Fibrous material surface reflectance analysis

Abstract

The light inspection on surface finishing of most product measurement is an important feature in the industries. In this study, a lab module tester for examination on the different type quality of tissue paper quality was done. The light reflectance element was used in this study to differentiate the quality of tissue paper. The laser diode and photodiode was used as manipulator to differentiate the tissue paper and photo detector to detect the reflected light from the surface of tissue paper. The both of laser diode and photodiode were placed in a light box. Different level of intensity reflected from the surface material will have different voltage output. The result showed that the total ply high quality tissue paper has a higher reflected voltage output compared to low quality tissue paper.

Keywords; Fibre Arrangement, Laser Diode, Light Reflectance, Pulp