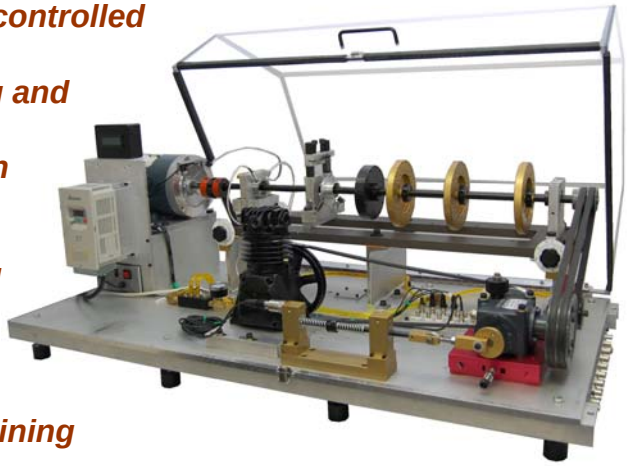
SpectraQuest introduces the Machinery Fault Simulator Magnum (MFS-MG)

- ***An innovative tool for learning machinery diagnosis and rotor dynamics***
- ***Simple methods for introducing controlled and calibrated machine faults.***
- ***Learn machine condition monitoring and predictive maintenance***
- ***Different bearing clearance selection and controllable lubrication oil pressure for rotor dynamics study***
- ***Enables in-depth study of oil whirl and whip in fluid film bearings***
- ***Smart design makes the simulator robust and easy to use***
- ***Bench top machine for hands-on training and skill sharpening***



- ***Over forty application specific optional kits are available for detailed in-depth investigation of specific vibration phenomena and machinery faults***
- ***Available in various packages to fit customer requirements***

Press Release, February 26, 2007

SpectraQuest introduces Machinery Fault Simulator Magnum (MFS-MG), an innovative upgrade of the Machinery Fault Simulator (MFS), to study the signatures of common machinery faults as well as dynamic behavior for rotor supported by oil lubricated journal bearings. Condition-based predictive maintenance (PdM) is a reliable, cost-effective technique for monitoring and diagnosing machinery faults before they irreversibly damage your machinery and cause breakdowns that threaten to undermine product quality, delivery and overall customer service. The success of any PdM program ultimately depends on how accurately and easily the vibration spectra, waveforms and phase relationships can be analyzed and understood. The MFS is a perfect tool to enhance your understanding of predictive maintenance and of machinery fault signatures. Various faults can be introduced either individually or jointly in a totally controlled environment, making the MFS the best tool available for learning machinery diagnosis. Also, its oil lubricating system allows configuring the machine using either fluid-film bearings or rolling element bearings. In addition, it provides different bearing clearance selection and controllable lubrication oil pressure for rotor dynamics whirl and whip phenomena. Its extended shaft length provides more space for overhung rotors, and is more suitable for studies in resonance and fluid-induced instability issues. The MFS-MG combines all the capabilities of the MFS and MFS-RDS, making it the most comprehensive simulator that we offer.

With the MFS-MG, controlled experiments and offline training can be performed to understand the real world vibration spectra and interaction between dynamic stiffness, resonance and speed of a machine. This allows the technicians and maintenance professionals to develop expertise to diagnose industrial machinery problems, without adversely affecting plant production and profits. The most comprehensive device of its kind on the market, the MFS-MG meets the needs of a broad range of vibration analysts, from novice to experienced. Moreover, Oil whirl and whip are important instability phenomena associated with rotors supported fluid

film bearings. With proper selection of the bearing load (the number of rotor disk), bearing clearance (the selection of bearing cartridge) and oil pressure (adjusting the oil supply valve), the oil whirl and whip can be simulated using the MFS-MG. It is an effective tool for introducing the concepts and methodologies of predictive maintenance and design considerations to engineering students.

The MFS-MG is designed to be both versatile and easy to operate. The simulator is constructed with an extended rotor base, fluid film bearings, oil distribution and pressure adjustment system, split bracket bearing housing, a sliding shaft, rotors with split collar ends, couplings, pulleys, a multiple belt tensioning and gearbox mounting mechanism, compressors, and reciprocating system; all of which are designed to be easily removed and replaced between various experiments. Over forty application specific option kits are available for in-depth studies of rotor dynamics and machinery faults. It comes with a training book and complete operations manual & videos to assist with exercises and learning. From basic to comprehensive, various packages are designed to provide you with all the tools needed to study rotor dynamics and vibration signatures of different machine malfunctions. 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