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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 EngineersBitumen ManufacturersRoad 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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| **Faculty In-charge:** Dr. M. Sivakumar **Email ID:**sivakumarm@nitc.ac.in**Phone number:** 04952286232 | **Technical staffs:**Chandni P Rchandnipr@nitc.ac.inAjin Das C Kajindasck@nitc.ac.in Abhiraj A Rabhirajar@nitc.ac.in  | **Department**CED**Office Email ID**cedoffice@nitc.ac.in**Location**Pavement Engineering Laboratory**Lab Phone No**0495-2286243 |

**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
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| **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 |