

# MICRO VISION

Leading Manufacturer in Testing Industry

An ISO 9000 Company



Since 1992



TENSILE  
TESTING  
MACHINES

[www.microvision.co.in](http://www.microvision.co.in)  
E-mail - [info@microvision.co.in](mailto:info@microvision.co.in)



**Typical Testing Applications :**

Typical Testing Applications :	Main Features
Plastics	Tensile Strength
Packaging	Flexural Strength
Metal	Tensile Modulus
Electronics	Flexural Modulus
Medical Device	Peeling Strength
Manufacturing	Bonding Strength
Automotive	Tear Strength
Machinery & Manufacturing	Elongation
Textiles	Compressive Strength

**Specifications :**

Load capacity	: Different capacity model from 10kg (100N) to 20 tonnes (200kN)
Load accuracy	: Load accuracy as per depend on to capacity of load cell
Mechanical structure	: High grade steel gives unmatched accuracy and precision. High axial stiffness reduces machine compliance while increasing speed and displacement accuracy when specimen under load.
Cross head driven	: Cross head driven by conventional screw and nut, guided & supported by hardened, ground finished and hard chrome plated tie rods. Gliding on linear bearings allowing the cross head motion. Ball screw driven mechanism is also available on demand.
Travelling length	: Maximum travel from grip to grip is 800mm at extension least count of 0.01mm. Higher length is also available on demand (optional).
Speed selection	: Speed controlling by variable speed drive and speed range is from 1mm/min to 200mm/min. or 1mm/min to 500mm/min on demand. For economy application variable speed AC drives is used and in most accuracy application servo control system is also available on demand.
Controlling device	: Microprocessor based user's friendly with mark identification key operating controlling system.
PC Interface facility & software	: Machines have serial output for direct connection to computers for testing with windows™ software. Profile based software to start the test quicker, and run test fast. Gives full control of test parameters with auto set-up of the tester. Full test is analysis with statistical and graphical print-out. A report is enhancement package for long term statistics and control charts with exports in Excel™ data sheet format.
Grips	: Choose from a wide range of grips and fixtures for tension, compression, flexural, shear, peel, puncture and product testing.
Result and parameters	: Max Load, Max Elongation, Yield force, Yield Elongation, Break force break elongation, GPD, Denier other customized at least two direct result value facility in corporate with the controlling unit.
Mode of test	: Tensile as well as compression test facility available, mode selection via software. No need to change mode every times before starting the new test.
Safety features	: Over load protection, reverse direction load protection, Maximum elongation protection for load cell. Both the side limit switches fitted as an additional facility.



