**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 |
| **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. |

**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. |

**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 |