

PCA Score Bend and Opening Force

The PCA Score Bend Tester is the predominant instrument for measuring carton opening force and the force to fold carton flaps and body scores. In addition to measuring peak force we measure spring back, which is the force exerted by the sample after the score has been bent to 90° and has been held there for 20 seconds. Score ratio, is the ratio of the force required to bend a scored paperboard sample to the force required to bend an unscored paperboard sample.

Opening force is the maximum force required to fully “open” a flat folded carton until all four of the carton corners are 90°. A separate test fixture is used to press on opposite sides of the flat-folded carton to open it. Spring back can also be measured as the force exerted by the open carton after it has been held open for 20 seconds.



PCA Score Bend

PCA Opening Force