CEMENT PROCESS

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Abstract.

It is well known that flocculants are required in the manufacturing process of asbestos free, PVA fibre cement products.

Whilst there are some guidelines for the suitable selection of flocculants, there are also varied opinions on the choice of the right flocculants to be used in the process.

Simply put, there is no universal solution. Each process needs to be individually evaluated, based on the characteristics of the machines and the type of mix formulations.

This paper deals with the unique approach of considering the use of multiple flocculants. Typically flocculants are expected to perform two distinct functions within the closed loop Hatcheck process. Namely, solids retention in the vats and settling in the cone tanks.

By splitting the process and evaluating the individual requirements, we are better able to understand the influences on the process and make a more suitable selection of flocculants.

Furthermore, we are able to note the significant influence that wet waste has on the selection of the polymer and the resultant retention characteristics in the Vat