

Kalpak Instruments & controls offers a proven range of K TEST series Universal Testing Machines designed to suit virtually every force testing application to aid in Production Testing, Quality Assurance Testing, Material & Component Evaluation, Design Verification, Vendor Qualification, Product Performance Validation. Kalpak Universal testing Machines offer a far better accuracy & resolution advantage over mechanical Testers.

Features

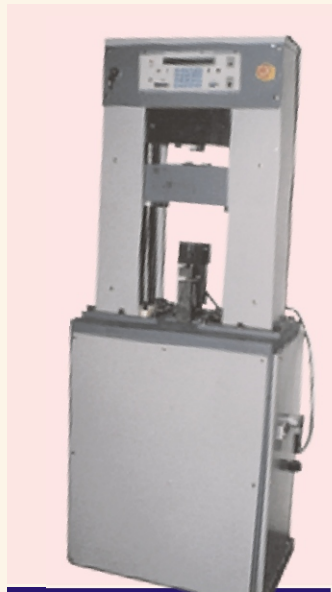
Load Capacity Range	Wide choice from 100 Kg/1000 Kg/10 Ton models depending on application
Mechanical Tests Supported	Tensile, Compression, Tear, Shear, Peel, Puncture, Friction, Flexure, Insertion, Bend, Extraction, Adhesion
Load Accuracy	0.2 % of full scale
Loading Frame	Powder Coated elegant & robust with compact footprint with table mount/Floor mount option
Drive Mechanism	Single / Twin Ball Screw driven by variable speed drive for zero back lash & excellent length accuracy
Testing Area	Dual Space with interchangeable Load Cells
Control Mechanism	Microprocessor based controller with 30 KB inbuilt memory
Safety Features	Emergency Stop Button, Upper & Lower Limit switches with over travel Protection & load cell overload protection
Outputs	RS-232 Serial Port for PC Interface, Parallel Port for Printer Connectivity
Software	Kalpak's Proprietary User friendly Software for Data Analysis
Display	2 Line X 40 character backlit LCD Display
Options	Wedge Grips for Tensile Test, Compression Plates, Fixture for 180 & 90 Degree Peel test & Flexure Tests



KIC-100 CAPACITY 100 Kg



KIC-1000 CAPACITY 1000 Kg



KIC-10 T CAPACITY 10 Tonnes

TYPICAL APPLICATIONS

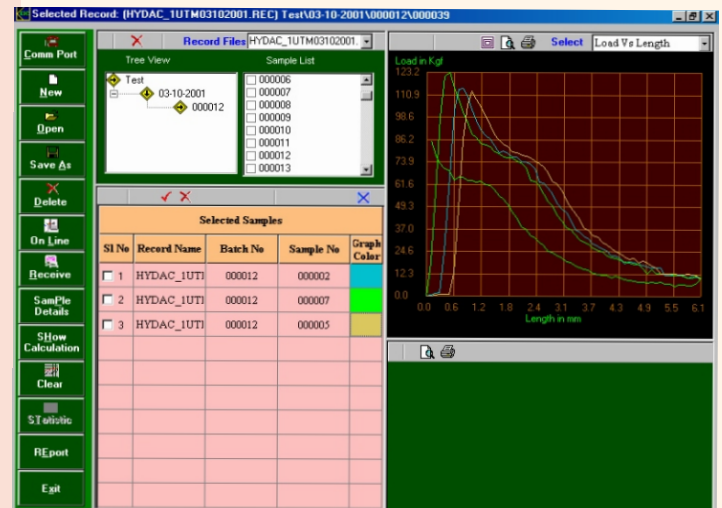
INDUSTRY	APPLICATIONS	KIC-100	KIC-1000	KIC-10 T
Auto Components	Metal, Plastic, Rubber Parts, Auto Electrical & Electronic parts, Springs, Mechanical & Electromechanical Assemblies, Wind Shield Adhesives.	X	X	X
Rubber & Elastomers	Buttons, Bellows, Belts, Metal to Rubber Bonded parts, Bushings, Coated Fabrics, Belts, Extrusions, Flooring, Gaskets, Hoses, Insulated Cables, Liners, Pads, 'O' Rings, Seals, Tapes.....	X	X	X
Plastic	Nylons, Acetals, Thin Films, Sheets, Bottles, Components, Strapping, Pipes..	X	X	X
Metals	Thin Cables, Composite Fibres, Sheets, Rods, Springs, Foils, Cans, Welded Parts, Fasteners.....	X	X	X
Cords & Textiles	Yam, Strings, Threads, Belts, Leather, Ropes, Fabrics....	X	X	X
Non Woven Materials	Felt, Filter Materials, Insulation Fabrics, Fiber Optics....	X	X	X
Packing Materials	Paper, Card Board, Boxes, seals, Labels, Films, Foil bags....	X	X	X
Adhesives	Tapes, Glues, Labels, Pressure Tapes...	X	X	X
Electronics	Wires, Cables, Connectors, Relays, Crimped terminals, Solenoids, Switches, Fiber Optic Cables & Components....	X	X	X
Medical	Tablets, Syringes, Sutures, Catheters, Bandages, Gloves, Threads, Tubal Rings, Lenses, Tissues, Tubings, Needles, Medical Devices....	X	X	X

