**REPEATED LOAD TEST SET-UP**

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|  | **Name of the equipment:** REPEATED LOAD TEST SET-UP**Make & Model:**SPRANKTRONOICS**I-Stem Registration ID-** 3220870 **Category of Instrument**Characterization and Testing**Types of Analysis / Testing**Fatigue Test**Application:** Determine material fatigue and evaluate structural performance**Description of Instrument**The Repeated Load Fatigue Testing Machine is a device used for testing the fatigue of materials such as concrete, bitumen, and soil. |

**Booking Details**

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| **Book through I-STEM:**<https://www.istem.gov.in/>**Slot Booking Link**[I-STEM Slot Booking link for External User](https://www.istem.gov.in/equipment-info/20870/Repeated-Load-Test) | **Booking available for**Internal and External Both**Requisition form for**[Internals](https://randc.nitc.ac.in/pdf/instruments/civil/CED-REQUISITION_FORM_Internal.pdf)[Externals](https://randc.nitc.ac.in/pdf/instruments/civil/CED-REQUISITION_FORM_Internal.pdf) |

**Contact Details**

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| **Features of the equipment*** Controlled and repeated loads
* Measurement of deformation and strain
* Monitoring of material or structural response
* Simulation of various loading conditions
 | **Unique features/Measurement capabilities, if any*** Deformation and strain measurement
* Load control (cyclic and dynamic loading)
* Material response monitoring
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| **Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)*** Load Range: 0-5T
* Frequency Range: 1-10Hz
* Hydraulic Actuation: Haver Sine Wave Static Ramp Control
* Auto Computer Control: Load and deformation control
* Rate of Load Frequency Operation: Maximum 5 cycles/second
* Servo Control: Total system is servo-controlled
 | **Measurement/Sample specifications:** * Material Type: Various materials such as soils, flexible pavements, and more.
* Sample Size: Varies depending on the test setup and application.
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**Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions**

**Features, Working Principle and Specifications**

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| * Sample Type: Representative samples of the material or structure to be tested.
* Sample Size: Typically, 1-5 samples, depending on the test setup and application.
* Preparation: Samples should be in a stable, undisturbed state.
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**User Charges Rs. (GST Extra)**

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| **Internal** | **External Academic Institutes** | **National R&D Lab** | **Industry** |
| 500/- per hour | 500/- per hour | 1500/- per hour | 3000/- per hour |