We offer a wide range of customized accessories such as Self tightening Wedge Grips, Double Bollard Grips, Eccentric Roller Grips, Screw Clamping Tensile Grips, Bending/ Flexure testing Fixture, Wire Test Grip, Peel Test Furnaces, Compression Plates, Cord Grips, Dumbbell Grip, Rolling Grip for Rubber O’ Ring, Additional Load cells, Extensometers and Environmental Test chambers.

Kalpak UTM- Test-C Software
Kalpak UTM-Test-C Software is designed for user friendly Control of Kalpak Computerized Universal Testing Machine. Online Data Acquisition to PC as well as Data Analysis.

Key Features include :
• Real time display of data, Test curves
• Test results can be generated Providing Accept/ Reject Status as per defined norms.
• Online/ Off line generation of Graphs of Load Versus length, Load versus Displacement, Load Vs Elongation, Stress Vs Strain, with scaling feature.
• Comparative study of various test results using features like Multi Graphs, Bar Graphs.
• Software password protection.
• Easily accessible file system to retrieve and view stored past data.
• Automatic Calculation of Parameters like Percentage Elongation, Peak load, Break load, Displacement, Peak Elongation, Peak tensile Strength, Break tensile strength, Proof stress, Strain, Young’s modulus.

Horizontal Computerized Universal testing Machine KIC-XXX-H

Load Capacity : Up to 20 KN max. (2 Tons)
Load Cell Options : 200N, 2 KN, 5KN, 10 KN, 20 KN
Drive : AC Servo Motor with AC Servo Drive
Optional Features : Ball Screw driven by variable speed drive for zero backlash.

Kalpak’s Windows based software UTM-TEST-C for control of the Machine, Online Data acquisition to PC as well as Data analysis.

www.kalpakpune.com
Tel. : +91 -20 - 24346802
E-mail : kalpakpune@vsnl.com, kalpakpune@gmail.com
AUTOMATIC SPRING TESTER
For Online And Offline Testing Of Springs

<table>
<thead>
<tr>
<th>STM-01</th>
<th>STM-25</th>
<th>STM-300</th>
<th>STM-1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity 1 KG</td>
<td>Capacity 25 KG</td>
<td>Capacity 300 KG</td>
<td>Capacity 1000 KG</td>
</tr>
</tbody>
</table>

Features:

- **Drive Mechanism**: Ball screw driven by variable speed drive for zero backlash and excellent length accuracy.
- **Testing Area**: Dual space i.e. above and below moving crosshead.
- **Output**: RS 232 for PC Communication.
- **Software**: User friendly windows based software for Data storage, retrieval and analysis.
- **Test Capability**: Load test with Length input, Length Test with Load as input Spring rate, Free Length.
- **3 Step Test Method**: Tests load vs Deflection values at 3 programmed heights / loads.
- **Safety**: Emergency Stop, Over Travel Protection, Overload Protection.
- **Accessories**: Grips for tension measurement, Compression Test Fixture, Hooks.
- **Group testing**: Enables user to program for 10 different groups and select the group as per the component to be tested.
- **Programming**: By standard full featured 4 x 4 keyboard.
- **Display**: 20 X 4 character LCD display.
- **Control Mechanism**: Micro Controller based with inbuilt 30 KB memory storage facility.

Kalpak Spring Testing Software:
Kalpak Spring testing Software is Windows based user-friendly software. It enables measurement of load and length as well as calculation of free height, deflection at preset length, Load at preset length, Spring Rate. The Test screen displays test results in tabular and graphical formats. The software enables easy access to past results.

**Computerized Spring Tester**

Control Mechanism and Programming: Through PC

- **Drive Mechanism**: Ball Screws driven by AC servo Motor and AC servo Drive
- **Testing Area**: Dual Space i.e. below and above crosshead
- **Output**: Test Parameters displayed on PC Monitor & reports on printer
- **Software**: Kalpak STM-TEST-C Software for Machine Control, data acquisition and data analysis
- **Test Capability**: Load test with Length input, Length test with Load input, Spring Rate, Free Length
- **5 Step test Method**: Tests Load versus deflection values at five programmed heights/loads
- **Safety**: Emergency Stop, Over Travel Protection, Overload Protection
- **Accessories**: Grips & fixtures for tension & compression springs
- **Group testing**: Unlimited group setting facility

**Torsion Spring Tester**

- **Choice of Models**: Computerized/ Motorized/ Manual
- **Interchangeable Torque cartridges**: Accurate Torque/ Angle Measurement
- **Accuracy**: Better than +/-0.5% of the reading

E-mail: kalpakpune@vsnl.com, kalpakpune@gmail.com

www.kalpakpune.com
Tel. : +91 -20 - 24346802
MICRO LEAK TESTER

For Accurate Objective And Fast Dry Air Leak Testing

Kalpak instruments and Controls offers a complete range of Micro Leak Testers to suit virtually any LEAK TESTING application in Production Testing, Quality Control and R & D applications. KALPAK Leak Tester is a Micro Controller based programmable instrument capable of easy and accurate volume leak testing down to 1 cc / min and measuring test pressures over a wide range from vacuum to 200 Bar using dry air as a source. It can test the products for leakage as per the latest national and international standards.

- Fully Programmable.
- Ease of Operation.
- Faster, repeatable Performance.
- Accept / Reject decision through Audio - Visual Indications.
- Ideal for production line QC / SPC Applications.
- Easy calibration.
- Can be used both for Single station Manual Testing as well as Automated Assembly / Test Systems.
- 16 X 2 LCD Display for Test results and status indication.
- Built in Memory for up to 1000 Test Records.
- RS 232 Interface for Data communication to PC.

We offer a choice from 4 proven Models depending on your allowable leak pressure and test pressure specifications.

