

Effect of Cationic Starch and Long Fibered Bamboo Pulp on The Double Fold of Recycled Bagasse Paper

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ABSTRACT

The various qualities of the papers possess the different types of strength properties as per their end use. The double fold is an important property of the paper, which is very important for currency, bond and legal document papers. The bleached bagasse pulp was used by adding strength improving chemicals to develop the surface as well as the other strength properties of the paper sheet on the basis of blending of long fibered pulp into the furnish. To attain the optimized strength properties of the paper produced for the specific use, the blending of long fibered pulp and the addition of strength improving chemicals was carried out on the stoichiometric basis in the furnish for paper making. The bleached bagasse pulp was used for this study. Bagasse is abundantly available in northern India as the waste product from the sugar mills. In this work the improvement in double folds of the recycled bagasse based paper was studied at various beating degree of the pulp samples by the addition of strength improving chemicals like cationic starch, retention aids along with the blending of long fibered bleached bamboo pulp, to produce paper of different strengths for the desired quality. So that a paper maker can select the various parameters of paper making of his own choice to make paper of desired quality on economic basis by adjusting breaking even point of process so that the process may consume minimum time, energy and other inputs. This work is based on multiple studies on different parameters, as no such data was available in this field till date.

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