

## 4i-Laboratory

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Enquiry no.: 4i-Lab/2013-02/05

Enquiry Date: 8/03/2013

Closing date: 14/03/2013

Sealed quotations should reach the undersigned latest by 12.00 noon on March 14, 2013 for a **Semi-Anechoic Chamber** (also referred as Chamber going forward) with the following specifications. **You may also quote the cost of a fully anechoic chamber as an option.** For construction of the chamber, a room of size 6.5 m X 6.5 m X 4.3 m will be provided. Two walls of this room will be 4-6 inches thick, while other two walls will be structural in nature.

- *The Chamber should be certified to meet ISO 3745 criteria. Testing and verification of the Chamber are within the scope of supplier work.*
- Outside size: 6.5 m X 6.5 m X 4.3 m
- Inside work area: 5.0 m X 5.0 m X 3.0 m
- Door (with min. STC of 50 dB(A)) size should be 1.8 m X 2.1 m. Please provide cost of the door separately.
- The Chamber should absorb 99.99% or more of incident acoustic energy above 200 Hz as per ISO-3745. The Chamber should have these absorption characteristics up to at least 10 kHz.
- Background noise level in the Chamber should not exceed 25 dB(A) (when all utilities are off), and 32-35 dB(A) (when air conditioning system is running). This will be verified as per ISO 3745 and/or ISO 140-4, when the ambient noise levels outside the Chamber are 70 dB(A) or less.
- Design should be upgradable to a fully anechoic chamber if required
- The design should include:
  - Appropriate lighting arrangement which generates low noise
  - Appropriate emergency lighting should be in place, so that user(s) may be able to come out of the room safely in event of electrical shut down.
  - Emergency alarm system, which can be activated from inside the chamber should be provided.
  - Appropriate electrical wiring in the room (with switches, power points, circuit breakers, etc.): The wiring should support three-phase as well as single-phase power supply
  - Entry points for cables while ensuring minimal leakage of noise
  - Appropriate provisions for air-conditioning the room
  - Appropriate integrated features to accommodate measurement devices like microphones
  - Appropriate isolation mechanisms, as it will be located on 1<sup>st</sup> floor.
- Materials used for construction should have fire retardant ratings as per relevant industry standards
- Wedges should be appropriately reinforced so to prevent them from hanging down

### Additional Description

Warranty period and time of delivery should be mentioned in quotation. The **techno-commercial quotation** should include performance data on key materials used in construction of the proposed chamber. The supplier is required to provide strong evidence of its ability to construct this chamber and should also provide references for whom it has constructed similar or larger chambers. The list of references should include name of the organization, contact person(s) name, address, and telephone numbers. Packaging, loading, unloading, and commissioning charges should be included in the quotation. You are requested to submit your quotation in sealed envelope with complete product description, technical literature, price, warranty period, delivery time and other conditions by March 14, 2013 at the address given below.

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