

Fiber Strength Testing System

KFY-1100F

Fibers form the basis of an extensive range of yarns, fabrics and technical textile products. It is essential that elongation and tensile strength is monitored at all stages of production to ensure the base material is suited to the requirements of the finished product. To conduct tests on such fragile material it is necessary that a highly precise delicate strength tester is used, we offer a tester specifically designed for this purpose. It has precision force measurement with a capacity resolution of 500gf x 0.01g and smooth precise crosshead movement with up to 300mm travel x 0.001mm resolution.

Due to the delicate nature of both natural and synthetic fibers very special grips are required. They need to have excellent gripping characteristics and be lightweight yet strong. We have developed pneumatic grips made from special alloy that meet all these requirements. They have hands-free operation which is essential for testing such fine materials and are provided with footswitch controls.



Software

We provide comprehensive software for fiber testing. It has pre-defined test methods to international standards that include all relevant calculations including tensile strength, elongation, and tenacity among others. Includes graphical results, reports analysis and archiving.

Meets all international standards including:

ASTM D 1294 Breaking tenacity of wool fiber bundles

ASTM D 5079 Tensile tests on spun fibers

ASTM D 2524 Tensile tests on wool fiber bundles

ASTM D 3106 Residual deformation of elastomeric fibers

ASTM D 3217 Loop tensile test of spun fibers

ASTM D 1445 Bundle strength of cotton fibers

BS 3411 Tensile properties of individual textiles fibers

BS 4029 Tensile elastic recovery of single fibers and filaments

BS 5116 Breaking tenacity of flat bundles of cotton fibers

BS EN 12751 Sampling of fibers for testing

EN ISO 5079 Tensile tests on spun fibers

EN 13895 Tensile tests on monofilament

ISO 3060 Bundle strength of cotton fibers

DIN 53843-2 Loop tensile tests of spun fiber

Certain tests will require special grips -Details on request



