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| **Combustion Laboratory Unit with oil Burner** | **Name of the equipment:**  Combustion Laboratory Unit with oil Burner  **Make & Model:**  PA HILTON, UK & C492 & c492B  **I-Stem Registration ID-**  **3224911**  **Category of Instrument**  Advanced Educational training system  **Types of Analysis / Testing**  Combustion Efficiency Analysis  Air-Fuel Ratio and Excess Air calculation  Comparison of Fuel Types  **Application:**  Combustion Efficiency Studies  Flue Gas Analysis  **Description of Instrument**  The Combustion Laboratory Unit C492 by P.A. Hilton is an advanced training system designed to provide hands-on experience in combustion processes using both gas and oil burners. This unit is widely utilized in educational settings for studying combustion efficiency, burner operation and energy conversion. |

**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/24911/Combustion-Laboratory-Unit-with-Oil-Burner) | **Booking available for**  Internal and External Both  **Requisition form for**  [Internals](https://randc.nitc.ac.in/pdf/instruments/med/20.%20Internal.pdf)  [Externals](https://randc.nitc.ac.in/pdf/instruments/med/20.%20External.pdf) |

**Contact Details**

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**Features, Working Principle and Specifications**

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| **Features of the equipment**   * Dual-Fuel Capability * Water-Cooled stainless steel combustion chamber * Integrated Flue Gas Analyzer | **Unique features/Measurement capabilities, if any**   * Real-Time visual flame analysis through quartz windows * Built in safety systems |
| **Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)**   * Integrated Instrumentation * Designed with safety, the unit includes flame monitoring sensors that shut off the fuel supply in the event of flame failure * Optional High-Specification Gas Analyzer * Special safety features * Dual-Fuel Capability | **Measurement/Sample specifications:**   * Compatible Fuels: Kerosene, gas oil or similar light fuel oils. * Compatible with natural gas of LPG (Propane/butane) |

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

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

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| **Test Details** | **Internal** | **External Academic Institutes** | **National R&D Lab** | **Industry** |
| NA | NA | NA | NA | NA |
| NA | NA | NA | NA | NA |