SPECIFICATIONS

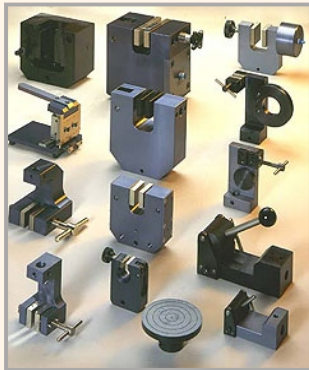
MODEL	KIC-100	KIC-1000	KIC-10T
Maximum capacity	100 Kgf	1000 Kgf	10Tonne
Loading Frame Type	Single Ball Screw Based	Double Ball Screw Based	Double Ball Screw Based
Mounting	Table Top	Table Top/ Free Stand	Free Stand
Loading Test Space	Two	Two	Two
Measuring Range	0-10Kgf/ 0-100Kgf	0-100Kgf/ 0-1000Kgf	0-1Ton/ 0-10Ton
Least count of loading	0.01Kgf / 0.1Kgf	0.1Kgf / 1Kgf	0.001Ton /0.01Ton
Resolution of platen travel	0.1 mm	0.1 mm	0.1 mm
Cross head displacement (mm)	350/500/800/1000	350/500/1000	350/600
Actuator Drive	Stepper/Servo Drive	Stepper/Servo Drive	Servo/VFD
Test Speed (mm/min)	Upto 1000mm /min	Upto 1000mm /min	Upto 100 mm /min
Minimum distance between grips	25 mm	25 mm	25 mm
Maximum distance between grips	800 mm	800 mm	350 mm
Front to back clearance	100mm	Through	Through
Clearance between columns	-- -- --	300/500 mm	300/500 mm
Built in Memory	30 KB	30 KB	30 KB
Supply	230 Vac, 50 Hz, 200VA	230 Vac, 50 Hz, 500VA	230/440Vac, 50 Hz
Size	1200 (H) X 400 (W) X 5 ∅ (D) m m	1450 (H) X 450 (W) X 5 ∅ (D) m m	1750 (H) X 800 (W) X 6 ∅ (D) m m

Kalpak UTM Software

User friendly software in **Windows** environment to fulfil all the basic functions of force and displacement measurement as well as other parameter evaluation such as tensile strength, percentage elongation, proof stress, Young's modulus etc. User friendly screen with complete evaluation and presentation of the characteristic results in graphical and tabular format. Report designer screen for individual layout design of parameters, results, statistics, graphics etc. Easy access of the previous tests taken. User-friendly screen representations for simple modification of symbol toolbars, screen windows, labels, names etc. Comparative study of various test results in graphical format with multiple graph plotting and Bar graphs.



OPTIONAL ACCESSORIES



Fixtures:

Spring Loaded Wedge grip for tensile test, compression plate for compression test. Also fixtures available for peel (90 degree / 180 degree), Flexure, tear, bending test.

Electronic Extensometer

Direct Extension measurement sensors suitable for extension measurement. Reduction in width measurement, deformation measurement in compression and Flexure tests, designed as per requirement.

KALPAK Universal Testing Machine with Hot air circulation chamber

To test at elevated temperatures.
Size : As per the user requirement.
Range : Up to 250 C
Hot air circulation by Blower



KALPAK INSTRUMENTS & CONTROLS

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* Due to continuous development, specifications and features are subject to change without notice. * The dimensions given above are nominal.