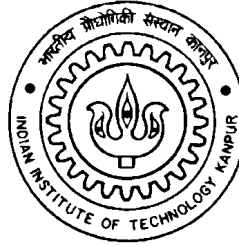


Dr. S. Sarkar
Professor

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Date: 09.09.2013

**Enquiry letter for purchase of Computerized VCR Engine Test Setup
(Preferably with multi-fuel option)**

Enquiry No: ME/SS/2013/004

Sub: Quotation for purchase of Computerized VCR Engine Test Setup

Sir / Madam,

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover. We would like to purchase a Computerized Variable Compression Ratio (VCR) Engine Test Setup for UG teaching preferably with multi-fuel option. Tentative specifications are given below:

Engine: Single cylinder, 4 stroke, water cooled, preferably 600 to 800 cc, 3 to 5 KW.

Dynamometer: Type eddy current, water cooled, with loading unit

The engine and the dynamometer should be housed on the same base.

It should be provided with necessary instruments for combustion pressure, crank-angle, airflow, fuel flow, temperatures and load measurements along with cooling water temperature measurement. These signals should be interfaced to computer through high speed data acquisition device.

The set up should enable to carry out engine performance study including brake power, indicated power, frictional power, BMEP, IMEP, brake thermal efficiency, indicated thermal efficiency, Mechanical efficiency, volumetric efficiency, specific fuel consumption, Air fuel ratio, heat balance and combustion analysis apart from P θ - PV plots. Engine's CR should be changed without stopping the engine. It should be provided with electric starting arrangement.

Note: If the multi-fuel option is quoted, the setup should enable study of VCR engine performance for both Diesel and Petrol mode and study of ECU programming.

Terms and condition:-

- 1. Sealed Quotation with manuals must reach to the undersigned on or before 18.09.2013, 5.00PM**
- 2. Prices should be FOR IIT Kanpur**
- 3. Please give best educational discount**

Sincerely,

(SUBRATASARKAR)