

राजीव गाँधी पेट्रोलियम प्रौद्योगिकी संस्थान
(संसद के अधिनियम के अधीन स्थापित राष्ट्रीय महत्व का एक संस्थान)
Rajiv Gandhi Institute of Petroleum Technology
(An Institution of National Importance established under an Act of Parliament)
Jais, Amethi- 229304, UP, India. Website: www.rgipt.ac.in

QUOTATION ENQUIRY

Ref. No.: RGIPT/JAIS/PEGE/ME-UG/2024-25/01

Dated: 5.11.2024

Last Date and time for the quote: 15.11.2024 till 17:00 hours in the Office of the Department of Department of Petroleum Engineering & Geoengineering, 5th Floor, AB-1, RGIPT, Jais, UP-229304.

Dear Sir/Madam,

Please submit your lowest quotation for supplying the under mentioned item. Quotation must reach us before the date marked above and should contain the following information:

1. Clearly mention the date of validity of offer.
2. Kindly clearly mention your E-mail ID and Mobile number.
3. Kindly mention appropriate GST % as applicable for supplying of Goods & Services.
4. Please mention your GST registration number and PAN in the quotation.
5. Conditions of supply and terms of payment shall be clearly mentioned in the quotation.

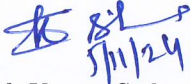
Quotation must be sent in **sealed envelope** with word "QUOTATION for "Mechanical Engineering Lab" and addressed to Office of the Department of Petroleum Engineering & Geoengineering, 5th Floor, AB-1, RGIPT, Jais-229304 (UP). Our reference number and last date as given above should be clearly marked over it. (Technical Specification attached as annexure-1

List of Equipment's

1	Impact Of Jet On Vanes	6	Losses Due To Friction In Pipe Lines
2	Free & Forced Vortex Apparatus	7	Model Of Lancashire Boiler
3	Model Of Babcock And Wilcox Boiler	8	Model Of Locomotive Boiler
4	Steam Engine Model With A Boiler	9	Static Surface Friction Apparatus
5	Gas Turbines		

Note:

- All charges (packing, freight, installation, and commissioning) including GST should be mentioned in detail.
- Company must provide a copy of PAN and GST Registration, and Cancelled Cheque.


Prof. Satish Kumar Sinha
Chairman, DPC
Department of Petroleum Engineering & Geoengineering,
RGIPT, Jais

Technical Specification

1. Impact of Jet on Vanes:-

Specifications	
Target	Flat Plate and Hemispherical Cup, 1 No. each
Nozzle	Material Brass
Jet Enclosure	Made of Acrylic
Counter weights	One set of dead weights
Water Circulation	FHP Pump, Standard make
Flow Measurement	Using Measuring Tank with piezometer, Capacity 25 Litres
Sump Tank	Capacity 50 Litres
Stop watch	Electronic
Control Panel Comprises of Standard make On/Off Switch, Mains Indicator, etc.	
Tanks will be made of Stainless Steel	
An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus	
The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint	

2. Losses Due to Friction in Pipe Lines

Specifications	
Pipe Test Section	(i) Dia 1/2", Pr. Taping Length: 1m, Material G.I. (ii) Dia 3/4", Pr. Taping Length: 1.25m, Material G.I.
Water Circulation	1/2 HP Pump, Crompton/Standard make.
Flow Measurement	Using Measuring Tank with Piezometer, Capacity 25 Litres.
Sump Tank	Capacity 50 Litres.
Stop Watch	Electronic.
Pressure measurement	Pressurized Differential Pressure Manometer
Control Panel Comprises of Standard make On/Off Switch, Mains Indicator, etc.	
Tanks will be made of Stainless Steel.	
An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus.	
The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint.	



