

규산소다의 MR Ratio에 따른 ONP 탈묵공정의 효율변화

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Abstract

In order to compare the influence of two silicates: the conventional product used in Europe and the silicate used in Korean ONP recycling mill, pilot pulping and flotation trials were performed in CTP. Here

Short analysis has demonstrated that Korean silicate is a more alkaline silicate than the one conventionally used in CTP. This difference has some direct consequences on the behaviour of ink particles during pulping: Alkaline silicate trial corresponds to an increase in ink and speck fragmentation without significant changes in terms of ink detachment. The increase in ink fragmentation is then responsible for a decrease in ink removal efficiency and a decrease in brightness of floated pulp.

Besides, when performing a peroxide bleaching sequence after flotation, even if this P sequence is able to perform an efficient bleaching action on fibre fraction, the too high ink content on floated pulp is responsible for poor brightness of the whole pulp even after bleaching if pulping is performed with alkaline silicate.

Based on pilot trials a solution to improve the quality of the deinked pulp in the case of Korean mill can be suggested as opt to a lower alkaline silicate than the conventional one.

With a view to verify the suggestion, mill trials comparing two silicate; MR ratio 2.45 and 3.26 were made in Korean ONP recycling mill.