

## **A Study on Low Stress Mechanical Properties of Denim Fabric for Hand Evaluation**

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**Abstract :** Denim is widely used by every age of people all over the world. As the use of denim is increasing progressively, till now the handle properties of denim fabric not reported at significant level. In the present study, five commercial denim fabric samples were used. Denim samples, weighing from 8.5oz/sq yds to 14.5 oz/sq yds, were processed as per standard commercial procedure for denim finishing. These finished denim samples were tested on Kawabata Evaluation System(KES) for low stress mechanical properties. The results of KES values are used for calculation of Total Hand value(THV) using equation for summer suit. The obtained result for THV using equation for summer suit for denim samples is in the range from 1.62 to 3.30. These values of low stress mechanical properties values given by KES, can be used to engineer the denim fabric for bottom wear.

**Keywords :** denim, handle value, Kawabata evaluation system, objective evaluation

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