

# ATL-3240

## VARIABLE COMPRESSION RATIO



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited**

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## ►► **COMPUTERIZED VARIABLE COMPRESSION RATIO MULTIFUEL DIESEL ENGINE TEST RIG**

### **Description:**

The setup consists of single cylinder, four stroke, Diesel engine connected to eddy current type dynamometer for loading. It is provided with necessary instruments for combustion pressure and crank-angle measurements. These signals are interfaced to computer through engine indicator. Provision is also made for interfacing airflow, fuel flow, temperatures and load measurement. The set up has stand-alone panel box consisting of air box, fuel tank, manometer, fuel measuring unit, transmitters for air and fuel flow measurements, process indicator and engine indicator. Rota meters are provided for cooling water and calorimeter water flow measurement. The setup enables study of engine performance for brake power, indicated power, frictional power, bmep, imep, brake thermal efficiency, indicated thermal efficiency, Mechanical efficiency, volumetric efficiency, specific fuel consumption, A/F ratio and heat balance. Lab view based Engine Performance Analysis software package "Engine soft" is provided for on line performance evaluation.

### ►► **Features:**

- All the datas are indicating on the digital indicators with analogue output interface to the computer.
- Online measurements and performance analysis
- Performance plots and tabulated results
- Variable Compression Ratio Engine
- Data logging, editing, printing and export
- Configurable graphs
- IP, IMEP, FP indication

### ►► **Range of Experiments:**

- Study of engine performance (Manual mode)
- Study of engine performance (Computerised mode)
- Study of pressure volume plot and indicated power

### ►► **Utilities Required :**

#### **Electric supply**

230 +/- 10 VAC, 50 Hz, 1 phase

#### **Computer**

IBM compatible with standard configuration

#### **Water supply**

Continuous, clean and soft water supply @ 5000 LPH, at 10 m. head. Provide tap with 1" BSP size connection



<b>Load indicator</b>	Digital, Range 0-50 Kg, Supply 230VAC
<b>fuel injection</b>	fuel injection pressure, injection timing
<b>compression ratio</b>	compression ratio
<b>Temperature indicator</b>	Digital Multipoint, 6 points, I/P thermocouples
<b>Load sensor</b>	Load cell, type strain gauge, range 0-50 Kg
<b>Fuel flow transmitter</b>	DP transmitter, Range 0-500 mm WC
<b>Air flow transmitter</b>	Pressure transmitter, Range (-) 250 mm WC
<b>Software</b>	“Enginesoft” Engine performance analysis software : Lab view software or VB based /card
<b>Rotameter</b>	Engine cooling 100-1000 LPH; Calorimeter 25-250 LPH
<b>Pump</b>	Type Mon block
<b>Overall dimensions</b>	W 1500 x D 2000 x H 1050 mm

## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

**HPLC Servicing** :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

**Trainings** :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

**AMC's/CMC** :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

**Validations** :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

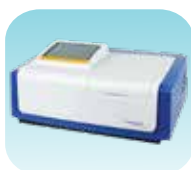
**Instruments** :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



## About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufacturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

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Infra FTIR



Optima Gas  
Chromatograph  
3007



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Flash  
Chromatograph



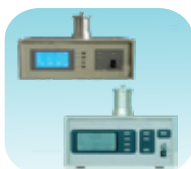
Atomic Absorption  
Spectrophotometer



Liquid Particle  
Counter



Optical Emission  
Spectrophotometer



DSC/TGA



Semi Auto Bio  
Chemistry Analyzer



HEMA 2062  
Hematology  
Analyzer



Micro Plate  
Reader/Washer



URINOVA 2800  
Urine Analyzer



Total Organic  
Carbon 3800



Fully Automated  
CLIA



NOVA-2100  
Chemistry Analyzer



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RTPCR



TOC  
Analyzer



Laser Particle  
Size Analyzer



Ion Chromatograph



Water purification  
system



## Regulatory compliances



## Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



**Analytical**  
**Foundation**

1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at [Info@analyticalfoundation.org](mailto:Info@analyticalfoundation.org)

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

## Reach us @



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