3. Free & Forced Vortex Apparatus

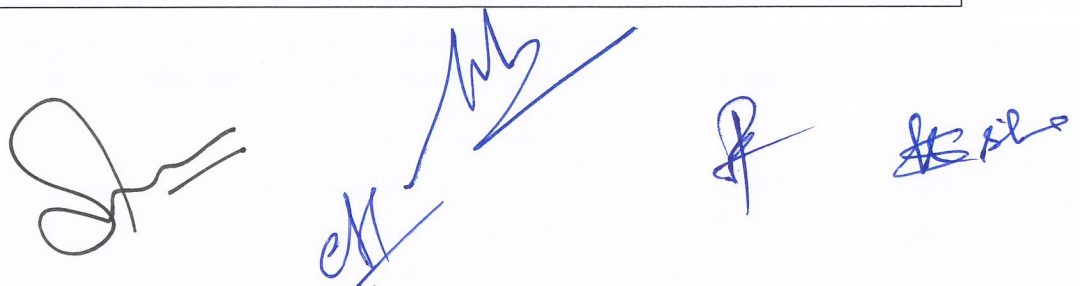
Specifications	
Cylinder	MOC Acrylic, Dia. 200 mm, Height 200 mm one each for Free Vortex and Forced Vortex.
Motor	Variable Speed DC Motor of Compatible capacity.
Probe	MOC Stainless Steel
Cross Slide	With scale reading in cm.
Pump	1/2 HP, Crompton/Standard make.
Orifices	3 Nos. of different openings.
Control Panel Comprises of Speed Control Unit : Thyristor Controlled Drive Digital RPM Indicator : 0-9999 RPM Standard make On/Off Switch, Mains Indicator etc.	
Tanks will be made of Stainless Steel.	
An ENGLISH instruction manual consisting of experimental procedures, block diagram etc. will be provided along with the Apparatus.	
The whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint.	

4. MODEL OF LANCASHIRE BOILER

Specifications
Steel Shell is of about 75 cm long and 20 cm in diameter. Two large tubes known as fire tubes pass from end to end. At the front end from each tube a furnace fire grating is placed and a door is hinged. Brick work, seating and flues are shown in wood work. The boiler is complete with dead weight safety valve, manhole, mud hole, check valve high steam and low water safety valve, steam and water gauges, regulating draught doors, dampers with counter weights and chimney. The model is approximately one meter in length, 37 cm in breadth and 45 cm high. It is specially made

5. MODEL OF BABCOCK AND WILCOX BOILER

Specifications
It is a water tube boiler. The shell is 15 cm in diameter and 75 cm in length and is fitted with a super heater and with inclined water tubes over the furnace connected with headers. The model is fitted with stop valve, safety valve, water gauge, steam gauge, man hole, mud hole, regulating draught door, damper with counter weight and chimney. Seating and brick work are shown in wood work. The model is approximately one meter in length 28 cm in breadth and 77 cm high.



6. MODEL OF LOCOMOTIVE BOILER

Specifications

The model is especially designed to understand the working of a locomotive steam boiler. The steel shell is of about 20 cm Dia and 60 cm. in length. The fire box is provided with a door and grate. The dissected barrel shows it's inside view. Hot gases after passing through the fire tubes enter the smoke box with a door, puzzle and the blast pipe. The model is approximately 100 cm. in length, 45 cm high and 35 cm. in breadth and is complete with whistle, steam dome, safety valve, check valve, steam regulator water and steam gauges.

7. Steam Engine Model with a Boiler

Specifications

Operation of a commercial steam engine is well illustrated with this working model. The small size unit is provided with a horizontal boiler with a whistle, safety valve, electrically heating arrangement and with a small dynamo model.

8. Static Surface Friction Apparatus

Specifications

When a body slides upon another body, the property by virtue of which the motion of one relative to the other is related is called friction. The frictional force is directly proportional to the normal reaction Suppose a body of weight is to be lifted by inclined plane & this requires effort when this load just move upward a frictional force acts downward which oppose its motion.

Things Provided	<ul style="list-style-type: none">• Inclined plane apparatus• Sliding boxes with 8 different surfaces• Pan• Thread
Structural Specifications	<ul style="list-style-type: none">• Consisting of Slider box surface length is 1m.• A wooden made apparatus

9. Gas Turbines

Specifications

The Section cut model is constructed of light and strong metal showing Air intake, Axial flow double stage compressor. Fuel supply, Combustion Chamber, Turbine Rotor, Jet Thrust, Exhaust etc. Complete on metal base. Size 45x20x25 cm. Approximately.

