Abrasion Testing (Taber Abrasion Tester)

This method determines the resistance of surfaces of paper and paperboard to the action of abrasion, either wet or dry, by measuring abrasion loss. Abrasion loss is quite complex and involves many factors including fiber type, material structure, and any additives or bonding agents used. Surface sizing may increase abrasion resistance. By combining abrasion test results with actual end use results, it is possible to predict usefulness and suitability of a product for a particular application.

The instrument consists of a horizontal turntable with a center clamp, which revolves at 70 to 75 rpm, and which holds the test specimen. Two weighted, special abrasive-embedded rubber wheels rotate freely on the surface of the specimen. The specifics of the abrasion test are given in TAPPI test method T476 or ASTM D3884.

