

SPICES BOARD

(Ministry of Commerce and Industry, Govt of India)
Sugandha Bhavan, NH By-pass, Palarivattom, Kochi -682 025.

Qlty/3(1)08/

15.06.09

QUOTATION NOTICE

Sealed competitive quotations in the name Secretary, Spices Board, Sugandha Bhavan, Cochin; are invited from the suppliers of reputed brands of the following **Lab Equipments** required for the Board's Lab at **Kochi** and for the Lab being set up at **Guntur (Andhra Pradesh)**.

The rate for the equipments with all necessary accessories and spares as detailed in the specification should give break up of **cost, excise duty/sales tax/VAT, packing and forwarding charges, freight, insurance etc (as applicable)**. If the rates quoted do not include sales tax/excise duty or any other taxes/charges, the same should be specifically stated.

Sl. No	ITEM**	Nos.	MAIN REQUIREMENTS *
1	Rotary Evaporator with Vacuum Pump &Chiller [Guntur Lab]	1 No	Solvent recovery up to 100% *
2	Electronic Analytical Balance with 5-Digit Precision [Guntur Lab]	1No	Readability of 0.00001 g (0.01 mg) Maximum Capacity at least 200g *
3	Electronic Analytical Balance with 3-Digit Precision [Kochi Lab]	5 Nos	Readability of 0.001 g (0.01). Maximum Capacity at least 350g *
4	Electronic Analytical Balance with 2-Digit Precision [Guntur Lab]	1 No	Readability of 0.01 g . Maximum Capacity at least 500g *
5	Stereoscopic Microscope [Guntur Lab]	1 No	Binocular tube. Magnification-Min 30 X *
6	OIML Class Calibration Weights [Kochi Lab]	1 Set.	E2-Class weight set 1mg – 200g, certified by NPL
*For detailed specification see annexure – 1(Encl.)			
**Instrument must be accompanied with instrument manual & calibration certificate by NABL accredited agency where relevant			

The cover containing the quotation should be super scribed “**Quotation for Lab Equipments for Guntur ((Andhra Pradesh). Lab due by 25.06.09 ”** and should be **send** to **The Secretary, Spices Board, Sugandha Bhavan, NH By-pass, P.B No.2277, Palarivattom, Kochi -682 025.**

Late quotations will not be accepted. The quotations will be opened in the presence of bidders or their authorized representative who may be present at the venue and time.

Last date & time for the receipt of quotations	25.06.09 (5 PM)
Date & time of opening the quotations	26.06.09(11AM) (next day)
EMD	2% of quoted value by DD drawn in favour of Secretary, Spices Board payable at Cochin , wherever the cost of the equipment is above Rupees One Lakh.

Quotation should give detailed specifications of equipments on offer, brand name, terms & conditions of supply, guarantee/warranty period(preferably two years), after sales service details, delivery period, the customer list including name of contact persons with telephone no./E-Mail ID etc. A statement of compliance with specifications should accompany the quotation. Onsite training of personnel if required, is to be conducted immediately after installation of the equipment.

The quotations should be submitted at its lowest rate along with statement of compliance with technical specification. Clarification if any, can be had from Senior Scientist(QC),Quality Evaluation Laboratory, Spices Board or e-mail to ssqc@indianspices.com

The delivery of the equipment shall be made at Board's Lab at Guntur,(Andhra Pradesh) within 30 days on receipt of the order. If however ,it is not possible to effect delivery by the due date, the date by which the delivery of the equipment can be effected may also be stated. 0-Full payment will be made only after satisfactory installation of the equipment at the site.

The Spices Board reserves the right to accept the quotation in full or in part or to reject without assigning any reason.

Secretary

Encl. annexure-No.I

ANNEXURE- No. I.

I. Specification for Rotary Evaporator system Vacuum Pump & Chiller:

Sl.No.	Our Requirements	Qty
I	<u>Rotary Evaporator:</u> Motor rotation speed from 20 to 250 rpm, rotation speed setting – scale.	1Set
	Bath Temperature from ambient to 180°C. Bath suitable for oil & water bath.	
	Heating bath material should be high-alloy stainless steel and should possess non-slip safety handles for safe and easy transport.	
	Angle of evaporation flask (Variable)	
	Condenser should be vertical double spiral for efficient cooling	
	Manual and smooth lift mechanism for lift operation with lift lock. Automatic lifting of the flask during power failure	
	Operating panels should be located in front of the evaporator	
	System should be capable of 50ml to 2L evaporation	
	All necessary attachments including evaporation and collection flasks in this volume range should be quoted.	
	Evaporating Flasks of the following capacities – 1L, 500ml, 250ml, 100ml & 50ml. Receiving Flasks of the following capacities – 1L, 500ml, 250ml, 100ml & 50ml.	
	Digital display should include rotation speed, vacuum [pressure], vapour temperature and bath temperature	
	The controller should include Vacuum control also the vacuum should be programmable and controlled in ramps.	
	Solvent recovery up to 100%	
II	<u>VACUUMPUMP:</u> Two-stage pump resistant against aggressive chemical material	
	The diaphragm made of Teflon and rubber	
	Pump need to have high suction capacity of 1.8m ³ /hr. The optimum suction capacity to obtain ultimate vacuum of 9mbar.	
	Pump should have high capacity (preferably to deliver vacuum to 2 or 3 rotary evaporator	

	and vacuum pump.	
	Two meter tubing and flask holder should be provided.	
III	<u>Circulating chiller (Cryo-circulator):</u> Chiller should specifically be designed the to match bench rotary evaporator and vacuum pump.	
	Should be with very short tubes from the chiller to rotary evaporator and vacuum pump.	
	Operating temperature range from –20 deg C to +30 deg C	
	Controller Temperature accuracy of +/-0.5 degree C	
	Maximum coolant charge of 2.5L to be used.	
	The system should be compatible with coolants like water, alcohol and their mixture.	
IV	<u>General Requirements:</u> System should be very safe for operation	
	Electric requirement as per local standards.	
V	Complete warranty information should be provided.	
VI	User's list for quoted model in India with complete contact information should be provided.	
VII	Any other accessory needed for operation of the machine should be quoted.	
VIII	All spares required for trouble free operation of the machine for two years , including all items requiring frequent replacement, should be quoted.	
IX	Compliance statement with each point in the specification should be provided compulsorily.	

