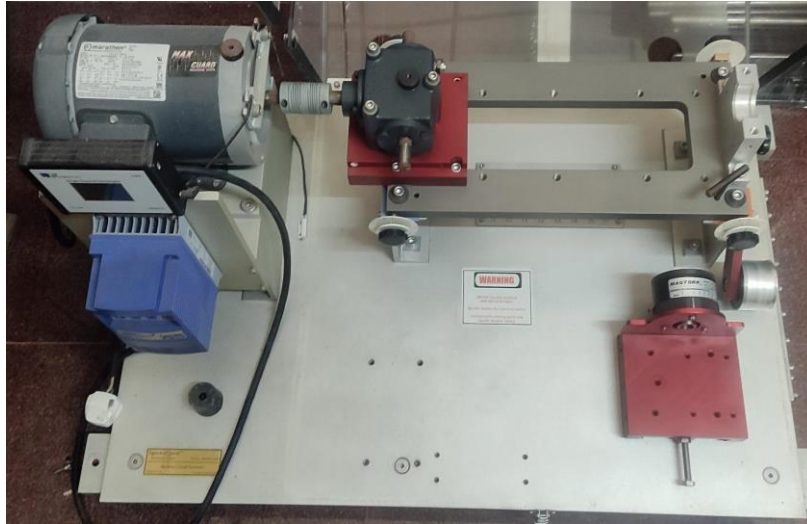


MACHINERY FAULT SIMULATOR

Photo of Instrument:



<b>Instrument Name</b>	Machinery Fault Simulator								
<b>Instrument Model &amp; Serial No.</b>	MFS2010-PK3								
<b>Instrument Make</b>	SpectraQuest								
<b>Category of Instrument</b>	Characterization and Testing								
<b>Description of Instrument</b>	Machinery Fault Simulator is used for studying signatures of common machinery faults. The system reflects a modular design that provides versatility, operational simplicity and robustness. Each component of the simulator is machined to high tolerances so it can be operated without any significant conflicting vibrations so that user can introduce various faults either individually or jointly in a totally controlled environment.								
<b>Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)</b>	<table border="1"> <tr> <td>RPM Range</td> <td>0 to 6000 rpm</td> </tr> <tr> <td>Shaft Diameter</td> <td>3/4" diameter; TPG Steel</td> </tr> <tr> <td>Rotors</td> <td>Two 6" aluminium with 36 threaded holes</td> </tr> <tr> <td>Instrumentation Connectors</td> <td>16 BNC connectors</td> </tr> </table>	RPM Range	0 to 6000 rpm	Shaft Diameter	3/4" diameter; TPG Steel	Rotors	Two 6" aluminium with 36 threaded holes	Instrumentation Connectors	16 BNC connectors
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Shaft Diameter	3/4" diameter; TPG Steel								
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Instrumentation Connectors	16 BNC connectors								

## Department of Mechanical Engineering, NIT Calicut

<b>Application of Instrument</b> (Limited to Major 4 or 5)	1)Balance Training 2)Shaft Alignment Training 3)Coupling Studies 4)Alignment System Assessment
<b>Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.)</b> <b>Guidelines for Sample Submission – User Instructions</b>	Shafts Sleeves Couplers Sleeve Bearing Gearbox studies
<b>Types of Analysis / Testing</b>	Fault Detection Tests
<b>Faculty In-Charge Name / Email / Contact</b>	Dr. Ashesh Saha <a href="mailto:ashesh@nitc.ac.in">ashesh@nitc.ac.in</a> 9451545350  Dr. Amit Kumar Rai <a href="mailto:amitrai@nitc.ac.in">amitrai@nitc.ac.in</a> 7355542803
<b>Technical Staff Name / Email / Contact</b>	Shibin <a href="mailto:shibin@nitc.ac.in">shibin@nitc.ac.in</a> 9746493487
<b>Location of Instrument</b>	Dynamics and Vibration Laboratory (Room No. 118)
<b>Other Details</b>	

### User Charges (per hour/ per person):

S.NO.	Type of Analysis / Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National R&D Labs	Industry
1		200	200	300	300	300

Note: Consumables and any other expenditure charges will be as per requirement, if any.

### Slot Booking and Payment Work Flow: