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| **HEATED ASPHALT ROLLER COMPACTOR** | **Name of the equipment:**  Heated Asphalt Roller Compactor  **Make & Model:**  B039 Roller Compactor  **I-Stem Registration ID-**  **—-----------**  **Category of Instrument**  Sample preparation  **Types of Analysis / Testing**  Sample Preparation  **Application:**  Highway Engineers  Bitumen Manufacturers  Road Construction Companies  **Description of Instrument**  It is used to produce representative sample slabs of several dimensions of bituminous mixtures laid and compacted on site.. |

**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 | **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  **[Contact Details](https://randc.nitc.ac.in/pdf/instruments/civil/CED-REQUISITION_FORM_Internal.pdf)** |

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**Features, Working Principle and Specifications**

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| **Features of the equipment**   * Electro-mechanical system: No air or hydraulic pressure * Programmable compaction: Adjustable compaction cycles * Heating and temperature control: Maintains optimal sample workability | **Unique features/Measurement capabilities, if any**   * Heating of the Segment Roller: Temperature control from room to 180°C * Programmable Compaction: Compaction cycles based on load or deformation values * Sample Preparation: Uniform density and dimensions, with cored or cut off samples for further testing |
| **Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)**   * Control Unit (B039-02): Thermoregulator circuit, temperature probe (up to 180°C) * Sliding Cart Heating Option (B039-03): Thermoregulated circuit with temperature probe * Segmented Roller: Alternated rotation, programmable for specific load or deformation values | **Measurement/Sample specifications:**   * Ability to produce samples with uniform density and dimensions * Sample slabs can be cored or cut off to obtain cylinders and beams for various tests, such as:   + Bending fatigue   + Indirect tensile   + Static and dynamic creep   + Stiffness   + 4-point tests |

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| * Sample type: Bituminous mixtures   **Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions**   * Preparation: Representative sample slabs of various dimensions * State: Moulded and compacted samples * Quantity: Varies depending on test requirements   **User Charges Rs. (GST Extra)** |

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| **Internal** | **External Academic Institutes** | **National R&D Lab** | **Industry** |
| 1500/- per test | 2000/- per test | 2500/- per test | 4500/- per test |