

UniTest

Universal Testing Platform

ASTM D1894, ASTM D2266, ASTM D2509, ASTM D2596
ASTM D2714, ASTM D2782, ASTM D2783, ASTM D2981
ASTM D3702, ASTM D3704, ASTM D4172, ASTM D5183
ASTM D5706, ASTM D5707, ASTM D6079, ASTM D6425
ASTM D7217, ASTM D7420, ASTM D7421, ASTM D7594
ASTM G119, ASTM G132, ASTM G133, ASTM G174
ASTM G181, ASTM G203, ASTM G204, ASTM G206
ASTM G77, ASTM G99, DIN 50324, DIN 51834

EASY TO CONFIGURE, IN JUST 4 EASY STEPS

Fast interchangeability, a vast testing ecosystem and many modules to choose from is what makes the UNITEST so powerful and adaptable. Our platform design is modular and open. It comes standard with a synchronized dual drive system and an embedded high precision Y stage. High precision position sensors are embedded in both axes. Its electronics is physically separated for excellent isolation high fidelity data acquisition capabilities.

SENSING AND MEASUREMENT

The UNITEST can be equipped with a variety of loading and sensing heads that are quickly interchangeable. These heads are available with force measurement capabilities in 1, 2, 3 and 6 axis. These load cells can be strain gauged, capacitive or piezoelectric. Our patented multi-axis load sensor offers unparalleled performance in a compact form factor. Another one of our patented sensor is designed to fully mechanically decouple forces for unparalleled performance.

MULTI-SCALE TESTING READY

By interchanging load heads, the UNITEST platforms testing and measurement capabilities can range from nano scale to macro scales. Our load head options are our patented MicroForce load head for multi scale testing, DecaForce Load Head Series, HectoForce Load Head Series and the KiloForce Load Head Series. Our specially developed BioForce Load Head which was purpose built for biotribological applications is also available.



MOTION. ANY WAY YOU WANT IT.

Precise and controlled movements are fundamental to many mechanical tests and all tribological tests. The UNITEST offers a wide variety of motion modules, so you can adapt your test system to match your specific movement requirements. Motion modules are all software controlled and programmable. Some of our standard motion modules include Linear Micro Drive, Linear Macro Drive, Linear High Performance Drive and Rotary Drives. Other specialized drives are also available. These drives cover motion requirements for a range of applications from pin on disk testing and piston and cylinder liner testing to fretting wear tests.

TESTING ENVIRONMENTS? ITS ALL HERE.

Low temperature testing options for ambient to -120 Deg C (-184 F) and high temperature options for ambient to 1200 deg C (2200 F) are available for testing temperature dependent properties of materials.

DIGITAL MICROSCOPY

Using our plug and play digital microscopy module, you can now image samples with complete flexibility. With built-in Brightfield Microscopy and Darkfield Microscopy modes, the digital microscopy module can be mounted on our unique moving beam and a large platform that can accommodate small to large sample sizes with ease.

