

**Office of the Dean Research and Development
Indian Institute of Engineering Science & Technology (IEST), Shibpur
Howrah-711 103**

Project Code: DRC/DST/CEGESS/HS/022/16-17

**Centre of Excellence for Green Energy & Sensor Systems
Indian Institute of Engineering Science & Technology (IEST), Shibpur
Howrah-711 103**

Ref.: Advt. No. CGE 1349, Dated: 15.02.2018

Notice Inviting Quotations

Sealed quotations are invited for the supply of

Item 1. *ULTRASONIC CLEANER.*

Item 2. Filtration & Circulation System for Ultrasonic Cleaner.

as per the following technical specification. The technical specification can be downloaded from the website. The document can be also obtained from the Centre of Excellence for Green Energy & Sensor Systems (**Contact: Prof. H. Saha**) between 10.00 a.m. and 6.00 p.m. on all working days. The invitation is valid for 7 working days from the date of publication of this notice.

Dean (R & D)

(A. Code DRC-T129/17-18)

SECTION I: TERMS & CONDITIONS

1. The last date of receipt of quotation is valid **for 7 working days** from the date of publication of this notice. Quotations received later will not be entertained under any circumstances.
2. Potential supplier are to submit the quotations in Sealed Cover to the Centre of Excellence for Green Energy & Sensor Systems in the following address:

**Prof. H. Saha
CEGESS
IEST, Shibpur
Howrah-711103, India**

3. Item name must be mentioned on cover.
4. The price quoted should be inclusive of all Taxes in INR, duties and levies. Inclusion of Tax/Levy at a latter stage will not be accepted. Freight, Insurance charges should be clearly indicated. If GST is chargeable then price quoted should be inclusive of GST in INR (Only for Indian Manufacturers).
5. Vendor should have proven track record of supply in IEST, IIT, NIT, IISc.
6. Commercial Papers duly signed & must be attached.
7. For Foreign Suppliers : Price should be include Packing + Insurance + Shipping + Custom Duty + Custom Clearance upto IEST, Shibpur. Custom duty and Clearance charges will not be paid by IEST, Shibpur.

SECTION II: TECHNICAL SPECIFICATIONS :-

Item 1.

ULTRASONIC CLEANER :

TECHNICAL PARAMETERS:

1. TANK WORKING CAPACITY WILL BE 84 LTR.
2. TANK SIZE WILL BE 900 mm X 100 mm X 950 mm (L X W X H)
3. MATERIAL OF CONSTRUCTION OF TANK WILL BE SS316, 16 GAUGE
4. ENCLOSURE WILL BE MADE FROM M.S. ANGLE & CRCA SHEET METAL DULY POWEDER COATED.
5. LID AND FIXURES WILL BE MADE FROM SS 304.
6. ULTRASONIC FREQUENCY WILL BE 33 ± 3 KHz.
7. ULTRASONIC POWER WILL BE 1000 W TO ENSURE OPTIMUM LEVEL OF POWER.
8. PZT CRYSTAL WILL BE FITTED FROM THE BACK SIDE OF THE TANK FOR EFFICIENT CLEANING.
9. S.S. IMMERSEABLE HEATER OF 3 KW (02 Nos.) WILL BE PROVIDED FOR EFFECTIVE HEATING.
10. INPUT SUPPLY WILL BE 415 V, A.C. TPN.
11. INLET & DRAINAGE VALVE WILL BE PROVIDED WITH ½" BSP S. S. BALL VALVES.
12. ULTRASONIC GENERATOR WILL BE AUTO TUNED SOLID STATE MODULE BASED.
13. MICROPROCESSOR BASED DIGITAL TIMER (0-99.9 min) WILL BE PROVIDED.
14. PULSE SWEEP POWER FOR UNIFORM DISTRIBUTION OF POWER.
15. MICROPROCESSOR BASED DIGITAL TEMPERATURE CONTROLLER WILL BE PROVIDED.
16. PULSATION WILL BE 10% TO 100% IN 1 SEC. TO ACHIEVE EFFEVTIVE CLEANING.

Item 2. Technical Specification of Filtration & Circulation System for Ultrasonic Cleaner :

TECHNICAL PARAMETERS :

1. FILTER HOUSING WILL BE BAG TYPE.
2. FILTER HOUSING WILL BE MADE FROM STAINLESS STEEL.
3. ALL THE PLUMBLING WILL BE MADE FROM GOOD MATERIAL.
4. A STRAINER WILL BE FITTED FOR GROSS FILTRATION.
5. A 0.5 H.P. STAINLESS STEEL PUMP WILL BE USED FOR CIRCULATION OF SOLVENT.
6. DEGREE OF FILTRATION WILL BE 5 MICRON.
7. FILTER CLOTH CAN BE REPLACED EASILY.