

Smoothness Tester for Textile Sheeting Materials

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Fabric smoothness-roughness is considered as one of the most important factors of clothing comfort. It is also a significant factor in today's consumer buying decision. The buyers always have complaint that the smoothness of fabric is not maintained and varies from one lot to other. Fabric smoothness behaviour is directly linked to the fabric surface friction behaviour. The fabric surface characteristics depend upon yarn characteristics; weave particulars, finishing treatment etc. Ultimately it is finishing process which alters smoothness



behaviour as per the requirement of buyers if other parameters are nearly same. At present, the finisher evaluate the quality of finishes used to impart smoothness to the fabric by rubbing the finished fabric mechanically against itself or feeling it by rubbing between the finger and the thumb which is purely a subjective assessment.

Hence, there is a need to develop a low cost instrument that eliminates the subjective evaluation of fabric smoothness property. Such an instrument will be of help to the finishers to precisely evaluate different kind of finishes which they use in their day-to-day operations.

To assess performance of smoothness property of fabric, NITRA has invented first-of- its-kind instrument to accurate measure smoothness properties of fabrics. The instrument works in a closed chamber. Two versions of instruments are developed as per the need of customers. The first version is available for those customers who are having RH and temperature controlling facility in their laboratory. This version is having no provision for controlling temperature and RH inside the chamber. In the second version, facility of controlling temperature and RH inside the chamber is provided.



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