II. Specification for Electronic with 5-Digit Precision

Sl. No.	Item	Specifications
1.	Electronic Analytical Balance	<ol style="list-style-type: none">1. Readability of 0.00001 g. (0.01 mg).2. Compact design with sturdy chemical resistant body.3. Weighing pan diameter at least 100 mm.4. Calibration of a frequently used weighing range using external weights.5. Digital panel with backlit display.6. Overload protection feature.7. Calibration certificate with F1 / E2 class calibration weights traceable to NPL should be provided with the balance.8. The supplier should have the capability to provide calibration of the balance once in six months with NPL certified weights. Full details of this service should be provided.9. One spare power adapter should be provided for each balance.10. Full operation manual should be provided.11. User list for the quoted model in India with full contact information should be provided.12. Name and details of service center nearest to Guntur (AP) should be provided.13. Full warranty information should be provided.14. Internal adjustment weight for precise result.15. Maximum Capacity at least 200g.16. Capability of displaying weighing result in different units.17. Features like Taring and % weighing feature should be available.18. Repeatability at least 0.03 mg.19. Standard RS232c interface to connect to external PC.20. Hook for weighing below the balance.21. Glass draft shield with sliding doors, with free access from right , left and above.22. A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.

III. Specifications for Electronic Balance with 3 digit precision - 5 NOS

Specification

A **heavy duty, high precision electronic balance** for use in a chemical laboratory with the following features should be quoted.

Number of balances required : **Five**

- 1 Sturdy, chemical resistant body.
- 2 Measuring range 0.001g - 350g
- 3 Accuracy $\pm 0.001g$
- 4 **Pan diameter at least 150 mm**
- 5 Self calibration facility should be available
- 6 Digital panel with backlit display
- 7 Facility for multiple weighing units and computer interfacing
- 8 Glass draft shields which opens at the sides
- 9 Rechargeable battery backup
- 10 One spare rechargeable battery should be supplied with each balance.
- 11 Overload protection features
- 12 **Calibration certificate with F1 / E2 class calibration weights traceable to NPL should be provided with the balance**
The supplier should have the capability to provide calibration of the balance
- 13 **once in six months** with NPL certified weights. Full details of this service should be provided.
- 14 One spare power adapter should be provided for **each** balance
- 15 Full operation manual should be provided
- 16 Users list for the **quoted model** in India with full **contact information** should be provided
- 17 Name and details of service center nearest to Kochi should be provided
- 18 Full warranty information should be provided.
- 19 **A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.**

IV. Specification for Electronic Balance with 2-Digit Precision

Sl. No.	Item	Specifications
1.	Electronic Analytical Balance	<ol style="list-style-type: none">1. Readability of 0.01 g.2. Compact design, with high quality chemical resistant body.3. Weighing pan diameter at least 180-200mm.4. Calibration using external weights.5. Digital panel with backlit display.6. Internal adjustment weight for precise results.7. Maximum Capacity at least 200g.8. Taring facility.9. Repeatability at least 0.01 mg.10. Glass draft shield with sliding doors, with free access from right, left and above11. Overload protection feature.12. Calibration certificate with FI / E2 class calibration weights traceable to NPL should be provided with the balance.13. The supplier should have the capability to provide calibration of the balance once in six months with NPL certified weights. Full details of this service should be provided.14. One spare power adapter should be provided for each balance.15. Full operation manual should be provided.16. User list for the quoted model in India with full contact information should be provided.17. Name and details of service center nearest to Guntur (AP) should be provided.18. Full warranty information should be provided.19. A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.

V. Specification for Stereoscopic Microscope

1. Binocular tube
2. Magnification-Min 30X
3. Stereomicroscope carried for column 32 with coarse and fine focusing
4. Illuminator
5. Zoom control
6. Focusing control
7. Planchromat S1.0 X objective.
8. Two spare lamps should be quoted.
9. All other accessories required for trouble free operation of the unit for a period of two years, including items requiring frequent replacement, should be quoted.
10. Full warranty information and users list with contact information for the quoted model in India should be provided.
11. **A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.**

VI. Specifications for OIML Class Calibration Weights

OIML Class Calibration weights with the following specifications should be quoted:

Specification

1 E2-class weight set 1mg - 200g

2 Denominations

Should be supplied in high quality wooden box, with cleaning brush and forceps
denominations in mg

1x1mg, 2x2mg, 1x5g, 1x10mg, 2x20mg, 1x50mg, 1x100mg, 2x200mg, 1x500mg
denominations in g

1x1g, 2x2g, 1x5g, 1x10g, 2x20g, 1x50g, 1x100g, 2x200g

3 Material Specification

High quality special steel

Non magnetizable

Density 739/cm

Polished and resistant to corrosion

4 The weights are to be supplied with complete calibration certificate from NPL.

5 Full warranty information should be provided.

6 A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.