

No.2015-UL

Ultra-light load folding endurance tester

Acid paper, which has been used widely for about 200 years, tends to become brittle during storage. Not only books in public libraries but also private libraries may suffer from such damage. Currently, neutral paper is manufactured, replacing acid paper. However, at present, there is no tester satisfactory for evaluating deterioration of paper. With the conventional MIT folding tester, tension is too high and wear of the shaft is another problem, making it difficult to assess differences between deteriorated paper specimens. For providing a solution for this problem, we KRK developed a folding tester under an ultra-light loading range, under the direction of Dr. Oe, former professor of Tokyo University of Agriculture and Technology. The basic configuration is the same as that of the conventional MIT folding endurance tester. With this instrument, tension is given by a dead load. It has such a mechanism that shaft friction is completely removed to improve the measurement accuracy.

Folding mechanism: based on the same principle as that of the conventional MIT folding endurance tester, with standard chuck (0.25mm)

Specimen: 15mm wide x 100mm long
Specimen tension loads: 20, 30, 50, 70, 100g

Tensioning: with a weight

Folding angle: $135 \pm 2^\circ$ in each direction

No. of folds: digitally indicated, counted by photoelectric sensor;
The counting and motor are automatically stop at specimen failure.

Power source: 100/110VAC 50/60Hz 1A

