

Material description:

Single entry face pinhole based twin cup dosimeter for radon and thoron measurement.

Total estimated approximate cost: Rs. 240000/-

Specifications:

- Simultaneous measurement of radon and thoron using LR-115 (type-II) detector.
- Single entry face for both radon and thoron by diffusion process through glass fibre filter paper.
- Discrimination of radon/thoron should be carried out by pin-holes. No additional membrane should be required for radon-thoron discrimination. Thoron entry into the radon chamber through pin-holes should be within 2 %.
- Material: Light weight plastic such as ABS with inside metal coating.
- Each cylindrical chamber is having a length of 4.1 cm and radius of 3.1 cm.
- Materials should be free from radon/thoron absorption.
- Outside coating by a decorative colour preferably wooden.
- Easy fixing holder for LR-115 detectors of minimum size of 3 cm x 3 cm with 4 numbers of pin holes, each with dimension of 2 mm length and 1 mm diameter for thoron cut off.
- Sensitivity should be at least $0.017 \text{ track/cm}^2/\text{day}/(\text{Bq/m}^3)$ for radon and $0.01 \text{ track/cm}^2/\text{day}/(\text{Bq/m}^3)$ for thoron detection.
- Proper sealing should be provided at each threading using Neoprene 'O' ring. Maximum allowable leakage in sealed condition is 0.0005 h^{-1} .
- Deployment arrangement: vertically with rust free chain lock system of SS at top with gas entry face downward.
- Provision for dosimeter numbering.
- Design should be approved by RP&AD, BARC.

PREQUALIFYING CRITERIA (PQC)

- Design should be approved by RP&AD, BARC. (Certificate should be provided by the party along with the quotation).
- One sample should be sent to indenter for approval prior to arrangement/manufacturing of the entire material.
- Inspection will be done by the indenter before supply of the whole material.

Probable suppliers:**1. Roop Creators**

606, Prestige industrial estate, Bawadi Cross Lane, Orlem, Malad (W) , Mumbai 400064,
Email: roopcreators@gmail.com

2. Parth Traders

6/A, Sagar Niwas, Manchubhai Road, Malad (E), Mumbai-400097,
Email: parthtrad1@gmail.com

3. Kamlesh Engg. Works

101, Sharvil Court, Marve road, Malad (W), Mumbai-64. Email: kewkam4@gmail.com

4. Professional Industrial Engineering Company

5, Satya kripa, Cama lane, Hansoti lane, Ghatkopar (W) Mumbai-86.
Cell: 09821833223, Tel: 022 2514 8130, Fax: 022 2513 9420,
E mail: headpicc@gmail.com

5. M/s Pandey Enterprises

4-Picket Road, Near GT Hospital, Mumbai, Maharashtra 400002, Tel: +91 22 22074053 / 30037151 / 66197151, Cell: 09869 042738 / 09969 111452
Email: sales@pandeyenterprises.com