**Booking Details**

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|  | **Variable compression ratio multifuel engine test rig**  **Name of the equipment:**  Variable compression ratio multifuel engine test rig  **Make & Model:**  Kirloskar, Engine No. 18.1324/1300209  **I-Stem Registration ID-**  **3224886**  **Category of Instrument**  Heat Engines  **Types of Analysis / Testing**  Performance (Load Test), Combustion Analysis Charts (P-Ɵ, P-V etc), Heat Balance and Emission Test for constant or variable Compression Ratio.  **Application:**  Diesel and alternative liquid fuels (like bio-diesel)  **Description of Instrument**  The engine is a single cylinder, four stroke, water cooled with maximum 5 kW output at 1500 RPM at normal compression ratio. The compression ratio can be varied from 14:1 to 18:1 for diesel/ bio-diesel operation. |

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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/24886/Variable-Compression-Ratio-Multifuel-Engine-Test-Rig) | **Booking available for**  Internal and External Both  **Requisition form for**  Internals  Externals |

**Contact Details**

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**Features, Working Principle and Specifications**

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| **Features of the equipment**   * The engine is a single cylinder, four stroke, water cooled with maximum 5 kW output at 1500 RPM at normal compression ratio. | **Unique features/Measurement capabilities, if any**   * The compression ratio can be varied from 14:1 to 18:1 for diesel/ bio-diesel operation. |
| **Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)**   |  |  | | --- | --- | | Bore | 87.5 mm | | Stroke | 110 mm | | Displacement | 661 cc | | Normal Compression Ratio | 17.5:1 | | Dynamometer | Eddy Current | | **Measurement/Sample specifications:**   * Diesel and alternative liquid fuels (like bio-diesel) |

**Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions**

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| * Quantity: As per the type of test. * Sample should be in sealed condition with proper labelling. |

**User Charges Rs. (GST Extra)**

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| **Internal** | **External Academic Institutes** | **National R&D Lab** | **Industry** |
| Rs. 500/ sample | Rs. 1000/ sample + GST | Rs. 3000/ sample + GST | Rs. 3000/ sample + GST |