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Technology</th>
<th>Test Pressure</th>
<th>Leak Measurements</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>MELD 1000</td>
<td>Vacuum based</td>
<td>Up to 760 mmHg</td>
<td>1 mBar and above</td>
<td>1:2000 parts</td>
</tr>
<tr>
<td>MELD 2000</td>
<td>Pressure Decay</td>
<td>Up to 200 Bar</td>
<td>1 mBar and above</td>
<td>1:2000 parts</td>
</tr>
<tr>
<td>MELD 3000</td>
<td>Differential Pressure / Vacuum</td>
<td>1 Bar to 20 Bar</td>
<td>0.01 mBar / 0.1 mm WC and above</td>
<td>1:20000 parts</td>
</tr>
<tr>
<td>MELD 4000</td>
<td>Mass Flow based</td>
<td>Up to 100 Bar</td>
<td>0.1 cc / min. and above</td>
<td>1:10000 parts</td>
</tr>
</tbody>
</table>

Leak Test Software

Kalpak Leak Test Software is a powerful Windows based user friendly software specially designed for the user of Kalpak Leak Tester. The test data is acquired through the serial PC Port and logged on to provide tabular display. The table indicates product details like Product and Customer Code number as also Test Parameters like Fill Time, Settle Time, Test Time, Exhaust Time, Delay Set and Group Set. The Data Table provides details such as Test Date & Time, Set Test Pressure, Set Pressure Difference, Actual leak and Accept / Reject Status.

- Features
  - User friendly screen with complete evaluation & presentation of test results in Tabular formats. Easy to load, Easy to operate, No special training required. Online or Receive mode options Report screen is used to make data entry and to generate reports, Layout design of parameters, results can be pre-programmed as per user requirements Easy access to results of past test data.

Customized Leak Test Systems

We offer Complete turnkey Leak Test Solutions using our engineering expertise in application of Leak detection Techniques. We have in house capabilities for Electrical and Electronic Design, PLC programming, Customized SPC and Data Analysis Software development, Design & development of Customized Manual/Pneumatic or hydraulic Clamping Test fixtures to support our turn key solutions. Above photos shall provide you with an insight into the range of Customized Leak Test Systems developed by us:

E-mail : kalpakpune@vsnl.com, kalpakpune@gmail.com
www.kalpakpune.com
Tel. : +91 - 20 - 24346802
Features

- **Range:**
  - Choice of Models:
  - Operating Test Modes:

- **Applications:**
  - Food, Packing, Pharma & Cosmetics
  - Tensile/Compression, Peel, Flexure, Shear, Puncture, Bend

- **Accessories:**
  - Chip Fixture
  - Cone Probes
  - Compression
  - Ball Probes
  - Slid Fixtures
  - Peel Fixtures

- **Computerized Uni-axial Compression Testers**
  - **Features:**
    - Range: KTT-XXX-C up to 1 KN Capacity
    - KUCT-XXX-C up to 200 KN Capacity

Kalpak Special Purpose Testing Systems

Our multi disciplinary capabilities enable us to understand customer's requirement in totality and offer them customized solutions to their testing problems as well as upgrading their test capabilities by offering features such as automated testing, data acquisition and analysis. We offer both Micro controller based as well as PC based Data acquisition and analysis systems.

Other Applications covered:

**Leak testing applications**
- PC Based Automatic Test & Data Acquisition System for Steering Gears
- Welding Torch leakage test Set up
- PC Based Vane Pump Test Rig
- Common Leakage Test Rig for Cooling & Intake Pipe (Hot water based)
- Automated Leakage test Rig for PTO & FWE casting
- Automated Leakage test Rig Rear & Intermediate Housing casting
- Automated Leakage testing for TEV Body Casting
- SPM for Leak Testing for Air-cooled & Water cooled Cylinder Head and Water cooled Cylinder Barrel
- Leak Testing System for Body Leak Testing of Crank Case
- Leakage test System for Bulk Connector
- Piston Valve Clearance Test Rig

**Other Applications**
- Friction Measurement Set up with PC interface & PC software
- Torch Switch test set up with PC interface & PC software.

**Force/ Torque/ Displacement Testing applications**
- Clutch Plate Torque Test Rig
- Clutch Plate Drag Test Rig
- Clutch Cover Clamp Load/ Release Test Rig
- Acceptance Test Rig for Mann Clutch Cover Assembly
- JASO Test Rig for Command and Control Cables
- Bendix Gear Test Rig
- Muscle Strength Comparator
- Egg Shell Strength Tester
- Food Texture Strength Tester

**Endurance/ Performance test Rigs**
- ACG/ Magneto Performance Test Rig
- ACG & Alternator testing Rig
- Refrigerator Bulb Endurance test Rig
- Automobile Horn Endurance test Rig
- Winker Relay Endurance test Rig
- Switch Endurance Test Rig
- Torsional Vibration Endurance Test

Leak testing applications
- VOC / Formaldehyde Release test Chamber
- Endurance Test Machine for Fan/ Blower
- Gear Shifter Assembly Endurance test Rig
- Jounce & Squirm Test System for Automobile Seats
- Custom Turnkey Leak Test System

KALPAK INSTRUMENTS & CONTROLS

16, N.R. Industrial Estate, Hingane Khurd, Vitthalwadi, Pune - 411 051. INDIA
Tel : +91 20 2434 6363, 2434 6802, Fax : +91 20 2434 6363

E-mail : kalpakpune@vsnl.com, kalpakpune@gmail.com  Website : www.kalpakpune.com

In view of Technological developments and our policy of continuous improvements in our products, Kalpak Instruments and Controls reserves the right to change Specifications, Dimensions and Features without notice.