**Optional Features :**

- Signature Calibration
- Overload Protection
- Digital Elongation

**Grippers**



Grip for Thread / Wire



Pneumatic Grips



# UNIVERSAL TESTING MACHINES

## Specifications

### Hardware

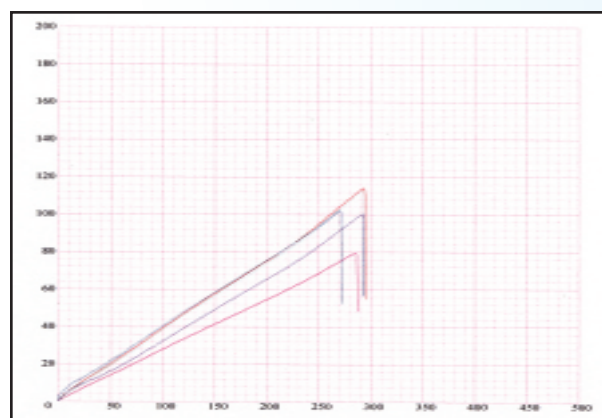
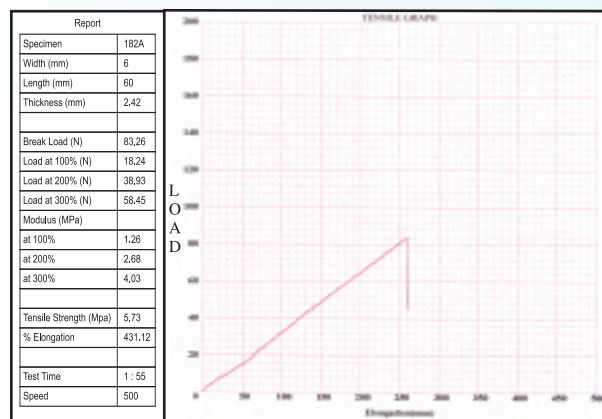
<b>Load Capacity</b>	10kN
<b>Force Ranges</b>	1 N to 10kN
<b>Force Accuracy</b>	+/- 0.5% of applied load @ 5-100% of capacity
<b>Crosshead Speeds</b>	0.1 to 1000 mm/min (0.004 to 40 in/min)
<b>Speed Precision</b>	+/- 0.5% from 0.1 to 500 mm/min (0.004 to 20 in/min) +/- 1.0 % from 500 to 1000 mm/min (20 to 40 in/min)
<b>High Speed Return</b>	1000 mm/min (40 in/min) maximum
<b>Crosshead Speed/Force Rating</b>	0.1 to 400 mm/min (0.004 to 16 in/min) up to 10kN 400 to 1000 mm/min (16 to 40 in/min) up to 5kN
<b>Testing Width</b>	450 mm (18.5 in)
<b>Crosshead Traverse</b>	1100 mm (43.3 in)
<b>Crosshead Position</b>	+/- 1 mm of set position

### Control

<b>Electrical</b>	200/220/240/260VAC +/- 10%, 50 +/- 3 HZ, 5 amp Single Phase
<b>Air Pressure for Pneumatic Grips</b>	5 kg/cm <sup>2</sup> , (500 KPa), (75 psi) clean compressed air
<b>Dimensions</b>	Width 92 cm (36.2 in), Height 240 cm (94.5 in), Depth 100 cm (39.4 in) Not including personal computer
<b>Installed Area</b>	22 x 122 cm (48 x 48 in) included seated operator
<b>Weight</b>	350 kg Approx

### Software

<b>Data Sampling Rate</b>	20 ms
<b>Crosshead Speed Units</b>	mm/min
<b>Stress Units</b>	kPa, MPa, GPa, kgf/cm <sup>2</sup> , lbf/in <sup>2</sup> , psi
<b>Strain Units</b>	Actual or percent
<b>Time Units</b>	Min/sec or decimal min
<b>Gauge Length</b>	Any length mm, cm or in
<b>Specimen Dimensions</b>	Area, width or thickness using preset constants or operator entry, auto entry option for width and/or thickness selected from mean, median, highest or lowest value reported from as many as 6 measurements
<b>Crosshead Speed</b>	Increments of 1 mm/min
<b>Crosshead Position</b>	Increments of 1 mm
<b>Crosshead Limits</b>	Preset or selected at time of test
<b>Device Verification</b>	Load cell
<b>Printer Output</b>	Report heading, sampling, specimen details
<b>Operating System</b>	Windows
<b>Operating Mode</b>	Keyboard or mouse



#### Disclaimer of warranty and liability

The information provided herein is believed to be true and correct but no warranty is given to its completeness, accuracy or fitness for use for any particular purpose. Micro Vision shall not be liable for any loss or damage arising from the failure to achieve particular result by the application of any route, method or process that is recommended herein.



EXTENSO METER



SLAB MOULD PRESS



UNIVERSAL TENSILE TESTER



Since 1992

# Microvision Engineering Pvt. Ltd.

1568, H.S.I.I.D.C. Industrial Estate Rai Sonapat-131001 Haryana India

Website : [www.microvision.co.in](http://www.microvision.co.in), Email : [info@microvision.co.in](mailto:info@microvision.co.in)

Ph. : 0130-6534565, Telefax : 0130-2242266

For Details contact : Mr. Rajeev Sharma - Mob : +91-9812041166



An ISO 9001:2008 Company

