

# Fractionation of KOCC for Better Utilization-Effect of Screen Design Parameter and Reject Flow Rate on Flocculation Efficiency

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Utilization rate of recycled fibers has been continuously increased for economical and environmental reasons. Recycled papers are major fiber resources for brown grades and newsprints. Since the recycled fibers have disadvantages of high fines content and fiber hornification, it is of great importance to optimize the use of these recycled fibers. OCC (Old Corrugated Containers) is the major fiber source for linerboards and corrugating mediums that require high strength properties. Diverse studies have been carried out to overcome the problems of strength reduction of brown grades when recycled fibers are used as raw materials. Fractionation technology could be considered as one of the available approaches for recycled fibers. In this study, effect of screen basket parameter and operation variable like reject flow rate on fractionation efficiency of KOCC was investigated. Hole-type basket showed higher fractionation index than slot-type and fractionation efficiency of OCC was better using screen with the smaller hole size.

**Keywords:** OCC, recycled fiber, fractionation, screen, multifractor, basket type