



MACH-1™

Micromechanical Systems

The Mach-1™ is a micromechanical testing system commercially available since 1999. This high resolution system is used in various testing configurations for evaluating the mechanical properties of tissues and materials. Due to its small size and high resolution, the Mach-1™ offers versatility in numerous biomaterial and biological applications. Each Mach-1™ system is equipped with a computer and easy-to-use software for specific applications. Two classes of Mach-1™ are currently available:



Technical Specifications

'V' Class MACH-1™	Compression/Tension and Shear	Torsion
Travel Range	100 mm	360°
Resolution	0.5 µm or 0.1 µm	0.0005°
Uni-directional Repeatability	1.5 µm or 0.4 µm	0.002°
Maximum Velocity	50 mm/s	80°/s
Load Capacity	±50 N	±1 N•m

'V' Class Mach-1™ - The Best Value

The 'V' Class Mach-1™ is renowned for the **value** it offers in combining cost-effectiveness and high performance. The 'V' Class was designed for multiple axis testing. Compression, tension, shear, torsion - the 'V' Class can apply them all in various modes including dynamic, static, creep and waveform loading.

'V' Class Models

This multiple axis testing system is offered in 4 models:

- Compression (V500c)
- Compression/shear (V500cs)
- Compression/torsion (V500ct)
- Compression/shear/torsion (V500cst)

Characteristics

- Designed for multiple axis loading
- Excellent for large displacements
- Fits into a standard tissue culture incubator



Mach-1™ Model V500c with Manual Angular Control and Manual x-y Displacements

Technical Specifications

'A' Class MACH-1™	A400
Travel Range	30 mm
Resolution	0.05 µm
Bi-directional Repeatability	±0.2 µm
Maximum Velocity	10 mm/s
Load Capacity	±40 N

'A' Class Mach-1™ - Unprecedented Accuracy



Mach-1™ Model A400

The 'A' Class Mach-1™ offers the **accuracy** needed to conduct highest precision testing. The 'A' Class is top-of-the-line and performs compression and tension testing in various modes including dynamic, static, creep and waveform loading.

Characteristics

- Highest precision
- Excellent for small displacements
- Fits into a standard tissue culture incubator

- On-site Installation & Training
- Customer Satisfaction Plan
- Warranty Included

12-month hardware warranty and free software upgrades

Contact Us

- For Additional Information
- To Discuss your Application
- For a Quotation



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