

SpectraQuest introduces the Kinematics and Dynamics of Machines (KDT) Series

- **Uniquely designed apparatus to enhance learning**
- **Visually illustrates the kinematics and dynamics principles of a typical machine**
- **Integrated turnkey systems with complete set of instrumentation, sensors and software**
- **Bench top devices for hands-on controlled experiments and demonstrations**
- **Validate theoretical concepts by comparing experimental results with the computer simulation of the theory**
- **Can be incorporated with the current curriculum**
- **Various application specific option kits and combination packages are available**



Press Release, November 5, 2010

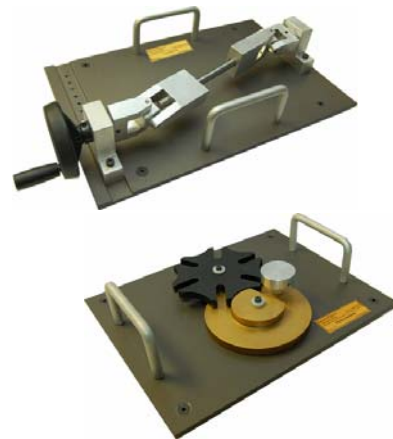
SpectraQuest introduces a series of devices specifically focused to enhance learning of kinematics and dynamics principles of a typical machine. Each apparatus is designed to visually illustrate sometimes elusive concepts to expedite learning. The KDT clearly brings classical theory to life by providing a convenient mean to validate predictions and to demonstrate the influence of parameter changes on system response visually. We also offer a set of instrumentations including sensors, data acquisition hardware, analysis and simulation software, and training manual to go along with applicable product. The associated equations are solved graphically and are animated in the software. A set of instrumentation is provided with each apparatus that allows performing actual experiments and verifying those results with the simulation, thereby reinforcing the learning difficult principles. It is an ideal tool for kinematics and dynamics courses both at under graduate and graduate levels. These devices are grouped as Kinematics and Dynamics according to the applications and associated demonstration.

The following devices are offered in the Kinematics series:

- Geneva Mechanism
- Ratchet Pawl Mechanism
- Scotch Yoke Mechanism
- Universal Joint Demonstrator
- Slider Crank Quick Return Mechanism
- Four Bar Linkage
- Cam/Follower Mechanism

The following devices are offered in the Dynamics series:

- Gyroscope
- Centrifugal Force Demonstrator
- Flywheel Apparatus
- Centrifugal Governor



It also comes with a training book and complete operations manual & videos to assist with exercises and learning. The KDT is available in various combination packages providing all the components necessary for a turnkey training system. Please download the brochure at <http://www.spectraquest.com/resources/downloads/> for more details.

About SpectraQuest

SpectraQuest is a leading developer and manufacturer of turnkey systems and products for enhancing reliability of rotating and reciprocating machinery. These products are ideal platform for research and education in machine fault diagnosis/prognosis, teaching dynamics and vibration courses, and wind turbine drivetrain studies. The distinguishing feature of SpectraQuest is a wide variety of Machinery Fault Simulators and Custom Designed Test Rigs which are sold in over forty five countries around the world. Further information is available at <http://www.spectraquest.com/>.

Contact info:

*SpectraQuest Inc.
8201 Hermitage Road,
Richmond, VA 23228
<http://www.spectraquest.com>
Tel: 804-261-3300 Fax: 804-261-3303
Email: info@spectraquest.com*