INDIAN INSTITUTE OF TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING

Enquiry letter for purchase of Atomizer

Sub: Quotation for supply, installation, commissioning and training of Atomizer

Reference: IITK/CE/2017/1202 **Dated: June 21, 2017**

Sir / Madam,

Purpose: Aerosol generation from aqueous solutions or organic solvents (like DMSO, Methanol, PSL) for instrument calibration and/or chemical analysis of dissolved particles in various instruments

Flow rate:

Minimum: Should be between 100-300 l/h (Litre per hour), but wider ranged atomizers can also be considered. Accurate control over flow rate, particles should be delivered with sufficient pressure to be transported through narrow steel/rubber tubes to different instruments for analysis.

Desirable: Precise control of flow rate, preferably with a least count of 20 l/h, accurate liquid to air ratio (volume basis) for different flow rates.

Number and Size distribution of generated particles

Minimum: Mode of the distribution should be in submicron range (~ 400 nm); atomizers with a wider distribution but covering submicron range can also be considered. Particle concentration generated should be sufficient (around #10^5/cc or more).

Fill volume:

Minimum: As low as possible; atomizer should be able to atomize the aerosols efficiently from a very low volume of liquid.

Desirable: Minimum fill volume of liquid should be around 5-10 ml. Maximum can be 80-100 ml.

Compressed air supply

Minimum: Built in compressor is required, but either HEPA filter is already fitted inside the atomizer or provisions should be there that if necessary it can be equipped with a HEPA/Zero air supply to generate particle free compressed air

Desirable: A pressure gauge to monitor the supply pressure and already inbuilt/fitted HEPA filter for particle free compressed air supply

Form factor and material

Atomizer should be portable, lightweight and made of durable material

Operating hours:

Minimum: Should be able to run continuously for long hours without any pressure variations and monitoring.

Desirable: Should be able to work continuously unattended until filled liquid gets completely exhausted

Mass flow rate

Minimum: Should be sufficient to generate high particle concentration and continuous operation

Desirable: An indicator for volume or mass of filled liquid consumed during atomization

Accessories:

All the accessories (including power supply unit suitable for Indian scenario) required for smooth operation of the atomizer should be supplied along with the atomizer in excess.

Warranty and service:

Should be at least for 2 years including spares. The supplier should have an excellent customer service team that can provide onsite service if needed.

The quotation should have the following details:

1. Indicate item-wise pricing on FOB/CIF basis
2. Technical specifications in detail
3. Technical bid and Price bid to be sealed separately (Two-bid system)
4. Warranty period
5. User list of similar system supplied in India.
6. Maximum educational discount considering end use for research and teaching
7. Payment terms
8. Proprietary Certificate, if applicable
9. Support/Service capability in INDIA
10. Comprehensive AMC prices should be quoted separately
11. In case of CIP/CIF price, insurance from your w/h to our w/h in IIT Kanpur must be arranged by the bidder/supplier
12. Any other relevant details

Terms and condition:-

1. Sealed Quotation must reach the undersigned on or **before June 30, 2017, extended up to July 7, 2017**
2. Prices should be in USD and CIF Delhi.
3. Our Institute is partially exempted from custom duty.

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